

## **Inverting Colonial Archival Structures: Increasing Discovery and Access for Indigenous Communities through SNAC**

In an Early Career Research Development project, Dr. Diana Marsh (College of Information Studies, University of Maryland, College Park) requests \$496,070 from the Laura Bush 21<sup>st</sup> Century Librarian program for a three-year qualitative research study on the discovery and access of Native American and Indigenous archival collections, drawing on Social Networks and Archival Context ([SNAC](#))—a platform for aggregating distributed archives—as a case study. Making colonially held material discoverable to communities is the crucial first step (digitally or physically) in furthering cultural reclamation and Indigenous sovereignty. The loss of many culture bearers and language speakers, exacerbated by the COVID-19 pandemic, has intensified the urgent need to make these archival collections accessible to community-based users. The project will answer the following *research questions*: **1)** How can aggregated discovery tools increase archival discovery for Native American and Indigenous community researchers (in culturally appropriate ways)? **2)** How can colonial archives and Indigenous communities work together to design and implement new tools, while centering communities in the design and implementation process? **3)** What are the specific affordances of [SNAC](#) for locating collections dispersed in colonial archives across North America, and what technical infrastructures, cultural protocols, and educational initiatives are needed for this purpose? **4)** How can SNAC or other archival discovery tools facilitate repatriation and stewardship for Indigenous communities?

This project largely funds the PhD training and career development of an Indigenous Information Studies scholar, as well as providing professional development training for four Tribal Project Archivists, an Indigenous MLIS student, and an Indigenous film student, while providing space for Indigenous students and professionals interested in these topics through focus groups. It therefore fits within major goals of program objective 3.4.

### **A. Project Justification**

This research responds to: a) the urgent need to make the Native American and Indigenous archival collections hidden in colonial repositories findable and accessible; b) findings of the Project Director's (PD) previous research, which showed that community-based researchers are disproportionately disadvantaged in archival discovery; c) the challenge facing the archival field to create better tools that integrate description of and access to colonially-created collections.

#### **A.1. Significant Historical Challenges**

Archives and museums hold invaluable collections documenting Indigenous peoples' languages and lifeways during a period of colonialist assimilation and cultural genocide; often housing more materials than the descendant communities themselves. Whereas U.S. objects in museums are subject to the [Native American Graves Protection and Repatriation Act \(NAGPRA\)](#), providing a legal framework for communities to reclaim Native American objects and ancestral remains, no such policy exists for archives where a vast amount of Indigenous knowledge—documented by paper, photographs, sound recordings, and film—are stored. This lack of policy is particularly troubling in light of the legacy of language and cultural loss in Native communities, underscoring the urgent need to make archival collections accessible to community users to support community-led sovereignty and revitalization projects.

The long history of colonial knowledge extraction and diaspora (Punzalan 2014) to dispersed archival holding institutions makes archival discovery extremely difficult for Indigenous researchers and community members. Work in the archival science field has foregrounded bias in archival description (e.g., Gilliland 2011; Jimerson 2009), showing that archival representation is a relic of colonial power and knowledge systems that underrepresent many marginalized and non-white communities. Further research in archival user studies has shown that finding aids—typically the primary means of navigating archival contents—are counterintuitive even for graduate-educated users (Weideman 2019; Daines and Nimer 2011; Yakel 2004; Yakel & Torres 2003; Daniels & Yakel 2010). User familiarity with contemporary “Amazoogle” (Dempsey 2015) searching has made antiquated archival interfaces feel even less approachable.

#### **A.2. Efforts to Increase Access & Support Sovereignty**

Momentum is building to change the relationship between Indigenous communities and archives. In August 2018 the Society of American Archivists adopted [Protocols for Native American Archival Materials](#) (PNAAM, a Native-led effort first drafted in 2006, see O'Neal 2014) making ethical stewardship of Native American collections a mandate, and in 2019 the International Council on Archives (ICA) [established the Expert Group on Indigenous Matters](#), in response to the UN Declaration on the Rights of Indigenous Peoples. Broader digital access combined with crowdsourced transcription, community-driven metadata infrastructures, and collaborative projects are drawing archives (often alongside museum collections) closer to their descendant communities (Geismar & Mohns 2011; Christen 2015, Hennessy et al. 2013, Powell & Aitken 2011). Work in Indigenous data sovereignty and Indigenous ontologies (e.g., Littletree et al. 2020; Christen

2011; Duarte & Belarde-Lewis 2015; Kukutai & Taylor 2016) has exploded archival interest in creating more culturally responsive protocols and standards for describing and stewarding Indigenous knowledge. As the PNAAM note, “the use of outdated, inaccurate, derogatory, or Eurocentric language impedes access” (“Providing Context”: <https://www2.nau.edu/libnap-p/protocols.html>). The archival field has an ethical responsibility to Indigenous communities across North America to revolutionize how archival collections can be accessed and searched.

Collaborative projects on reparative description have generated new systems for applying appropriate, unified Indigenous terminologies, such as the [Xwi7x̱wa \(or Brian Deer\)](#) system, formalized and developed as an Application Programming Interface (API) at the University of British Columbia Libraries. Archivists at the National Museum of the American Indian (NMAI) have likewise developed an ethnonym thesaurus to be used in describing collections. These cultural thesauri have not yet been broadly integrated into archival content management systems but show the potential for adapting descriptive terminologies to fit cultural protocols while building new institutional-community relationships.

These collaborative developments, along with the wider movement toward “archival returns” and “digital knowledge sharing” initiatives, help explain why Indigenous archival collections are now used by community-based researchers as frequently as by academics (Barwick et al. 2019; Marsh 2019: 131; Carpenter 2019: 8-9), and are employed for cultural-revitalization initiatives such as artists’ projects, language-immersion programs, and geolocation mapping projects for land claims (e.g., Lowery 2009; Roy et al. 2011; Schweitzer & Henry 2019). Community-driven digitization and digital knowledge sharing efforts increasingly allow archival materials to be downloaded, shared, and remixed remotely, often through community-curated databases.

In particular, [Mukurtu](#)—an open source content management system designed for Indigenous cultural heritage—has allowed many communities to build their own digital collections or community archives, often combining museum objects and archival materials, and bringing together community-held materials with those digitally reclaimed from colonial institutions. In combination with [Local Contexts](#), Indigenous communities are stewarding these collections under Traditional Knowledge (TK) labels—alternative, community-based forms of copyright.

But neither Mukurtu nor Local Contexts addresses *discoverability*. In order to populate Mukurtu with historical content (often digital surrogates of collections held in big, institutional repositories), communities first have to locate that material. In order to argue for a TK label to be added to a repository’s item or collection, communities first have to know it exists. Even new advances in Mukurtu through the Mukurtu Shared project do not address how to make colonially structured archival collections findable without direct intervention from colonial and federal archives staff (or on-site grant-funded fellows). Likewise, some programs have shown that discovery and access barriers can be overcome through in-depth, on-site training for community members in archival research (Baldwin et al. 2018; Bell 2011). However, such programs are short-term, competitive, limited in scope, and do not tackle the root barriers of information structure and representation.

### **A.3. The Project Director’s Long Term Research Agenda—Addressing a Gap**

[The Project Director’s \(PD\)](#) previous qualitative research with Native and Indigenous archival researchers has shown that Indigenous collections are *least accessible* to Indigenous users. In addition to the problems of archival discovery for all marginalized communities, the PD’s work over the past five years has shown that Native and Indigenous community researchers are disproportionately affected by physical and cultural barriers to historical collections. Most recently, the PD led a three-year NSF-funded study, “Re-aligning Archival Practice and Anthropological Needs: Improving Data Discovery at the National Anthropological Archives” (1627066; Cultural Anthropology program), at the Smithsonian’s National Anthropological Archives (NAA) that comprised a pilot interview-based study and survey. In 2015, as an Andrew W. Mellon Postdoctoral Curatorial Fellow at the American Philosophical Society (APS), the PD partnered with the Center for Native American and Indigenous Research (CNAIR) to document community-based stories and experiences with digitally shared collections (Marsh 2022).

The more recent of these studies found that among all users of the NAA, Indigenous community-based users are least able to access Indigenous collections (Marsh et al. 2021; 2019; 2018). Together, these two projects revealed that major barriers for Native researchers may include the cost of an archival trip, the lack of funding opportunities to undertake such research, internet connectivity or data storage capacity, or the historical trauma evoked by archival security processes (Marsh 2022; Marsh et al. 2021). The PD’s [recent co-authored article](#) with members of the Human Rights Archives Section and Native American Archives Section (NAAS) of the Society of American Archivists (SAA) has further highlighted many of these cultural barriers and the surveillance culture in archival reading rooms (Buchanan et al. 2021). The NAA study showed that community researchers are further disadvantaged by a mismatch between their preferred search strategies and entrenched institutional metadata practices. For example, community researchers tend to

search by cultural group name—or “subject” terms—but most collections are described and organized by the names of white “record creators” (Marsh 2018; 2019).

New approaches to structuring information have been developed to improve discovery and access for Native and Indigenous researchers. The PD has been exploring the digital resurgence of an old technology: Indigenous subject guides or “LibGuides” that compile information [topically](#) by culture or region, and which help community researchers to navigate complex archival collections. At the NAA, the PD worked with staff archivists to expand a pilot project to create subject guides for communities with large representation in the archives’ collections. However, such subject guides only cover collections at a single institution. This presents a barrier to effective access because communities want (and need) access to all information about their community, regardless of which institution holds the material.

The PD has also worked to revitalize the [Council on the Preservation of Anthropological Records](#) (CoPAR) with her colleague Ricardo Punzalan. They have updated CoPAR’s global list of anthropologists’ papers to help make collections more findable. The list is only a first step, however, because it a) focuses on colonial actors rather than Indigenous communities and b) does not incorporate structured data or other technologies to link its resources to other data or repositories.

The PD’s research program in this field is therefore designed to understand the use of archival collections for Indigenous communities, and to collaboratively research, co-design, and explore new models for making these collections discoverable and accessible. The work draws on the PD’s strengths in qualitative methods to better understand the uses of archival collections, and the gap between the potential of the digital era and the reality of Indigenous access. Through this research, the PD aims to launch her career by exploring archival tools that harness both new technologies and the collaborative paradigm, while building guidelines for best practice in the process.

#### **A.4. Case Study of SNAC to Benefit Indigenous Communities’ Discovery and Access**

##### ***4a. SNAC Background***

[SNAC](#) is a cooperative initiative that works to allow searching across all archival collections in the US. SNAC operates by authority control—standardizing headings used in catalogue records, and linking all records by that heading, drawing on the standard of Encoded Archival Context—Corporate bodies, Persons, and Families (EAC-CPF). SNAC was specifically designed to address the challenge of dispersion across archival collections by connecting and aggregating such distributed historical records through a social-document network. As of February 2022, SNAC has 57 institutional members and has linked over 2 million archival resources in more than 4,000 repositories. Energy and buy-in from the archival community for the use of SNAC is growing. From its first iteration as a Research and Development grant to a full-fledged platform, SNAC has been funded by the National Endowment for the Humanities (NEH, 2010–2012), the Andrew W. Mellon Foundation (2012–2015; 2015–2020), and IMLS (2011–2015). Although the effort began and is still housed at the University of Virginia (UVA), it has collaborated with the California Digital Library, the School for Information Science at the University of California, Berkeley, and the U.S. National Archives and Records Administration (NARA) in its development. The University of Maryland (UMD) Libraries joined the cooperative in late 2020. UMD has also just received [NEH support](#) for the Maryland Institute for Technology in the Humanities (MITH), to reconnect dispersed archival records, audio collections, and associated data in SNAC.

SNAC is built on a cooperative model; membership is free and requires only that members (usually organizations) participate in SNAC’s ongoing work. Two SNAC Liaisons—funded to work full time on the SNAC Cooperative by NARA—offer free monthly “SNACSchool” programs to train editors in SNAC. Not unlike the Wiki model, dozens of new editors are therefore added to SNAC’s ranks each month, able to edit records in SNAC based on their knowledge of collections and historical figures. SNAC has a shared governance structure among its membership and a number of working groups that direct its technical, descriptive, and overall platform development. SNAC records are communally owned and made available via the [CC0 1.0 Universal \(CC0 1.0\) Public Domain Dedication](#) license.

##### ***4b. SNAC for Indigenous Discovery***

SNAC users can potentially search SNAC to locate every archival institution that contains records of interest. But most Indigenous archival knowledge is buried in the collections of white, male historical figures, and is therefore underrepresented in SNAC. For example, a search for white author [Ernest Hemingway](#) yields 427 entries, but one for Native athlete Jim Thorpe yields only 15. Working closely with an Indigenous Advisory Board, the PD’s current project has piloted SNAC for Indigenous discovery via an [Indigenous Edit-a-thon](#) that has shown both SNAC’s potential for this work, and the need for a more expansive effort to explore the platform for its affordance as a tool for researchers seeking to identify which archives contain information of value to their communities.

SNAC potentially presents an important departure from most archival description, which focuses on the owner or creator of a collection, rather than on the people and groups described within it (in other words, focuses on the anthropologist, not the Native individuals or communities s/he worked with). Currently, crucial Native and Indigenous community information is buried in collections named for (usually white, male) historical figures. Unlike in problematic Library of Congress or other standard authority files that require bureaucratic approval processes (and have been based wholly in a colonial model), and unlike Wikipedia entries which require a certain level of “notoriety” to be approved by the Wiki community, SNAC allows editors to create new authorities essentially at will, and then to link those authorities to relevant historical sources and archival collections around the world.

SNAC therefore presents an opportunity to use community entities as the central nodes in a constellation of information and archival collections. SNAC staff have indicated that using “corporate bodies” or “families” may help structure Indigenous community relationships to collections, and that the latter may allow for a more organic use of these categories for identifying Indigenous collections: while “corporate bodies” might indicate the political entity of, say, The Little Traverse Bay Bands of Odawa Indians, the “family” category might allow you to add “Odawa” as the more inclusive entity. If scaled up, this approach to SNAC would, for example, allow a Mohawk researcher to locate relevant collections and ancestors at every participating archival institution linked to the entity, “Mohawk.” Indigenous users would be able to ask which archives contain information of value to their communities.

That need and desire is clear for both communities and for archivists working with Indigenous collections. In 2017, Michael Pahn (Head Archivist, NMAI), Jennifer O’Neal (Assistant Professor, University of Oregon), and Jerry Simmons (SNAC) organized a panel at the Association of Tribal Archives, Libraries and Museums (ATALM) conference, [“Elevating Native Identities in the Historical Record.”](#) positing SNAC as a possible tool to solve the archival diaspora problem for Native collections, but that effort was never taken up by SNAC or any other organizations. Alternative approaches include the Library and Archives Canada (LAC), which is piloting a project entitled “Listen, Hear Our Voices,” to create research guides to Indigenous language recordings across Canadian collections, with input from six Indigenous archivists. However, that project does not yet have a technical solution to uniting these guides in a single platform.

The current project draws on this growing interest and need in the Indigenous archival field. In the PD’s recent survey about archival barriers and use among community-based researchers (administered via ATALM with 123 respondents), results likewise indicate that a strong desire among Native and Indigenous researchers for an aggregated database to search Native and Indigenous archives (Marsh et al. 2021).

SNAC has been increasingly committed to applications of its platform for highlighting underrepresented historical figures and organizations. Its leaders recognize the current platform’s bias toward white male figures and seek to correct it through targeted projects. At SNAC’s September 2021 annual meeting, the Archivist of the United States highlighted both our Indigenous SNAC Edit-a-thon and [Bernetiae Reed’s work to conduct Enslaved/Free Person research](#) as key initiatives for SNAC. Director Daniel Pitti has consistently highlighted the need to enhance community self-representation and to diversify entities represented in SNAC.

#### ***4c. New SNAC Technological Affordances***

Until recently, much of the work to link such records in SNAC was manual and arduous. However, in the newest phase of the SNAC project, the team at UVA has built a web service to enable repositories to extract EAC-CPF descriptions. They have created a plugin for OpenRefine, a powerful open-source application that allows refinement of large data sets, reconciliation of authority data, and transformation of data into standard forms. The latest version, OpenRefine 3.0, has an extension that enables users to push data to Wikidata, and which has served as a model for the SNAC OpenRefine extension. The OpenRefine plugin allows for both the extraction of existing web-based linked data held in Wikidata to populate SNAC, and for subsequent integration of SNAC identifiers into local (institutional) descriptions. SNAC’s developer has also launched an extension to ArchivesSpace, the archival content management system increasingly used by most repositories. Further, a new “controlled concept vocabulary management module” will enable SNAC editors to maintain specialized thesauri. Finally, the SNAC team at UVA is also developing a “Lite SNAC” platform that will allow form-based data input with minimal training.

#### ***4d. Building Research on the 2021 Indigenous SNAC Edit-a-thon***

This early career project is designed based on preliminary findings from a [2021 Indigenous SNAC Edit-a-thon](#) co-organized by the PD, which took place on October 11 and 12 after 6 months of collaborative planning with an Indigenous Advisory Board and partners at Harvard University, the New School, and NARA. The event recruited 70 participants, including 20 from Indigenous communities, who worked on 248 different resource records. That event and its planning

process provided an opportunity to pilot new uses of SNAC entities on a very small scale, revealing important insights into a number of technical needs and cultural concerns that will shape the larger project proposed here. Through this event we were able to create several processes and project outcomes—all generated collaboratively with input from the project team and Indigenous Advisory Board. For the event itself, we created a content caution, code of conduct, feedback forms for the SNAC platform, and protocols for reporting culturally sensitive materials.

This latter protocol, in particular, is a step toward creating greater awareness of cultural ethical practices for Indigenous archival materials. It allows for SNAC editors to report information that may not be appropriate to have in online holdings, and creates accountability for the project team to contact holding repositories and communities to create contact between them as well as work toward greater ethical care for archival materials. We also piloted a double peer-review process: the first round being a technical review from SNAC editors, and the second an Indigenous review to ensure appropriate and accurate information in edited records. The edit-a-thon and its products also inspired changes to the [SNAC editorial policy](#). Perhaps most importantly, the project team collaboratively created a [SNAC Indigenous Editorial Guide](#) that draws upon *Elements of Indigenous Style* (Younging 2018), [Archives for Black Lives Anti-Racist Description Resources](#), the SNAC editorial policy, and the PNAAM. The Editorial Guide is an excellent blueprint for working appropriately in the SNAC platform, vetting cultural content, and avoiding colonial ontologies. It also highlights the many areas that need technical and cultural improvements in the SNAC platform, such as controlled vocabularies for language, placenames, ethnonym, gender, occupation, and subject headings. These limitations were identified by the Advisory Board and confirmed by Indigenous participants in the event; they provide clear next steps for our work in the proposed project. We are now working with SNAC leadership to establish an Indigenous Description Group under the umbrella of SNAC's Editorial Standards Working Group and with SNAC's Technical Infrastructure Working Group (TIWG) to inform the development of both the SNAC platform and SNACSchool. As in planning the 2021 Edit-a-thon, this early career research will allow for findings based on its process as much as its products.

## **B. Project Work Plan**

Drawing on SNAC as a case study, this project seeks to combat gaps in Native and Indigenous collections representation and discoverability by (*Research Question 1*) researching the affordances of linked data and authorities to virtually connect dispersed collections and data with community users; (*Research Question 2*) drawing on a collaborative, process-oriented approach that will provide a replicable model for other decolonizing archival initiatives; while (*Research Question 3*) researching specific cultural, technical, and educational needs for Indigenous description and discovery; and (*Research Question 4*) better understanding Native American and Indigenous needs for discovery and access to support community sovereignty.

### **B.1. Specific Research Activities & Methods**

Over the three years, we will collaboratively research, design, and explore the use of SNAC for enhancing Native American and Indigenous archival discovery by piloting community protocols, terminologies, and descriptive approaches. Throughout, we will engage community members as partners in needs assessment and co-design, and provide recommendations to SNAC and the wider archival field to create generalizable best practices for representing underrepresented community information. The project embraces a collaborative and community centered approach and iterative co-design process. This includes an Indigenous Advisory Board, four Tribally-based Project Archivists (working part-time on Indigenous entities in SNAC and identifying SNAC limitations) and Indigenous Focus Groups (4 groups of 7 participants, video-recorded and analyzed in the qualitative coding software NVivo), in six phases to explore what an Indigenous approach to [SNAC](#) (or other like tools) would look like.

Centering and embracing a collaborative and community-centered approach throughout the research process is central to the goals of this project. It follows a framework developed in collaborative archival, museum, and ethnographic work (e.g. Hill & Coleman 2019; Lassiter 2005; the [PNAAM; Guidelines for Collaboration](#)) in which community input and needs influence the project at each major stage (early planning, pilot phases, implementation, post-project reflection). The PD and Graduate Assistant (GA) will obtain IRB approval from both UMD and any Tribal research boards to ensure that this work is ethical and mutually beneficial from both an institutional and community perspective.

Advisory Board meetings will be run utilizing an Indigenous research methodology modeling after talking circles, and allowing for and documenting opposing views and reconciling Western and Indigenous models (Baskin 2005; Becker et al. 2006; Loppie 2007; Struthers et al. 2003). Meetings with the Indigenous Advisory Board (at each formative stage of the project) will provide external input and build iterative guidelines for the project while respecting a variety of Indigenous perspectives. They will also aid in scoping the project by helping to identify potential project staff and participants to take part in Focus Group Discussions (FGDs)—our major methodologies for researching with our main

constituencies. We will also apply the above Indigenous research methodologies to these FGDs with key community stakeholders, while using a semi-structured interview approach. FGD participants will be instrumental throughout the process by providing insights on their own processes for working in a platform like SNAC, evaluating SNAC's ability to highlight Native and Indigenous collections, and provide overall guidance on best practices and challenges in locating Indigenous archival collections broadly. Feedback from these FGDs will be shared with our team, Advisory Board, and SNAC staff to iteratively shape this project as it progresses, inform SNAC's wider approach to representing Indigenous communities, and most importantly, provide core feedback from key beneficiaries of the research on wider approaches to Indigenous discovery and reparative description.

FGDs will be run by the PD and GA; Each focus group will meet for two sessions and be comprised of 7 participants from different core audiences (Morgan 1997); **Focus Group A** will be recruited from Indigenous expert users—Indigenous participants in the 2021 Edit-a-thon who have familiarity with both SNAC and archives (considered Indigenous expert users). This group will give feedback on SNAC and gather information on their experiences with SNACSchool in order to provide suggestions for Indigenous-centered archival training. **Focus Group B** will be made up of current Indigenous LAM professionals within the field, and **Focus Group C** will be made up of Indigenous students within MLIS and other related disciplines. Group B will be tasked with guidance and feedback on current Indigenous metadata, and cataloging practices and needs, and Group C will be tasked with providing insight for current Indigenous researchers' needs, community needs, and their home disciplines and fields. Groups B and C will provide testing and feedback on SNAC and its use for Indigenous discovery in year 2 after initial cultural and technical changes have been made (based on 2021 Edit-a-thon). The final group, **Focus Group D**, will be made up of community members who have experience as community researchers but who have not used SNAC, to evaluate the usability of SNAC for Indigenous communities, contexts, or repatriation needs, and provide overall guidance on designing tools for Indigenous discovery. Focus Group D's first FGD will be structured according to contextual inquiry methods, drawing on areas of focus and open-ended questions to allow participants to lead the dialogue as they navigate SNAC (Holzblatt & Jones 1993).

All FGDs and interviews will be recorded via Zoom audiovisual recording with permission of the participants. They will be transcribed using Zoom's transcription service (covered by UMD's subscription). All transcripts will be checked by the GA, then analyzed and compared for significant patterns and themes by the GA and PD using NVivo, a qualitative analysis software provided by UMD. All analysis will adopt a grounded theory approach, which involves iterative development of codes and themes from qualitative data (Glaser & Strauss, 1967[2009]; Charmaz, 2008). The analysis will provide important feedback and identify major areas of collective concern to project staff, Advisory Board, SNAC leadership and technology teams (especially the new Indigenous Description Group and lead developer, Joseph Glass) at multiple stages. At the conclusion of the project, we will share our analysis and research process with a wide range of community researchers, as well as both Tribal and non-Tribal archives professionals.

Working together with the Indigenous Advisory Board, Tribal Archivists, PD, GA, programmer/developer and student, SNAC staff, and Focus Groups, the project will engage our main target audiences: Native American and Indigenous community researchers, practicing archivists from Indigenous communities, and archivists in colonial repositories stewarding Indigenous collections. We will draw on the collections and subject expertise of archivists and SNAC staff, while drawing on the necessary technical expertise to pilot new approaches, and the knowledge of Indigenous Advisory Board members experienced in collaborative settler-Indigenous projects.

The project's phases are as follows:

#### Year 1

##### ***Phase 1. Collaborative project design and use of community entities (Aug 2022 to Jan2023)***

In this phase: a) in August, we will hire Tribal Project Archivists, as well as contract developer and Indigenous MLIS student to enhance SNAC's Indigenous metadata and thesauri; b) in September, we will obtain UMD and Tribal IRB, and work with the Advisory Board and Tribal Project Archivists to shape work with SNAC technical infrastructure; c) the PD and GA will launch our Twitter account and website for the project in consultation with the Advisory Board; d) beginning in October, the Tribal Project Archivists will work with the developer and student team to explore and test options for technical and cultural upgrades in SNAC, in consultation with the Advisory Board, GA, and PD.

##### ***Phase 2. Focus Group A and SNAC training (Feb 2023 to Jul 2023)***

In this phase: a) throughout, the developer and MLIS student will work with the Indigenous Description Group and SNAC's development team (incorporating FGD feedback) on changes to the SNAC platform to accommodate community-based needs, and to test thesauri, placenames, languages, and other upgrades necessary for findability; b) Project Archivists will add relevant community entities, and work with PD and GA on further developing the new

Indigenous SNAC Training Module; in February and March, c) the PD and GA will run two virtual, recorded FGDs with Focus Group A (expert group) who will provide feedback on SNAC and SNACSchool experiences to help shape and consider what aspects may need to be considered in the Indigenous SNAC Training or in broader community-targeted archival training; b) In early April the GA will check and have participants approve transcripts; in late-April to June, the PD and GA will analyze FGDs in NVivo using a grounded theory approach; c) in June, the GA and PD will provide notes and summary findings from these FGDs that are consistent with IRB requirements to participants, to the Advisory Board at its July meeting, and SNAC team, and can also be provided to the wider community or Tribal Councils, as appropriate.

## Year 2

### ***Phase 3. Focus Groups B & C (Aug 2023 to Jan 2024)***

In this phase: a) In August/September and October/November, respectively, we will run two virtual, video-recorded FGD sessions each with Focus Groups B (Indigenous Archival & Library Professionals) and C (Indigenous students from MLIS and adjacent fields); b) the GA will check transcripts and approve final drafts with participants on a rolling basis; from October to mid-December, the GA and PI will analyze recordings from session #1 for both groups using qualitative analysis methods in NVivo; c) in January the PD and GA will compile and share preliminary summary findings—as consistent with IRB requirements—to participants and to the Advisory Board for feedback from A & B session #1.

### ***Phase 4. Analysis & developing Indigenous SNAC Training (Feb 2024 to Jul 2024)***

In this phase: a) In February, key preliminary findings will be communicated to SNAC staff and the Indigenous Description Group in order to make further technical and cultural changes to SNAC; from February to March the PD and GA will undertake analysis of FGD session #2 for Groups B and C using qualitative coding analysis in NVivo; c) in April the PD and GA will compile final notes and summary findings from sessions #1 and #2 and share—as consistent with IRB requirements—with participants and to the Advisory Board; these can also be provided to the wider community and/or relevant Tribal Council, as appropriate; final key takeaways in consultation with Advisory Board and Project Archivists will be communicated to SNAC staff and Description Group; d) the GA, PD and Project Archivists will work with SNAC staff to make final changes to Indigenous SNAC Training Module based on feedback from FGDs B and C; the year's work will be summarized for SNAC staff and the Advisory Board in July.

## Year 3

### ***Phase 5. Final analysis for completed project (Aug 2024 to Jan 2025)***

In this phase: a) In August, we will work with the Advisory Board and Project Archivists to finalize our first draft of Indigenous SNAC Training based on feedback; b) In September, we will case test SNAC as a discovery tool with Focus Group D (community members who have not used SNAC)—in this first exercise, they will use SNAC without any introduction to the platform, and provide feedback on its ability for locating Indigenous records of interest; c) In October, members of Focus Group D will take part in the new Indigenous SNAC Training; d) in November, the GA and PD will run a final FGD with Focus Group D in which members will provide feedback on the Indigenous SNAC Training Module and SNAC as a tool for Indigenous community research needs, as well as more general guidance for designing future training and discovery tools; they will directly address whether SNAC or similar platforms can facilitate repatriation e) in December and January, the GA and PD will analyze FGD recordings in NVivo; e) in January, we will hire an Indigenous Film Student to produce a 3-minute open access YouTube video on SNAC as an Indigenous discovery tool.

### ***Phase 6. Outreach and evaluation for completed project (Feb 2024 to Aug 2024)***

In this phase: a) In February, we will make final updates to, and launch Indigenous SNAC Training, putting all slides as open access PDFs on the SNAC website in its SNACSchool resources, and hosting a live Indigenous SNACSchool event; b) we will meet with the Advisory Board to discuss findings, and plan outreach activities—including leveraging Indigenous networks and list-serves to promote new Training Module, planning publications geared at practicing and Tribal archivists, video promotion, and relevant community-oriented conference presentations (e.g. [Association of Tribal Archives, Libraries, and Museums \(ATALM\)](#), [Native American and Indigenous Studies Association \(NAISA\)](#))—and evaluation; b) the GA and PD will submit abstracts to present on this research process at relevant community-based conferences, e.g. at the NAAS-SAA annual meeting in August, the annual ATALM meeting in the Fall; c) in May, the film student will show draft video to Advisory Board and make any edits; c) In June, we will promote SNAC via launch of the new video, released through community-based professional networks, such as the [Tribal College Librarians Professional Development Institute](#), and list-serves and email contacts built through our 2021 Edit-a-thon and throughout the project; c) we will meet with Advisory Board and Project Archivists collaborate on at least two practitioner-facing publications on the project process and to evaluate project outcomes; d) in July and beyond, the team will present research findings (as well as provide resources for archival discovery) virtually for communities by collaborating with the Tribal

Project Archivists and their networks to identify a few key Indigenous and Tribal archives, libraries, museums, and cultural centers (e.g. Six Nations Polytechnic Deyohahá:ge [Indigenous Knowledge Centre](#) or the Maskwacis Cultural College [Online Microlearning Program](#)); e) in late-July, the PD and GA will collect final data from SNAC about the number of entries and associated collections added in SNAC, as well as site views for those new resources, and assess overall project outcomes according to the evaluation plan.

## **B.2. Research Team, Partners, and Roles**

**Project Director:** [Diana Marsh](#), PhD, is an archives and digital curation Assistant Professor at the University of Maryland's College of Information Studies (iSchool) who has worked with Native American and Indigenous community partners in archival and museum projects for the past thirteen years. She is Vice Chair of the Native American Archives Section of the SAA, which is currently engaged in a multi-pronged effort to promote the adoption of the PNAAM in institutional repositories, and to provide resources for Tribal and Indigenous archivists. She works to create relevant, ethical research projects with mutual benefits for communities and with direct impacts on the archival profession.

**Indigenous Advisory Board:** To ensure that the project is community-centered and covers regional diversity, we will expand the Indigenous Advisory Board we worked with on the 2021 Edit-a-thon. The Indigenous Advisory Board for this project will therefore include our original board: [Margaret Bruchac](#) (Abenaki), Coordinator, Native American & Indigenous Studies, Associate Professor, Department of Anthropology, University of Pennsylvania; [Stephen Curley](#) (Diné/Navajo Nation), Director of Digital Archives, The National Native American Boarding School Healing Coalition; [Taylor Gibson](#) (Cayuga), Archivist, Listen Hear Our Voices, Library & Archives Canada; Instructor, Six Nations Polytechnic [Eric Hemenway](#) (Anishnaabe/Odawa), Director of Repatriation, Archives and Records for the Little Traverse Bay Bands of Odawa Indians; [Keahiahi Long](#), Librarian at Kamakakūokalani, University of Hawai'i at Mānoa; [Melissa Stoner](#) (Diné/Navajo Nation), Native American Studies Librarian, Ethnic Studies Library, University of California-Berkeley. We will be adding [Angie Bain](#) (Lower Nicola Indian Band), Researcher, Nicola Watershed Governance Project; [Alan Corbiere](#) (M'Chigeeng First Nation), Assistant Professor, Department of History, York University; [Tawa Duchenaux](#) (Cherokee), Archivist, Oglala Lakota College; [Tiffany Chavis](#) (Lumbee), Health Literacy Librarian, University of Maryland, Baltimore; [Selena Ortega-Chiolero](#), Museum Specialist, Chickaloon Village Traditional Council; [Kimberly Toney](#) (Nipmuc Nation), Head of Readers' Services, American Antiquarian Society. All of these members have confirmed commitment should we receive funding.

**Graduate Assistant:** The project's GA, [Lydia Curliss](#) (current PhD student at the iSchool and member of the Nipmuc Nation), will provide the core research support for the project while being funded for the bulk of her doctoral program. She will gain valuable professional and academic training to prepare her for a career in the LIS field. Her role includes leadership in the research process (Advisory Board collaboration and repository consultation; IRB; design and implementation of FGDs and contextual inquiry interviews; transcription processing; stewarding research data; qualitative analysis; collaborative writing) as well as project dissemination, including promoting Indigenous participation in specialized SNACSchool, professional and community-based presentations, and writing for both academic and community audiences. Throughout, the GA will gain professional and academic training, relevant project management experience, and valuable professional networks with Advisory Board members and project partners.

**SNAC Partners:** We will work with NARA Liaisons to SNAC (Jerry Simmons and Dina Herbert, both at the Office of Innovation), as well as with [Daniel Pitti](#), Director, SNAC, University of Virginia Library, and Joseph Glass, SNAC Lead Technical Developer, to adapt SNAC for Native and Indigenous collections. Simmons and Herbert, leaders of the SNACSchool Team, which runs monthly virtual trainings in the SNAC platform and editing, have offered to coordinate SNACSchool as needed for project participants and to help develop an Indigenous SNACSchool training.

**Part-time Tribal Project Archivists:** We seek to hire four part-time Project Archivists, who are Indigenous and regionally and institutionally diverse. These project archivists will be hired to help assist on the project including work with SNAC improvements, perform SNAC editing, implement collections, entities, and authority records, and provide community-grounded feedback on SNAC and our research. They will meet regularly with the project team and GA.

**Developer/Programmer and Indigenous MLIS Student:** In year 1 we will hire an experienced part-time developer/programmer, who will work with an Indigenous MLIS student to test and implement automated approaches to SNAC and work to implement culturally relevant thesauri, placenames, languages and other metadata into SNAC. The part-time Indigenous MLIS student will receive mentorship and also shape these efforts from a community perspective. Together this team will assist in applying unified Indigenous terminologies. They may, in collaboration with SNAC staff, make direct contributions to SNAC code, or assist with large-scale metadata transformations (e.g. OpenRefine+SNAC) to



push the data from repositories with large Indigenous collections into SNAC. They might also clean up exported finding aid data using existing APIs or metadata automation.

**Institutional Repository Partners:** The project will continue its partnership with Katherine Satriano at the Peabody Museum of Archaeology and Ethnology at Harvard University, who has been an instrumental collaborator in our Indigenous SNAC work thus far. In planning this project, we have also met with staffs of the Archives Center at the NMAI, the NAA, and the Office of the Chief Information Officer (OCIO, which runs archival platforms) at the Smithsonian Institution. NMAI's ethnonym thesaurus—a controlled vocabulary for Native and Indigenous cultural terms—is now also in use at the NAA, so these two repositories may provide guidance or important feedback (or drawbacks) on using those terms as authorities. OCIO and archivists at the NMAI did extensive work to update their SNAC records for NMAI collections in advance of our 2021 Edit-a-thon, and we hope to encourage that commitment going forward. Some of these repository archivists have also chosen to volunteer as SNAC editors during this project.

### **B.3. Project Dissemination & Communication Plan**

We have a multi-pronged communication plan that will allow for maximized outreach to Indigenous communities and practitioners in the field about our project and its process. Our collaboration with community participants, Tribal Project Archivists, and Advisory Board will ensure that these materials have been vetted for use with our target communities: a) **Website and Social Media:** We will maintain a website to promote our work and progress, and create a Twitter account, @IndigenizeSNAC to promote our works in progress; b) **Conferences and Practitioner Publications:** We will share project process and outcomes with SNAC members at the SNAC annual meeting in Year 3, with practicing archivists at the Society of American Archivists' meeting at the close of the project, and with Tribally-based cultural heritage professionals through the [Tribal College Librarians Professional Development Institute](#) and at the Association of Tribal Archives, Libraries, and Museums Meeting at the project's completion. These professional meetings will offer important venues to amplify project impact and draft practitioner-focused publications; c) **Indigenous SNACSchool:** Working with SNAC staff, the GA and PD will develop a tailored Indigenous SNACSchool and schedule these virtual trainings for community-based researchers and LAM professionals; as part of that process, we will create open access online instructional PDFs resulting from these trainings which will be freely available online on SNAC's and the project's websites; d) **Promotional Video:** Our 3-minute video will demonstrate the use of SNAC for the discovery of Native American and Indigenous archival materials (created with an Indigenous film student) based on our research findings; this is modeled on the [video created during Mukurtu's first launch](#). This will be shareable on our website and via YouTube with Native and Indigenous community-based researchers as well as in classrooms and at conferences e) **Community Presentations:** Upon project completion and final iteration of Indigenous SNACSchool, we will present virtually at Indigenous and Tribal archives, libraries, museums, and cultural centers. Through these presentations, we will present on our research findings and provide resources for increasing discovery of colonially-held collections. We will also present at the Maskwacis Cultural College [Online Microlearning Program](#), which has been providing free, online webinars for Native and Indigenous communities since the start of the pandemic.

### **C. Diversity Plan:**

This project increases the diversity of users who can access archives in historically inaccessible institutions. We have built Native American and Indigenous perspectives into its framework through its Indigenous Advisory Board, FGDs, as well as through recruiting Native and Indigenous staff (GA, Tribal Project Archivists, MLIS Student, Student Filmmaker) in carrying out the project. The project design allows for Native and Indigenous Board and Staff, with input via FGDs, to define and shape the project's framing, scope, and implementation. Further, hiring Native and Indigenous staff contributes to diversifying the archival profession. This project therefore takes seriously the needs, opinions, and cultural perspectives of Native and Indigenous professionals and users seeking to use archival collections in contemporary community work. The outcomes of this project will provide SNAC (and other technical platforms looking to aggregate archival information) with best practices guidance for representing Native and Indigenous information and collections. Digital inclusion requires the discoverability of relevant content (Jorgensen, Morris, & Feller 2014: 3). By co-designing this project and using community feedback, this project provides a community-centric model for other archival systems, as well as for representing other BIPOC communities in SNAC.

### **D. Project Results:**

#### **D.1. New Knowledge & Capacity**

At the end of this project we will have the following results: 1) a wider range of **SNAC entities, thesauri, and Indigenous representation** in SNAC; 2) a **freely-available, online SNACschool training module** (also freely offered

live annually by NARA SNAC staff) that provide resources for Indigenous communities as well as library and archival professionals who are interested in participating in these efforts at their own institutions; 3) **a promotional plan** that includes community-based presentations and sharing our Indigenous SNAC video via the community networks built during our [2021 Indigenous SNAC Edit-a-thon](#) (which yielded 70 volunteers and 20 Indigenous participants), including Indigenous information list-serves (e.g. [GRASAC](#), Big Ten Native Alliance, Knowledge River program), and conference networks (e.g. NAISA, ATALM); 4) **evidence-based practice** for archival, library, and museum professionals to support Indigenous community needs; 5) increased knowledge of needs for this **or alternative tools to support community researchers in successful archival discovery**. This Indigenous SNAC project will help a broad range of Native and Indigenous community members to locate and request their heritage materials—whether for digital sharing or repatriation—or provide insights for alternative platforms or tools to accomplish these goals.

### **D.2. Impacts: Generalizability to the Field and Benefit to Society**

The results of this research project will create a replicable model for other genres and communities currently marginalized in archival collections, contribute to a shift in practice toward reparative description across the archival field, and increase the visibility of Indigenous histories and figures, both for communities and in public discourse. The project will **a) increase archival access i)** through community collaboration **ii)** to address access barriers to Indigenous archival collections, **iii)** using new cultural, descriptive, and technical tools and **iv)** open access community-oriented training; **b) develop an iterative, community co-design process** that benefits community members, technologists and digital humanists working with other marginalized communities; **c) field test a possible solution for the widespread discovery challenges** facing Indigenous archival collections with key community-based stakeholders; and **d) create evidence-based, culturally relevant approaches** to increasing digital access for the broader archives and cultural heritage field.

### **D.3. Sustainability Plan**

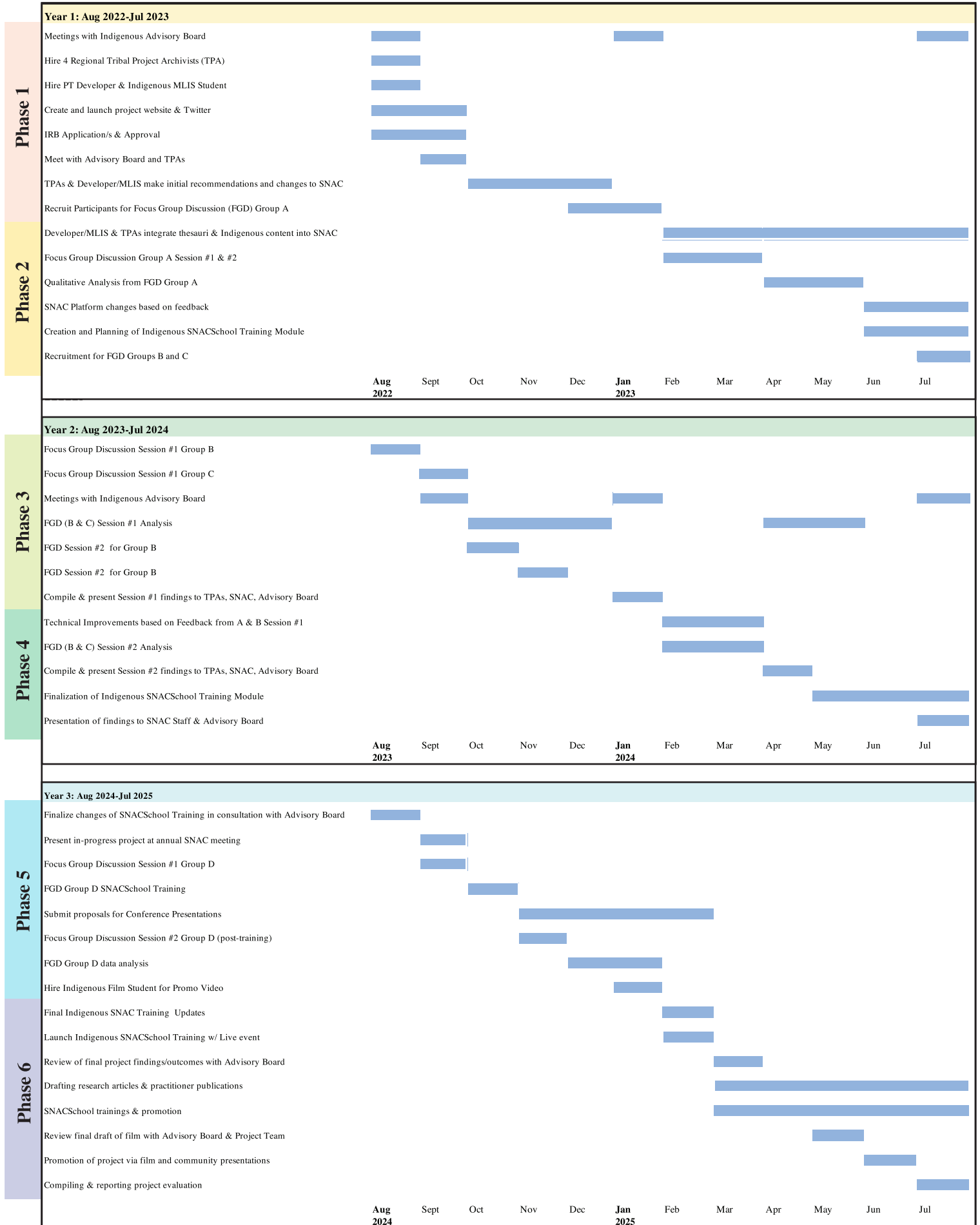
The project has several mechanisms built into its design to ensure its sustainability and lasting impact. SNAC and NARA leadership have endorsed this project as a priority; the project outcomes include training more Indigenous SNAC editors to build capacity and developing Indigenous SNAC School modules that will be freely online in perpetuity. Our partnerships with Harvard and the Smithsonian provide further foundation for further growth. The PD is committed to continuing her efforts to explore SNAC as a discovery tool for Indigenous collections, or to find alternatives, beyond the 3-year funding currently requested; she will use her role (currently Chair) in NAAS-SAA to promote the project. This project is just the first step in creating a total social-document network for Indigenous knowledge.

All findings of the project will be available on the project's website; both our research content and our site will be hosted on a secure networked server by the UMD College of Information Studies, and all project products will be digitally preserved and made accessible through the University's [institutional repository](#). All of the resulting SNAC entities, and any new thesauri or technical components, will be maintained in the SNAC platform. We will use Archival Resource Keys, persistent identifiers, for resource records added in SNAC to ensure their long-term stability in the platform and pathway back to archival repository records.

### **D.4. Conclusion**

Archives hold materials that Native and Indigenous communities need to revitalize language, reclaim land, and restore sovereignty. These collections are hard to locate online and may be difficult or impossible to access in person (especially but not only due to the COVID-19 pandemic). The PD seeks to build new models to harness current technological capacities, generate information equality, and empower Indigenous communities with tools to return knowledge to their home communities. This project will utilize collaborative methods to undertake that challenge, and provide a pathway for the wider archival and heritage community to follow suit.

## 6. Schedule of Completion



## 12. Digital Products Plan

### **Type: What types of digital products will you create?**

We expect 8 audiovisual Zoom recordings created during Focus Group Discussions (FGDs), which will be captured in both .mp4 and .mp3 (not to be made public according to IRB). About 8 resulting transcripts (and consent documentation) will be formatted as PDFs or .docx Word documents to be shared with participants after transcripts have been checked by the Graduate Assistant (GA) and Project Director (PD). Any photographs (screen shots) will be formatted as .jpg. Our qualitative coding files in NVivo will be in .nvpX. Any notes kept by the PD and GA will be in .docx or in paper note form. All published resources (including Indigenous SNAC School training modules, conference slides, and publications) will be published as PDFs and downloadable documents. Included among these materials will also be our updated [Indigenous SNAC Editorial Guide](#) which we will continue to enhance throughout the process, and will include descriptive processes and any workflows for SNAC technical implementations for Indigenous metadata and thesauri, and for tribal archivists inputting materials into SNAC. All SNAC entities and thesauri will be created in the SNAC platform, but our Developer and MLIS student and Tribal Project Archivists will likely work with hundreds of EAD files (likely csv or xml) extracted from ArchivesSpace or other content management systems as they transform them for SNAC. The project will publish an open-access promotional video (Youtube and in .mov), which will demonstrate and promote the use of SNAC for the discovery of Native American and Indigenous archival materials. We will also create recordings and transcripts for community presentations we give that will be formatted in .mp4 and .mp3 or PDF.

### **Availability: How will you make your digital products openly available (as appropriate)?**

The University of Maryland will impose no condition on access or use of the published research made available through University's DRUM repository ([drum.lib.umd.edu](http://drum.lib.umd.edu)). All SNAC entities and information will be similarly open access via SNAC's [CC0 1.0 Universal \(CC0 1.0\) Public Domain Dedication](#). We will share project slides, publications, training materials and images (with participant permission) on our project website; SNAC training materials or editorial policies will be made available on the [available on the SNAC website](#). Primary data and other supporting materials created or gathered in the course of the research project will be shared only in accordance with our IRB agreement, and any Tribal IRB we undertake for this project, in order to protect privacy and confidentiality for partner/users or Indigenous Advisory Board members. Zoom recordings and transcripts, and any Advisory Board meeting notes, will be used only by the GA and PD for analysis, or shared back with participants for feedback. Our IRB protocols will also ensure that we respect any cultural sensitivities as well as the Native or Indigenous ownership of information we seek to elevate through this project. We will make community presentations we give open-access only with consent of the community.

### **Access: What rights will you assert over your digital products, and what limitations, if any, will you place on their use? Will your products implicate privacy concerns or cultural sensitivities, and if so, how will you address them?**

Any records, entities, or thesauri created for this project will be maintained within the SNAC platform, and will be, as are all records in within the SNAC Cooperative corpus, "deemed to be communally owned." As SNAC lays out on their website: "per the terms of the SNAC Cooperative Membership Agreement, all records are available via the [CC0 1.0 Universal \(CC0 1.0\) Public Domain Dedication](#) license." That domain dedication ensures that future SNAC editors (and ideally increasingly Native and Indigenous archivists and editors) can continue to improve and build off of these records, allowing further linkages across global repositories.

The PD will manage the proposed deliverables, and review methods, implementation plans, research findings, and data project products with our Indigenous Advisory Board, before publication or wider circulation. We will also consult the Advisory Board at key stages of the project to review in-process findings and make next steps decisions as a group. The GA will also review notes, recordings, and transcriptions as they are synthesized, and participate in quality assurance of the coding, transcription, and application of IRB protocols for collected materials.

Training materials created for Indigenous SNACSchool are also open access and [easily available on the SNAC website](#). We will also plan to host these training materials on our project website. The main research products for this project will appear as text and images in conference presentations, white papers, as well as in video recordings of any conference or community presentations; these materials will be made available on the project's website. They will also be digitally preserved and made openly accessible through the Digital Repository at the University of Maryland (DRUM: [drum.lib.umd.edu](http://drum.lib.umd.edu)). Our promotional video will be hosted on Youtube, as well as on the SNAC website, our website, and with the consent of professional archival organizations, be additionally available on those websites (e.g. the Society of American Archivists' Native American Archives Section). All products will include attribution of the investigators and the funder, IMLS for supporting the research collecting and generating the data. Any practitioner- and peer-reviewed publications will be subject to copyright limitations of those publishers, however we will aim to publish through open source venues.

Primary source data will include Zoom audio and video recordings and associated transcripts from Focus Group Discussions as well as observational notes and notes from Advisory Board meetings. That data will be kept confidential and we will follow all UMD Institutional Review Board (IRB) protocol, as well as any Tribal IRB protocol agreements in maintaining that data. That research content will be hosted for 36 months in UMD networked storage space to store audiovisual recordings and project data sustainably and securely.

**Sustainability: How will you ensure the sustainability of your digital products?**

Any records, entities, or thesauri created for this project will be maintained within the SNAC platform with the [CC0 1.0 Universal \(CC0 1.0\) Public Domain Dedication](#) license. They can be edited, enhanced, and linked by the growing SNAC editor community. Working with the Technical Infrastructure Working Group and other SNAC staff, we will ensure that all data ingested into SNAC meets not only SNAC standards for sustainability but wider best practices in data curation (e.g. ensuring archival resources are linked with ARKs, persistent identifiers, for any resource records added in SNAC to ensure their long-term stability in the platform and pathway back to archival repository records). That information can, in turn, be ingested by institutional or community archives to be held in perpetuity as they wish. Our partnerships with SNAC leadership, institutional repositories, and community archives will ensure that these products have maximal exposure for future use.

The research products for this project will be archived in DRUM, which is built on DSpace software, a widely used, reliable digital repository platform. Digital FGD recordings and transcripts may be acquired by the UMD Archives and Special Collections or another repository if that is the desire of participants and the Advisory Board upon completion of this project (which would go through a subsequent deed of gift and accession process).

## Data Management Plan

**Identify the type(s) and estimated amount of data you plan to collect or generate, and the purpose or intended use(s) to which you expect them to be put. Describe the method(s) you will use, the proposed scope and scale, and the approximate dates or intervals at which you will collect or generate data.**

We will collect qualitative data in the form of audiovisual recordings, transcripts, notes, and qualitative coding files (in NVivo) in the course of recording and analyzing Focus Group Discussions (FGDs). The intended purpose of this observational and analytical data is to research community-based affordances of the SNAC platform as a tool for Indigenous archival discovery at crucial stages of the project. FGDs will be recorded directly from Zoom and use Zoom's automated transcription to create a draft transcript. That draft will be checked, edited, and formalized by the GA into docx files, then reviewed by participants, before being imported into NVivo, a qualitative coding software, for inductive coding. The data from the focus group A (FGD-A) will be collected during two, approximately two-hour meetings, one February 2023 and March 2023. Data from our second and third FGDs (B and C) will be collected in meetings in August to November (one per month). Focus Group D will meet twice, once in September and once in November. We will draw on our analysis from all FGDs in conference presentations or publications, to be held in the Digital Repository for University of Maryland (DRUM); that analysis will also be incorporated into SNACSchool training materials openly available on the SNAC website.

**Will you collect any sensitive information? This may include personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information. If so, detail the specific steps you will take to protect the information while you prepare it for public release (e.g., anonymizing individual identifiers, data aggregation). If the data will not be released publicly, explain why the data cannot be shared due to the protection of privacy, confidentiality, security, intellectual property, and other rights or requirements.**

We will not collect personally identifiable information from FGD participants, and we will anonymize participant identities using alphanumeric codes in transcripts and in NVivo files. Research data collected in FGDs—and any other primary research audiovisual recordings, notes, transcripts, and NVivo files—will only be accessible to the Project Director (PD), Graduate Assistant (GA), and participants represented in recordings. Any files we share with participants will be sent by FTP or keylink via a password-protected folder. For any all participants, we will anonymize personal information in our transcripts and NVivo files using alphanumeric codes, and ensure that we obscure identifiable names, locations, or other information. None of that primary research data will be made public.

While we will primarily talk about SNAC and archival materials with our participants, many of these archival collections contain sensitive information. It is of utmost importance that if participants share sensitive information, that this information remains confidential and does not get published. We will work with our Indigenous Advisory Board and each of our participants to ensure that culturally sensitive information is not ingested into the SNAC platform nor quoted in any publications, presentations, or on social media. Allowing participants to choose their level of involvement and personal identification, as well as being able to cut anything from a recording or observation should prevent this possible ethical harm. University IRB approval is required for this project and all data collection practices will be reviewed by the University of Maryland's IRB. A university IRB application will be submitted after grant approval. As outlined in the schedule of completion, we expect to secure approval in the Fall of Year 1. Where it exists, we will also vet this research with any Tribal Internal Review Board deemed relevant (by our Indigenous Advisory Board and/or via feedback from any Indigenous participant). We will further draw on our Indigenous Advisory Board to adhere to any cultural protocols outlined by Tribal Councils or other bodies of communities represented in SNAC records. The PD and GA will obtain verbal consent according to human subjects' protocol and such verbal consent for participation will be recorded before the interviews. Any research products or SNAC records will be approved by our participants and Indigenous Advisory Board for open access.

**What technical (hardware and/or software) requirements or dependencies would be necessary for understanding retrieving, displaying, processing, or otherwise reusing the data? How can these tools be accessed (e.g., open-source and freely available, commercially available, available from your research team)?**

SNAC data will be open access for retrieval or reuse on the SNAC platform. Research products including training materials tailored to Native and Indigenous researchers will be available as PDF and downloadable documents from University of Maryland's DRUM, our project website, and the SNAC website. Research data—audiovisual recordings, notes, transcripts, NVivo files, and any other data that is deemed to be private by our Advisory Board, Tribal Project

Archivists, or partners —will only be accessible to the Project Director and GA and will be stored in password-protected and secure network storage at the university.

**What documentation (e.g., consent agreements, data documentation, codebooks, metadata, and analytical and procedural information) will you capture or create along with the data? Where will the documentation be stored and in what format(s)? How will you permanently associate and manage the documentation with the data it describes to enable future reuse?**

FGD transcripts and consent agreements will be stored as .docx and PDF documents. Audiovisual files will be stored as .mp3 and .mp4 files. NVivo coding files are in .nvp format. Those primary research data and documentation will not be made public, but will be stored in password-protected and secure network storage at the university. Five years after the completion of the grant period we will delete all primary research (audiovisual and text) files, unless it is the desire of the Indigenous Advisory Board, Tribal Project Archivists, or other team members to archive these files in a repository (in which case these records will go through another review as part of the deed of gift process with participants). Our Tribal Project Archivists and developer/MLIS student team will transform archival EAD records for use in SNAC in .xml or .csv formats, but these will only be used as working files to take existing data from archival content management systems, modify or transform it to fit SNAC requirements, and ingest into SNAC. SNAC works to permanently associate linked data for future use.

**What is your plan for managing, disseminating, and preserving data after the completion of the award-funded project? If relevant, identify the repository where you will deposit your data. When and for how long will data be made available to other users?**

The PD and GA will be responsible for managing the data during this project, and keeping working files secure in UMD's networked, password-protected storage during all six phases. During the project, investigators will adhere to the data creation and management best practices outlined by the University of Maryland's Division of Research and IRB committee. The research products archived in DRUM will be available indefinitely. The University of Maryland Libraries' DRUM repository is built on DSpace software, a widely used, reliable digital repository platform. DRUM performs nightly bit-level integrity tests on all files, and all contents are regularly copied to back-up storage. DRUM conforms to the digital preservation principles outlined in the University of Maryland Libraries' Digital Preservation Policy. Any SNAC records and thesauri created will be maintained by SNAC to under a [CC0 1.0 Universal \(CC0 1.0\) Public Domain Dedication](#) license, and continue to be edited, enhanced, and linked by the growing SNAC editor community. Working with the Technical Infrastructure Working Group and other SNAC staff, these project staff will ensure that all data ingested into SNAC meets SNAC data preservation standards as well as data curation best practices (as noted in our digital products plan, e.g. ensuring archival resources are linked with ARKs, persistent identifiers, for any resource records added in SNAC to ensure their long-term stability in the platform and pathway back to archival repository records). As outlined in our narrative, our outreach efforts, including SNACSchool trainings, professional and community presentations, promotional video, and Twitter account will assist in disseminating research products created during the project.

**When and how frequently will you review your Data Management Plan? How will the implementation be monitored?**

The PD will be responsible for ensuring the data management plan is adhered to. In consultation with the Indigenous Advisory Board and SNAC leadership, the PD will review the data management plan at the close of each of the project's six phases as outlined in the narrative (essentially twice per year) throughout the course of the project.

## **Organizational Profile**

### **University of Maryland**

#### Mission:

The University of Maryland College Park is a public research university, the flagship campus of the University System of Maryland, and the original 1856 land-grant institution in Maryland. The University of Maryland is dedicated to achieving excellence as the State's primary center of research and graduate education and the institution of choice for undergraduate students of exceptional ability and promise. With a commitment to diversity of faculty, students and staff, the University advances knowledge, provides outstanding and innovative instruction, and nourishes a climate of intellectual growth in a broad range of academic disciplines and interdisciplinary fields for the benefit of the economy and culture of the State, the region, the nation and beyond.

#### Service Area:

The Fall 2021 enrollment was 41,271 a total of graduate and undergraduate students. 42% of the population are minority students. 34.991% of students come from out-of-state and 65.009%% are Maryland residents. The University serves the state of Maryland as a premier research institution and reaches national distinction as ranking among the very best of public research universities in the United States.

### **College of Information Studies Maryland's *i*School in the Information Capital**

#### Mission:

The College of Information Studies, Maryland's *i*School, engages in collaborative, interdisciplinary, and innovative research, teaching, and service. We educate information professionals and scholars, and we create knowledge, systems, and processes.

#### Service Area:

The *i*School offers Master's degrees in Library Science (MLIS), Information Management (MIM), Human Computer Interaction (HCIM) and a doctorate degree in Information Studies. Per most recent admission data, 355 students are enrolled in the MLIS program, 43 enrolled in the MIM program, 123 enrolled in HCIM program and 76 enrolled in the doctoral program. The *i*School also offers Bachelor's degree in Information Science (BSIS) and the current number of enrollees is 1479. Approximately 42.39% of the total student body is female and 26.65% are underrepresented students. The *i*School has 45 Tenured and Tenured-track faculty, 35 Professional-track faculty, 54 staff and 113 adjunct faculty representing diverse subject areas in information studies. The *i*School serves the mid-Atlantic region.