



NATIONAL ENDOWMENT FOR THE HUMANITIES

OFFICE OF DIGITAL HUMANITIES

Narrative Section of a Successful Application

The attached document contains the grant narrative and selected portions of a previously funded grant application. It is not intended to serve as a model, but to give you a sense of how a successful application may be crafted. Every successful application is different, and each applicant is urged to prepare a proposal that reflects its unique project and aspirations. Program guidelines also change and the samples may not match exactly what is now required. Please use the current Notice of Funding Opportunity instructions to prepare your application.

Prospective applicants to the Institutes for Advanced Topics in the Digital Humanities program should consult the current Notice of Funding Opportunity at <https://www.neh.gov/grants/odh/institutes-advanced-topics-in-the-digital-humanities> for instructions.

Applicants are also strongly encouraged to consult with the NEH Office of Digital Humanities staff well before a grant deadline.

Note: The attachment only contains the grant narrative and selected portions, not the entire funded application. In addition, certain portions may have been redacted to protect the privacy interests of an individual and/or to protect confidential commercial and financial information and/or to protect copyrighted materials.

Project Title: Networking Archaeological Data and Communities

Institution: Alexandria Archive Institute, Inc.

Project Director: Leigh Lieberman

Grant Program: Institutes for Advanced Topics in the Digital Humanities

List of Project Personnel

Core Team

Director

Leigh Anne Lieberman, The Alexandria Archive Institute / Open Context

Senior Staff

Sarah Witcher Kansa, The Alexandria Archive Institute / Open Context

Eric Kansa, The Alexandria Archive Institute / Open Context

Postdoctoral Researchers

L. Meghan Dennis, The Alexandria Archive Institute / Open Context

Paulina F. Przystupa, The Alexandria Archive Institute / Open Context

Advisors

Sarah Bond, University of Iowa

Shawn Graham, Carleton University

Sebastian Heath, New York University, Institute for the Study of the Ancient World

Ethan Watrall, Michigan State University

Faculty

The Data Management Lifecycle

Anne Austin, University of Missouri St. Louis

Anne Hunnell Chen, Bard College

Ixchel M. Faniel, OCLC Research

Michelle LeFebvre, Florida Museum of Natural History, University of Florida

Data for Professional Communication

William Caraher, University of North Dakota

Sarah Herr, Desert Archaeology

Lisa Lodwick, University of Cambridge

Data for Diverse Publics

Pınar Durgun, Vorderasiatisches Museum, Berlin
Edward González-Tennant, University of Central Florida
Neha Gupta, University of British Columbia
Jarre Hamilton, University of California, Berkeley
Desiree Martinez, Cogstone Resource Management
Sarah Miller, Florida Public Archaeology Network, Flagler College

Data for the Classroom

Beth Compton, University of Western Ontario
Katherine Cook, University of Montreal
Tiffany Earley-Sapadoni, University of Central Florida
Eric Poehler, University of Massachusetts Amherst
Jennifer Zovar, Whatcom Community College

Narrative

Significance

Although the curation, communication, and interpretation of research data have assumed greater prominence across the humanities and social sciences, these disciplines still lack adequate support and expertise to fully realize new opportunities afforded by data.¹ The problem is particularly acute in archaeology, a discipline that often relies on destructive research methods—namely excavation—and often requires the coordination and collaboration of data collection and analysis between researchers with very different disciplinary specializations.² Archaeological teams generally have little formal training in managing data, which can unfortunately lead to bespoke data creation, archiving, and sharing practices that make curation and reuse more difficult and expensive.³

Data management cannot be regarded as a simple compliance or technical issue. Data involve significant ethical concerns, including issues around cross-cultural intellectual property, protection of sensitive data, and equitable recognition of contributors, many of whom work in conditions of precarity or face structural discrimination in hyper-competitive academic contexts. For example, representatives of indigenous communities need self-determination and recognition in the governance of the data and media relevant to their histories and heritages. Similarly, although the disclosure of site location data can invite looting and vandalism, without carefully considered public information sharing, it can be difficult to mobilize and coordinate protection of historical landscapes.⁴ Finally, new forms of digital scholarly communications can offer greater recognition for contributions of students, specialists, and other contributors in collaborative archaeological research projects. However, as demonstrated by some of the dysfunctions of social media (e.g.: trolling, doxing, gendered and racial abuse, etc.), exposure can be dangerous. Without editorial and administrative controls, online scholarship, including data sharing, can perversely reinforce structural inequalities.

For data to be meaningfully preserved and used in intellectually rigorous ways, they must be integrated into all aspects of archaeological practice, including ethics, publishing, outreach, and teaching. With the proposed *Networking Archaeological Data and Communities* institute, the Alexandria Archive Institute / Open Context (AAI/Open Context) aims to promote good digital practices that align technology with professional needs. In doing so, this institute will build upon and complement other institutes previously funded by the NEH, as well as the long-term efforts

¹ Yakel, E., I. M. Faniel, and Z. J. Maiorana (2019) "Virtuous and vicious circles in the data life-cycle." *Information Research*, 24(2). <http://informationr.net/ir/24-2/paper821.html>.

² Faniel, I. M., and L. S. Connaway (2018) "Librarians' Perspectives on the Factors Influencing Research Data Management Programs." *College & Research Libraries Journal*, 79 (1). <https://doi.org/10.5860/crl.79.1.100>.

³ Kansa, S. W., L. Atici, E. C. Kansa, and R. M. Meadow (2020) "Archaeological Analysis in the Information Age: Guidelines for Maximizing the Reach, Comprehensiveness, and Longevity of Data." *Advances in Archaeological Practice*, 8(1), 40–52. <https://doi.org/10.1017/aap.2019.36>; Edwards, P. N., M. S. Mayernik, A. L. Batcheller, G. C. Bowker, and C. L. Borgman (2011) "Science friction: Data, metadata, and collaboration." *Social Studies of Science*, 41(5), 667–690. <https://doi.org/10.1177/0306312711413314>.

⁴ Kansa, E. C., S. W. Kansa, J. J. Wells, S. J. Yerka, K. N. Myers, R. C. DeMuth, T. G. Bissett, and D. G. Anderson (2018) *The Digital Index of North American Archaeology: Networking Government Data to Navigate an Uncertain Future for the Past*. *Antiquity*, 92(362), 490–506. <https://doi.org/10.15184/aqy.2018.32>.

of the AAI/Open Context to make data publishing more inclusive and more consistent with professional standards of good conduct.

In 2021, in response to the demand assessed during informational interviews with over 50 professional stakeholders representing a variety of institutions and backgrounds (e.g.: librarians; research and teaching faculty; museum professionals; public archaeologists; etc.), the AAI/Open Context began to organize a professional development curriculum around data literacy for archaeologists and cultural heritage professionals. While professional development opportunities may be readily available to individuals from select institutions, they are not broadly accessible to the majority of archaeologists. Because good data management practices go beyond the scope of any particular institution, there is a need for wider disciplinary conversations around this topic.

Our team launched collaborative pilot programs in the fall of 2021 aimed at offering members of the Archaeological Research Facility (ARF) at the University of California, Berkeley (UC Berkeley)⁵ and the Early Career Scholars Group of the American Society of Overseas Research (ASOR)⁶ an introduction to archaeological data literacy. These pilot programs were incredibly well received;⁷ moreover, participant feedback highlighted specific hurdles to individual practices around data among archaeologists. For instance, one participant lamented the lack of standard recording practices across projects and sites (“I often refer to there being many *archaeologies*, since often how archaeology is practiced is contingent upon where you work and what time period you are excavating.”). Likewise, another participant expressed an interest in wanting to learn how to build a database for their research project, but reluctance to begin (“I know some of the basics about relational databases but I find myself hesitating to start building one for fear of negating the whole thing with a few mistakes.”). These reflections guide the kinds of programs and resources that the AAI/Open Context is developing.

Through our pilot work with the ARF and ASOR, we ultimately learned that, while an overwhelming majority of participants in these workshops think working with data is important for them and their future careers, a similar majority felt that they lacked both the training and the comfort to do so. *Networking Archaeological Data and Communities* aims to provide this kind of training specifically for individuals who do not have access to these kinds of resources through their own institutions; in this way, we will be able to expand the AAI/Open Context’s offerings to underserved communities, providing mentorship and support so that participants can develop skills that are critically important for success in the humanities and social sciences while giving them an opportunity to make significant progress on a digital research project for professional communication, public engagement, or instruction. Moreover, the institute’s collective outcomes will be published open access so that they can be used by others to exponentially increase the number of people this work reaches. Both the participant and collective outcomes are described more fully below in the *Impact and Evaluation* section.

⁵ <https://alexandriaarchive.org/data-conversations/>; full program assessment available at link.

⁶ <https://alexandriaarchive.org/digging-up-data/>; full program assessment available at link.

⁷ The ASOR workshops, shared publicly on the organization’s YouTube channel, have received almost 1000 views since they were posted in fall 2021.

Curriculum and Work Plan

Networking Archaeological Data and Communities will provide comprehensive professional development opportunities tailored to meet the needs of under-resourced participants. This section describes in detail the curriculum planned by this institute over three years. To summarize, the institute will be divided into six phases and two summer programs:

- Phase I (September - December 2022): Participant Recruitment and Program Launch
- Phase II (January - May 2023): The Data Management Lifecycle
- Summer Workshop I (June - August 2023): Networking Data
- Phase III (September - December 2023): Data for Professional Communication
- Phase IV (January - May 2024): Data for Diverse Publics
- Summer Workshop II (June - August 2024): Networking Communities
- Phase V (September - December 2024): Data for the Classroom
- Phase VI (January - August 2025): Wrap Up and Dissemination

Online Collaboration

In addition to formal institute communications by email, informal communications between institute participants, Faculty, and especially the Core Team (identified below in the *Staff, Faculty, and Consultants* section) will be facilitated using the AAI/Open Context's Discord server. This free-of-charge platform allows both private and group conversations; screen sharing and video conferencing; and has features for exporting conversation threads. Core Team member L. Meghan Dennis has experience setting positive expectations for appropriate conduct and for moderating and managing online conversation spaces. This platform has proved invaluable for internal communications among the AAI/Open Context team and among participants in some of the AAI/Open Context's ongoing work with ASOR. For this reason, we are confident it will provide a useful space for facilitating collaboration and learning.

Participants and Faculty, including the Core Team, will also have access to a shared Google Drive, managed by the AAI/Open Context, for sharing materials associated with the ongoing work of the institute (e.g.: organizational information; lesson plans, with associated readings and exercises; collective outcomes; etc). This drive will also serve as a repository for working drafts of institute materials that will be shared on the institute website. We expect that most of our applicants will already be familiar with some of the functionality of Google Drive; for this reason, it will be relatively easy for participants to navigate and access.

Phase I: Participant Recruitment and Program Launch

The institute will start with four months of preparation, advertising, and participant recruitment. During this time, the Director will meet virtually with Senior Staff and Advisors on a regular basis to review and finalize the institute goals, curriculum, schedule, and assessment plan outlined in this application. The Director will also meet with the Faculty and Core Team to define their individual contributions and draft a more detailed schedule for their respective workshops. The institute website and application will be launched, and, once applications are due, the Director and Senior Staff will assess the applicants based on criteria defined in collaboration with the Advisors (for more detail, see the *Participants* section below).

Phases II, III, IV, and V: Online Workshops

Networking Archaeological Data and Communities is organized around four semesters devoted to specific themes: *The Data Management Lifecycle*, *Data for Professional Communication*, *Data for Diverse Publics*, and *Data for the Classroom*. Each semester includes three or four online, synchronous workshops, scheduled on weekend days to better accommodate participants with other weekday commitments that may preclude their participation. There are 14 online workshops scheduled across the three-year project. Sessions will be recorded so that they can be shared with institute participants (especially in the event that they are unable to attend) and consulted by institute staff for assessment purposes.

To reduce *zoom fatigue*, each workshop will be divided into a morning and an afternoon session; each session will be a maximum of two to three hours, including short breaks, with a longer break between sessions. Participants will be asked to do a bit of reading and preparation in advance of each workshop, which consists of a faculty-led lecture and learning activities that contribute toward individual project outcomes for participants as well as collective outcomes for the whole institute.

This institute benefits from the collaboration of a large number of expert faculty. Like most professionals, these individuals have demanding schedules and commitments. Therefore, the Core Team will maintain primary responsibility for communications, logistics, assessment, curriculum development, and project management of collective outcomes. In order to reduce attrition, Faculty will work in pairs, with each pair leading a single workshop. Additionally, the Core Team will facilitate each workshop to help ensure continuity between workshops, and to help fill gaps in the event of Faculty attrition.

Summer Workshops I and II

In addition to the online workshops, the institute will host two summer programs at the ARF at UC Berkeley (see letter of commitment from Prof. Christine Hastorf; for a description of the facility, see the *Institutional Profile* section below). We are confident that these short programs (each consisting of a four-day workshop, with an additional day for travel; tentatively scheduled for late July 2023 and 2024) will be feasible for participants, who may already have fieldwork scheduled for earlier in the summer as well as other personal commitments to attend to. This schedule has been designed, and remains flexible, specifically to mitigate the risk of attrition among participants.

These workshops give participants opportunities for in person collaboration and learning with other institute participants and members of the Core Team. As demonstrated by the prior success of the 2011-2014 *Linked Ancient World Data Institute* (LAWDI)⁸ and the 2014-2017 *Michigan State University Institute on Digital Archaeology Method & Practice* (MSUDAI),⁹ these summer sessions play a vital role in forging a lasting sense of community as well as long-term collaborations. For example, the LAWDI institute catalyzed partnerships that led to Pelagios¹⁰ and PeriodO,¹¹ successful digital projects that link major epigraphic, art historical, and archaeological collections. Similarly, partnerships initiated by the MSUDAI institute led to the

⁸ <https://www.neh.gov/divisions/odh/institutes/linked-ancient-world-data-institute>

⁹ <https://www.neh.gov/divisions/odh/institutes/institute-digital-archaeology-method-practice>

¹⁰ <https://pelagios.org>

¹¹ <https://perio.do>

Open Digital Archaeology Textbook,¹² a major conference sponsored by Harvard University,¹³ and a special issue in the journal *Advances in Archaeological Practice*.¹⁴ Alumni from the LAWDI institute (Sarah Bond, Sebastian Heath, Eric Kansa, and Eric Poehler), and the MSUDAI institute (Katherine Cook, Neha Gutpa, Eric Kansa, and Ethan Watrall) will bring their prior experience leading successful institutes to their work on *Networking Archaeological Data and Communities*, helping to build a welcoming, inclusive, and resilient community.

Furthermore, the MSUDAI institute demonstrated how in person workshops cultivate not only a sense of community, but also a sense of accountability among participants. Participants will be motivated to meet their individual project goals when we gather and report on progress during the in person summer workshops. *Networking Archaeological Data and Communities* will further the model pioneered by the MSUDAI institute by also encouraging participants to report back on their progress during online workshops throughout the year and informally on the AAI/Open Context Discord server.

Phase VI: Wrap Up and Dissemination

During the institute's final phase, the Director will work towards finalizing and publishing the *Data Literacy for Archaeologists Practice Guide*. The Core Team and Advisors will also offer feedback to participants about their individual research projects and public-facing outcomes.

Participants

Demand for the kind of professional development training that this institute promotes is high (for a discussion of this demand, based on our work with the ARF and ASOR, see the *Significance* section above). *Networking Archaeological Data and Communities* builds on this assessment, allowing us to target the growing number of early career researchers, faculty, librarians, support staff, and public archaeologists from underrepresented communities. By focusing our efforts on these types of individuals, who often do not have access to these critical resources through their own institutions, we can foster a more accessible network of colleagues and develop a more equitable cache of resources around archaeological data literacy.

We will circulate our call for applications widely through disciplinary and scholarly society networks (e.g.: Archaeological Institute of America, ASOR, Register of Professional Archaeologists, Society for Anthropology in Community Colleges (SACC), Society for American Archaeology, Society of Black Archaeologists, etc.). We will also rely on the AAI/Open Context's active Twitter account to spread the word. Finally, members of the AAI/Open Context Board of Directors, the AAI/Open Context Sustainability Advisory Board, Core Team, Advisors, and Faculty have far ranging professional networks. For example, (b) (4)

[REDACTED]. Similarly, Faculty member Desireé Reneé Martinez is a Gabrieliño (Tongva) archaeologist, member of the Society for American Archaeology Board of Directors, and president of Cogstone Resource Management. Her networks span across indigenous, professional society, and commercial constituencies.

¹² <https://o-date.github.io/draft/book/about-the-authors.html>

¹³ <https://archaeology.harvard.edu/critical-perspectives-practice-digital-archaeology>

¹⁴ <https://www.cambridge.org/core/journals/advances-in-archaeological-practice/issue/0E42182312FF97D724012F0CCA9E0993>

Applicants will submit a C.V. or résumé, and short (2-3 pages, single-spaced) personal statement that describes how they would benefit from the institute and sketches the data-driven project they hope to accomplish through participation. The evaluation committee for applications will include the Director and Senior Staff. Applicants will be rated on a Likert scale using a holistic evaluation. So that each participant can fully benefit from the support of the institute staff, only 15 will be admitted; however, all qualified applicants who are not admitted to the institute will remain alternates through the first semester of the institute, in the event that any accepted applicants are unable to participate and space becomes available. Our selection criteria will be defined during Phase I with input from the institute's Advisors. In addition to striving for a balanced representation of gender, ethnicity, and institutional status among institute participants, we will consider institutional support, level of data literacy, and project proposal; significantly, we will privilege individuals from institutions who do not have any sort of digital infrastructure and those who do not have access to the kinds of professional development resources and mentorship that *Networking Archaeological Data and Communities* offers.

Institutional Profile

The AAI/Open Context is a non-profit entity working to improve research and teaching through innovative uses of the Web, especially in archaeology and cultural heritage related disciplines. Our goal is to lead the research community in developing accessible, reliable, comprehensive, and open access scholarly resources around archaeological and heritage data. We help transform these data into knowledge, making them valuable and relevant for students and scholars worldwide. This promotes transparency in the research process, innovative reuses of data, and broad-scale collaborative research. A primary focus of this work has been in publishing open access archaeological data through Open Context, a platform developed by the AAI in 2006 that now houses more than 150 data publications with over two million records and 140,000 images, maps, and 3D models. Ongoing data publishing developments are informed by numerous research programs, including our *Data Literacy Program* and *Sustainability, Collaboration, & Network Building* program, funded by The Andrew W. Mellon Foundation and an Infrastructure and Capacity Building Challenge Grant from the NEH. Past projects include *The Secret Life of Data* (SLO-data), exploring how data creation practices impact downstream data use; and *The Digital Index of North American Archaeology (DINAA)* gazetteer.

The AAI/Open Context's staff members make up the institute's **Core Team** (discussed below in *Staff, Faculty, and Consultants*). The AAI/Open Context's Board of Directors consists of nine individuals who share the organization's vision and have personal qualifications to lead the organization to success. They evaluate the AAI/Open Context's performance in working toward its mission and enable progress towards growth. More recently, as part of our current NEH Challenge Grant, the AAI/Open Context developed a Sustainability Advisory Board—composed of representatives from libraries, museums, and publishers—to develop plans for budgeting, marketing, and partnerships to expand and refine our initiatives. We will use these boards to help recruit participants and we will use the curriculum created by this institute to develop continued services in collaboration with these partner institutions. The Core Team will report to these two bodies at regular intervals, as described in Attachment 3: *Work Plan and Course Outline*.

Challenges inherent in understanding and using digital data are as intellectually demanding as any other humanistic research endeavor. The AAI/Open Context has a 16-year record of success publishing a diverse body of editorially-vetted archaeological datasets, often linked to books and peer-reviewed articles. The AAI/Open Context's staff members hold leadership positions in scholarly societies, policy-making committees, and granting programs, advocating change in professional attitudes towards data. In 2013, the White House celebrated these contributions with a Champion of Change in Open Science award and we subsequently earned awards from the digital library and archaeological research communities (International Digital Curation Conference Best Paper prize in 2014 and the Archaeological Institute of America's award for Outstanding Work in Digital Archaeology in 2016).

Since the AAI/Open Context's inception, we have researched, employed, and promoted ethically and contextually appropriate approaches to open access and open data. We've participated in multi-year collaborative programs to investigate and promote data management practices situating data within collaborative research agendas centered on inclusive oversight and participation of Indigenous communities. This work informed several research papers exploring issues of open data; the need for protection and privacy of sensitive data; and the need for collaborative processes to know what data can and should go public, and what data may, because of cultural and historical contexts, require access controls and other protections.¹⁵ In addition to guiding our editorial and accession policies, these research efforts helped shape Open Context's intellectual property policies and terms and conditions of service.

Resources for In Person Workshops

In person workshops during summer 2023 and 2024 will take place at the ARF at UC Berkeley. The ARF supports field and laboratory research conducted by UC Berkeley archaeologists and related specialists who are engaged with the human past by developing resources (including laboratory facilities and workshops) that benefit numerous scholars and their students, and by making these resources available to practitioners across campus and beyond. The ARF has a classroom that seats 50 people and an adjacent laboratory space for break-out sessions. The building is ADA accessible, including two restrooms and a kitchen space. The building has reliable, free guest wifi and A/V equipment. Berkeley has easy public transportation connections with San Francisco and mass transit connectivity with two major airports. Participants will stay at the Bancroft Hotel, located across the street from the ARF, or the Berkeley City Club, located a half mile from the ARF. Both hotels are ADA accessible. The ARF space is provided free of charge to this institute because Director Leigh Anne Lieberman and Postdoctoral Researcher L. Meghan Dennis currently hold three-year, unpaid Research Associate titles with the ARF, through an ongoing collaborative relationship between the AAI/Open Context and archaeologists at UC Berkeley. Lieberman and Dennis have given virtual lectures and workshops for the ARF community and have plans for future contributions, including guest

¹⁵ For example: Kansa, E. C., J. Schultz, and A. N. Bissell (2005) "Protecting Traditional Knowledge and Expanding Access to Scientific Data: Juxtaposing Intellectual Property Agendas via a 'Some Rights Reserved' Model." *International Journal of Cultural Property* 12(03): 285–314 <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/S0940739105050204>; Kansa, E. C. (2009) "Indigenous Heritage and the Digital Commons." Pp. 219–44 in, *Traditional knowledge, traditional cultural expressions and intellectual property law in the Asia-Pacific region* edited by C. Antons. Kluwer Law International; and Kansa, E. C. (2016) "Click Here to Save the Past" In *Mobilizing the Past for a Digital Future: The Potential of Digital Archaeology*, eds. E. W. Averett, J. M. Gordon, and D. B. Counts, 443-472. Grand Forks, ND: The Digital Press at the University of North Dakota. <https://escholarship.org/uc/item/9w9593tn>

lectures in archaeological ethics and storytelling with data at a commuter-based field school for underrepresented students that the ARF is offering in summer 2022.

Staff, Faculty, and Consultants

The **Core Team** comprises the Project Director, two Senior Staff, and two Postdoctoral Researchers. These five individuals are the staff of the AAI/Open Context and will work together on all phases of the project. The Core Team has demonstrated dedication and expertise in different complementary areas of digital archaeology. They bring doctoral training in a number of relevant disciplines; extensive field work experience; experience in cultural resource management; and technical expertise in open source software engineering, GIS, databases, data analysis, and visualization.

Overall, we strive for a balanced representation of gender, ethnicity, and institutional status among the institute's Core Team, Advisors, and Faculty. Those involved have an established track record of researching, developing and publishing about best practices in archaeological data management, especially in areas of ethics and professional development (which can be seen throughout the *Sample Bibliography* sections in Attachment 3: *Work Plan and Course Outline*). Finally, those involved at all levels have experience organizing professional development programs, including participation as faculty in a number of prior NEH Institutes (described above in the *Curriculum and Work Plan* section). Informed by our prior experience in professional development programs, organizational roles for *Networking Archaeological Data and Communities* include the following:

- **Project Director (Core Team):** Project Director Leigh Anne Lieberman will oversee all aspects of the program, including managing curriculum development and documentation, the application process, institute assessments; and the *Data Literacy for Archaeologists Practice Guide*. In consultation with the Faculty, she will co-lead most semester sessions, and with the Core Team she will co-lead the summer workshops.
- **Senior Staff (Core Team):** Senior Staff members Sarah Witcher Kansa and Eric Kansa oversee research and development at the AAI/Open Context. They will weigh in on and contribute to aspects that the Project Director manages. In consultation with the Faculty and Project Director, they will each co-lead several online semester sessions. As members of the Core Team, they will co-lead the summer workshops.
- **Postdoctoral Researchers (Core Team):** AAI/Open Context postdoctoral researchers L. Meghan Dennis and Paulina F. Przystupa, as part of ongoing work supported with a grant from The Andrew W. Mellon Foundation, bring expertise in storytelling with archaeological data; development of digital projects for professional communications, instruction, and public engagement; and ethics. In collaboration with the Faculty and Project Director, they will each co-lead two online semester sessions. In collaboration with other members of the Core Team, they will co-lead the summer workshops.
- **Advisors:** Four individuals will provide guidance, including helping define the scope of the curriculum; helping define applicant criteria; helping review assessments and offer feedback about changes to curriculum; providing feedback on participant and collective outcomes; and advertising application and outcomes to target audiences.
- **Faculty:** 18 individuals, in consultation with the Project Director and Senior Staff, will co-lead one online session each. They will have an opportunity to inform the scope of the curriculum and will advertise the application and outcomes to target audiences.

Impact and Evaluation

Networking Archaeological Data and Communities encourages a number of less tangible outcomes for the archaeological community as a whole. The prior LAWDI and the MSUDAI institutes succeeded in building lasting, collaborative communities that this institute will continue to expand while also promoting greater diversity and inclusivity among our staff and participants. This institute will result in long-term impacts of continued partnerships; future collaborative projects; and ongoing conversations in publications, citations, and social media. In addition to these community impacts, the institute will lead to participant and collective outcomes that are concrete and complementary.

Participant Outcomes

As with the MSUDAI institute, each *Networking Archaeological Data and Communities* participant will explore a variety of approaches and then develop their own digital project for professional communications, instruction, or public engagement. Because this institute highlights complementary aspects of good technical and professional (especially ethical) practice, each participant will develop a Data Management Plan (DMP) for their project. DMPs will be collaboratively discussed and revised to align with applicable FAIR (Findable, Accessible, Interoperable, Reusable) Guiding Principles¹⁶ for scientific data management and stewardship and CARE (Collective benefit, Authority to control, Responsible, Ethical) Principles¹⁷ for Indigenous Data Governance. Context and stakeholder needs matter greatly in how DMPs should emphasize different aspects of FAIR and CARE principles. Collaborative discussion of DMPs tailored to the needs of diverse projects will broaden understanding of how to better align technology and data practices with ethical goals.

Development of individual projects will be supported by the Core Team and advised by members of the Faculty. Examples of projects include an instructional module that uses data in teaching about topics in archaeology methods, theory, ethics, or cultural history; a data publication to share and preserve interoperable field research data with professional audiences; a “data story” that combines archaeological data with engaging and accessible journalistic style narrative for public engagement; or an online puzzle game that illustrates how archaeological context information helps guide understanding. Projects driven by the priorities of individual participants are valuable because they help bring a diverse range of issues and topics into focus for collaborative discussion. While participants will have an opportunity to learn through exposure to a variety of perspectives, the Core Team has an opportunity to create a dynamic and responsive curriculum that reflects the priorities of the individual participants.

Collective Outcomes

Individual participant outcomes will also contribute to collective outcomes for *Networking Archaeological Data and Communities*. The main collective outcome will be the *Data Literacy for Archaeologists Practice Guide*. This resource will be compiled and edited by the Core Team, published open access, and archived (with version control and DOIs for citation) in Zenodo. Depending on time and interest, we may also seek to engage with an academic press to publish this resource as an open access edited volume. Individual participant projects as well as the

¹⁶ <https://www.go-fair.org/fair-principles/>

¹⁷ <https://www.qjida-global.org/care>

work participants accomplish during the online workshops, will provide invaluable examples on issues of data management, linked data, interoperability, ethics, public engagement, and pedagogical strategies in archaeological research and teaching. For their contributions, individual participants will be credited as chapter or section coauthors.

This collective outcome aims to fill some gaping disciplinary needs. For example, archaeologists currently lack guidance on how to consistently record archaeological field data, as well as on how to develop and evaluate DMPs. By assessing and designing analog and digital data collection forms for multiple aspects of archaeological field work (e.g.: excavation, survey, flotation, materials analysis, etc.) in an online workshop during *The Data Management Lifecycle* semester, participants will create a suite of models that can be adopted and adapted by other practitioners. Likewise, the DMPs created by participants for their individual projects, refined through collaborative feedback, will offer illustrative examples of good data management practices, helping improve the overall quality and value of DMPs in the discipline.

In addition to being shared as part of the *Data Literacy for Archaeologists Practice Guide*, many of the individual projects will have instructional and public engagement goals. The Core Team will work with project participants to register these instructional outcomes with Open Educational Resource (OER) aggregation and discovery services such as the OER Commons.¹⁸ Additionally, the AAI/Open Context has an active collaboration to develop data literacy instructional materials for *Traces*,¹⁹ an open access textbook currently in development by SACC. The Core Team will build on this collaboration to encourage and facilitate the development of participant projects aligned with institutional learning objectives, especially those promoted by community colleges. Because community colleges play a critical role in making higher education more accessible to under-served populations, digital projects that meet community college needs can have tremendous positive impacts.

Continual Assessment and Improvement

Evaluation of the institute itself by participants will take place at multiple points through written surveys and interviews conducted by the Core Team, who have extensive experience designing surveys and employing a wide-range of quantitative and qualitative assessments. Short, anonymous surveys shared after each virtual workshop and after each day during the summer sessions will gauge participants' comprehension of topics, their perceived relevance to their work, and their overall satisfaction. Institute staff will review this feedback on a regular basis and adjust the curriculum accordingly. Participants will also have more opportunities for feedback at the end of each semester or summer workshop about whether they have developed more flexible foundational computational skills, whether they have developed more confidence in their use of digital tools, and whether they feel they have the support they need to advance their data-driven, public-facing projects.

¹⁸ <https://www.oercommons.org/>

¹⁹ <https://sacc.americananthro.org/publication/open-source-textbook/>

Work Plan and Course Outline

Phase 1: Participant Recruitment and Program Launch

September 2022

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors
- Faculty

Key Activities

- Director meets virtually with Senior Staff and Advisors to review the institute goals, curriculum, schedule, and assessment plan; define criteria for participant selection; and brainstorm participant recruitment strategies.
- Director meets virtually with members of the AAI/Open Context Board of Directors and the AAI/Open Context Sustainability Advisory Board to share an update about the institute.
- Director meets virtually with each instructor cohort (including Senior Staff and Postdocs) to review the institute goals, curriculum, schedule, and assessment plan.
- Director creates institute application and solicits feedback from Senior Staff and Advisors.
- Director creates institute poster or brochure and solicits feedback from Senior Staff.
- Director and Senior Staff build the institute website (hosted by <https://alexandriaarchive.org/>), which will include working copies of the institute goals, curriculum, schedule, and assessment plan.
- Director shares the final institute poster or brochure with Senior Staff, Postdocs, Advisors, and Faculty for distribution through their networks.

Key Outcomes

- Institute website containing link to application (due November 10, 2022) is launched.
- Detailed working outlines of the institute goals, curriculum, schedule, and assessment plan are drafted and shared on the institute website.
- Explicit criteria for participant selection are defined.
- Initial advertising campaign begins.
- Working list of additional advertising channels (including professional societies, disciplinary listservs, etc.) is drafted.

October 2022

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors
- Faculty (*The Data Management Lifecycle* and *Data for Professional Communication*)

Key Activities

- Director meets virtually with Senior Staff and Advisors to continue to review the institute goals, curriculum, schedule, and assessment plan; and share an update about the institute's progress.
- Director shares institute poster or brochure with additional advertising channels (including professional societies, disciplinary listservs, etc.).
- Director meets virtually with individual Faculty (including Senior Staff and Postdocs, teaching during *The Data Management Lifecycle* and *Data for Professional Communication* semesters) to define their contributions for their respective days.

Key Outcomes

- Detailed working outlines of the curriculum and schedule for *The Data Management Lifecycle* and *Data for Professional Communication* semesters are drafted and shared on the institute website.
- Advertising campaign continues.

November 2022

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors
- Faculty (*Data for Diverse Publics* and *Data for the Classroom*)

Key Activities

- Director meets virtually with Senior Staff and Advisors to continue to review the institute goals, curriculum, schedule, and assessment plan; and share an update about the institute's progress.
- Director meets virtually with individual Faculty (including Senior Staff and Postdocs, teaching during the *Data for Diverse Publics* and *Data for the Classroom* semesters) to define their contributions for their respective days.
- Director and Senior Staff begin reading participant applications.

Key Outcomes

- Detailed working outlines of the curriculum and schedule for the *Data for Diverse Publics* and *Data for the Classroom* semesters are drafted and shared on the institute website.
- Most applications (due November 10, 2022) read.

December 2022

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors

Key Activities

- Director and Senior Staff finish reading applications; meet virtually to finalize the list of institute participants.
- Director notifies applicants (by December 10, 2022); accepted applicants have until December 31, 2022 to confirm participation; all other qualified applicants remain as alternates.
- Director, Senior Staff, and Postdocs meet virtually to define their contributions for each summer program.
- Director sets up Discord channels on AAI/Open Context server to facilitate communication and networking (among staff and other participants) before, during, and after the institute.
- Director meets virtually with members of the AAI/Open Context Board of Directors and the AAI/Open Context Sustainability Advisory Board to share an update about the institute.

Key Outcomes

- Detailed working outlines of the curriculum and schedule for each summer program are drafted and shared on the institute website.
- Institute applicants are notified about the status of their applications; accepted applicants confirm participation and join Discord server.

Phase II: The Data Management Lifecycle

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors
- Faculty (*The Data Management Lifecycle*)

Key Activities

- Director and Faculty (including Senior Staff and Postdocs teaching during *The Data Management Lifecycle* semester) lead four virtual workshops for institute participants. Each workshop, scheduled monthly on a weekend day, is divided into a morning and an afternoon session.
- Director shares a short assessment survey with participants after each workshop.
- Director analyzes and summarizes workshop assessment data.

Key Outcomes

- Lesson plans and collective outcomes from each workshop are edited and prepared to be shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.
- Workshop assessment data are summarized and prepared to be shared with Senior Staff, Advisors, and Faculty (including Senior Staff and post docs, teaching during *The Data Management Lifecycle* semester).

January 2023: Creating Clean Data & Cleaning Messy Data

Faculty

- Leigh Anne Lieberman (Facilitator)
- Paulina F. Przystupa
- Michelle Lefebvre

Sample Bibliography

- Kansa, S. W., L. Atici, E. C. Kansa, and R. H. Meadow (2020) "Archaeological Analysis in the Information Age: Guidelines for Maximizing the Reach, Comprehensiveness, and Longevity of Data." *Advances in Archaeological Practice*, 8 (1), 40-52.
<https://doi.org/10.1017/aap.2019.36>

Sample Exercises

- Identify attributes of data quality.
- Clean messy data with OpenRefine.

Participant Outcomes

- Familiarity with attributes of data quality, including unique identifiers, controlled vocabulary, appropriate documentation, etc.
- Experience finding and evaluating open archaeological data in online repositories.
- Experience cleaning messy data with a program like OpenRefine.

Collective Outcomes

- Annotated samples of clean archaeological data sets.

February 2023: Data in the Field

Faculty

- Leigh Anne Lieberman (Facilitator)
- Sarah Witcher Kansa
- Anne Austin

Sample Bibliography

- White, R. (2009) "Data Collection by Excavation." *The Oxford Handbook of Archaeology*, eds. C. Gosden, B. Cunliffe, and R. A. Joyce. New York City, NY: Oxford University Press.

Sample Exercises

- Assess paper and digital data collection forms for some aspect of archaeological field work.
- Design paper and digital data collection forms for some aspect of archaeological field work.

Participant Outcomes

- Understanding of the ways that paper or digital data collection forms guide the types of data that are collected.
- If applicable: paper and/or digital data collection forms for individual research projects that incorporate attributes of data quality.

Collective Outcomes

- Annotated samples of paper and digital data collection forms for multiple aspects of archaeological field work (e.g.: excavation, survey, flotation, materials analysis, etc.)

March 2023: Legacy Data

Faculty

- Sarah Witcher Kansa (Facilitator)
- Leigh Anne Lieberman
- Anne Hunnell Chen

Sample Bibliography

- Allison, P. (2008) "Dealing with Legacy Data: An Introduction." *Internet Archaeology* 24, 1–14.

Sample Exercises

- Assess the range of materials and sources associated with a legacy archaeological research project.

- Outline a feasible, short-term proof of concept around a long-term, legacy archaeological research project.

Participant Outcomes

- Understanding of the ways that legacy projects are distinct from field projects with respect to data curation and management.
- If applicable: outline a feasible, short-term proof of concept for individual research projects.

Collective Outcomes

- Annotated samples of legacy project workflows.

April 2023: Long and Short Term Access and Storage

Faculty

- Leigh Anne Lieberman (Facilitator)
- Eric Kansa
- Ixchel M. Faniel

Sample Bibliography

- Faniel, I.M., A. Austin, E. C. Kansa, S. W. Kansa, P. France, J. Jacobs, R. Boytner, and E. Yakel (2018) "Beyond the archive: bridging data creation and reuse in archaeology." *Advances in Archaeological Practice*, 6(2), 105-116.

Sample Exercises

- Assess data management plans of several archaeological research projects.
- Identify personnel and resources at respective institutions for data management planning.

Participant Outcomes

- Familiarity with the attributes of a good data management plan.
- Identification of a model for individual research projects' data management plan.

Collective Outcomes

- Annotated samples of data management plans for archaeological research projects.

May 2023

Personnel

- Director
- Senior Staff
- Postdocs

- Advisors
- Faculty (*The Data Management Lifecycle*)

Key Activities

- Director shares semester assessment survey with participants and Faculty (May 1, 2023; due May 12, 2023).
- Director analyzes and summarizes semester assessment data.
- Director meets virtually with Senior Staff, Advisors, Faculty (including Senior Staff and Postdocs teaching in *The Data Management Lifecycle semester*) to review assessment data; and share an update about the institute's progress.
- Senior staff begin organizing accommodations, flights, and facilities for the summer program.
- Director drafts a report about the first semester and solicits feedback from Senior Staff and Advisors.

Proposed Outcomes

- Report about the first semester is finalized and shared on the institute website.
- Lesson plans and collective outcomes from each workshop are shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.

Summer Workshop I: Networking Data

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors

Key Activities

- Director, Senior Staff, and Postdocs lead a four-day, in person program for institute participants at the Archaeological Research Facility at the University of California, Berkeley. Participants arrive on a Monday midday and depart the following Friday in the late afternoon. Each working day is divided into a morning session, during which participants work with and get feedback from members of the institute Core Team, and an afternoon session, during which participants give short presentations about their progress since the start of the institute.
- Director shares a short assessment survey with participants after each day.
- Director analyzes and summarizes workshop assessment data.

Key Outcomes

- Lesson plans and collective outcomes from the first summer program are edited and prepared to be shared as part of the *beta Data Literacy for Archaeologists Practice Guide*.

- Workshop assessment data are summarized and prepared to be shared with Senior Staff, Postdocs, and Advisors.

June 2023

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors

Key Activities

- Senior staff continue organizing accommodations, flights, and facilities for the first summer program.
- Director, Senior Staff, and Postdocs meet virtually to review the curriculum and schedule for the first summer program.
- Director meets virtually with members of the AAI/Open Context Board of Directors and the AAI/Open Context Sustainability Advisory Board to share an update about the institute.

Key Outcomes

- Accommodations, flights, and facilities for the first summer program are finalized.
- Curriculum and schedule for the first summer program are finalized and updated on the institute website.

July 2023

Personnel

- Director
- Senior Staff
- Postdocs

Monday: Welcome

Tuesday & Wednesday: Data Management Plans for Individual Research Projects

Thursday & Friday: Applying Linked Open Data Standards

Participant Outcomes

- Opportunities to network with each other and institute Core Team.
- Data management plan for individual research projects drafted.
- Plan to incorporate appropriate Linked Open Data ontologies, vocabularies, and other resources into their research data sets drafted.

- Brief update about progress since the start of the institute presented.

Collective Outcomes

- Annotated examples of Data Management Plans for archaeological research projects.
- Annotated examples of why and how to integrate Linked Open Data into general data management practices for archaeological research projects.

August 2023

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors

Key Activities

- Director shares first summer program assessment survey with participants and Core Team (August 1, 2023; due August 12, 2023).
- Director analyzes and summarizes first summer program assessment data.
- Director meets virtually with Senior Staff, Postdocs, and Advisors to review assessment data; and share an update about the institute's progress.
- Director drafts a report about the first summer program and solicits feedback from Senior Staff and Advisors.

Proposed Outcomes

- Report about the first summer program is finalized and shared on the institute website.
- Lesson plans and collective outcomes from the first summer program are shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.

Phase III: Data for Professional Communication

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors
- Faculty (*Data for Professional Communication*)

Key Activities

- Director and Faculty (including Senior Staff and Postdocs teaching during the *Data for Professional Communication* semester) lead three virtual workshops for institute

participants. Each workshop, scheduled monthly on a weekend day, is divided into a morning and an afternoon session.

- Director shares a short assessment survey with participants after each workshop.
- Director analyzes and summarizes workshop assessment data.
- Director and Senior Staff draft the NEH interim report (expected due November 2023).

Key Outcomes

- Lesson plans and collective outcomes from each workshop are edited and prepared to be shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.
- Workshop assessment data are summarized and prepared to be shared with Senior Staff, Advisors, and Faculty (including Senior Staff and post docs teaching during the *Data for Professional Communication* semester).
- Interim report submitted to the NEH (expected due November 2023).

September 2023: The Ethics of Data

Faculty

- Leigh Anne Lieberman (Facilitator)
- Eric Kansa
- L. Meghan Dennis

Sample Bibliography

- Dennis, L. M. (2020) "Digital archaeological ethics: Successes and failures in disciplinary attention." *Journal of Computer Applications in Archaeology*, 3(1).

Sample Exercises

- Collective brainstorming around ways in which individual research projects can reflect and promote FAIR (Findable, Accessible, Interoperable, Reusable) and CARE (Collective Benefit, Authority to Control, Responsibility and Ethics) principles.

Participant Outcomes

- Familiarity with FAIR and CARE principles.
- Comprehensive working list of the ways in which individual research projects will put FAIR and CARE principles into practice.

Collective Outcomes

- Compilation of approaches where data-driven archaeological research and public engagement projects can align practices with FAIR and CARE principles.

October 2023: Publishers and Data Publishing

Faculty

- Leigh Anne Lieberman (Facilitator)
- Sarah Herr
- William Caraher

Sample Bibliography

- Caraher, W. (2019) "Collaborative Digital Publishing in Archaeology: Data, Workflows, and Books in the Age of Logistics." *Critical Archaeology in a Digital Age*, ed. K. Garstki. Los Angeles, CA: Cotsen Institute of Archaeology Press.

Sample Exercises

- Assess the ways in which research data has been integrated into various types of digital publications.

Participant Outcomes

- Identification of methods ("green", "gold", "diamond") and venues for open access publication related to individual research projects.
- Identification of data set to be integrated into open access publication related to individual research projects.

Collective Outcomes

- Annotated samples of digital publications that integrate research data.

November 2023: Authors and Data Publishing

Faculty

- Sarah Witcher Kansa (Facilitator)
- Leigh Anne Lieberman
- Lisa Lodwick

Sample Bibliography

- Lodwick, L. (2019) "Sowing the seeds of future research: data sharing, citation and reuse in Archaeobotany." *Open Quaternary*, 5(1).

Sample Exercises

- Brainstorm potential reuse applications for data set to be integrated into open access publication related to individual research projects.
- Clean data set to be integrated into open access publication related to individual research projects.

Participant Outcomes

- Comprehensive working list of the ways in which data sets related to individual research projects can be reused, as well as specific measures that will help promote reuse.

Collective Outcomes

- Principle ways in which archaeological research data sets can be reused together with good practices that facilitate data reuse.

December 2023

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors
- Faculty (*Data for Professional Communication*)

Key Activities

- Director shares semester assessment survey with participants and Faculty (December 4, 2023; due December 15, 2023).
- Director analyzes and summarizes semester assessment data.
- Director meets virtually with Senior Staff, Advisors, Faculty (including Senior Staff and Postdocs teaching in the *Data for Professional Communication* semester) to review assessment data; and share an update about the institute's progress.
- Director drafts a report about the second semester and solicits feedback from Senior Staff and Advisors.
- Director meets virtually with members of the AAI/Open Context Board of Directors and the AAI/Open Context Sustainability Advisory Board to share an update about the institute.

Proposed Outcomes

- Report about the second semester is finalized and shared on the institute website.
- Lesson plans and collective outcomes from each workshop are finalized and shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.

Phase IV: Data for Diverse Publics

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors

- Faculty (*Data for Diverse Publics*)

Key Activities

- Director and Faculty (including Senior Staff and Postdocs, teaching during the *Data for Diverse Publics* semester) lead four virtual workshops for institute participants. Each workshop, scheduled monthly on a weekend day, is divided into a morning and an afternoon session.
- Director shares a short assessment survey with participants after each workshop.
- Director analyzes and summarizes workshop assessment data.

Key Outcomes

- Lesson plans and collective outcomes from each workshop are edited and prepared to be shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.
- Workshop assessment data are summarized and prepared to be shared with Senior Staff, Advisors, and Faculty (including Senior Staff and post docs, teaching during the *Data for Diverse Publics* semester).

January 2024: Decolonizing Data

Faculty

- Leigh Anne Lieberman (Facilitator)
- Neha Gupta
- Edward González-Tennant

Sample Bibliography

- Quinless, J. M. (2022) *Decolonizing Data: Unsettling Conversations about Social Research Methods*.

Sample Exercises

- Assess sample pathways to collaboration for archaeological research projects and publications with relevant community stakeholders, especially those with indigenous, BIPOC, low-income, diaspora, refugee, and other underserved communities.

Participant Outcomes

- Draft of a pathway to collaboration for individual research projects and publication with relevant community stakeholders, especially those with indigenous, BIPOC, low-income, diaspora, refugee, and other underserved communities, where appropriate.

Collective Outcomes

- Annotated samples of pathways to collaboration for archaeological research projects and publications with relevant community stakeholders, especially those with indigenous, BIPOC, low-income, diaspora, refugee, and other underserved communities.

February 2024: Diverse Learners and Diverse Media

Faculty

- Leigh Anne Lieberman (Facilitator)
- Paulina F. Przystupa
- Sarah Miller

Sample Bibliography

- Przystupa, P. F. (Forthcoming) "Archaeology and Comics: Cons, concerns, and creativity."

Sample Exercises

- Assess various applications that prioritize engagement with diverse communities around archaeological research and teaching.
- Explore potential applications that prioritize engagement with diverse communities around individual research projects.

Participant Outcomes

- Outline for potential application that prioritizes engagement with diverse communities around individual research projects.

Collective Outcomes

- Annotated list of potential applications that prioritize engagement with diverse communities around individual research projects.

March 2024: Building Community in Museums and on Site

Faculty

- Sarah Witcher Kansa (Facilitator)
- Leigh Anne Lieberman
- Pinar Durgun

Sample Bibliography

- Durgun, P. (2021) "Digging Digital Museum Collections Blog Series."
<https://alexandriaarchive.org/digging-digital-museum-collections/>

Sample Exercises

- Assess various museum and site didactics and programs that prioritize engagement with diverse communities around archaeological research and teaching.
- Brainstorm potential collaborations with museums and archaeological site personnel that prioritize engagement with diverse communities around individual research projects.

Participant Outcomes

- Outline for potential collaborative didactic and/or program with museum and/or archaeological site personnel that prioritizes engagement with diverse communities around individual research projects.

Collective Outcomes

- Annotated list of potential collaborative didactics and/or programs with museums and/or archaeological site personnel that prioritize engagement with diverse communities around individual research projects.
- Compile good practices for museums to make online collections better support multiple forms of public engagement.

April 2024: Inclusive Data

Faculty

- Leigh Anne Lieberman (Facilitator)
- Desiree Martinez
- Jarre Hamilton

Sample Bibliography

- Hacıgüzeller, P., J. S. Taylor, and S. Perry, (2021) On the Emerging Supremacy of Structured Digital Data in Archaeology: A Preliminary Assessment of Information, Knowledge and Wisdom Left Behind. *Open Archaeology*, 7(1), pp.1709-1730.

Sample Exercises

- Assessment of various public-facing archaeological research projects to determine assumptions, perspectives represented, and transparency.
- Brainstorm strategies by which individual research projects can prioritize transparency and showcasing diverse perspectives.

Participant Outcomes

- List of the strategies by which individual research projects can prioritize transparency and showcasing diverse perspectives.

Collective Outcomes

- Annotated list of strategies by which archaeological research projects can prioritize transparency and showcasing diverse perspectives.

May 2024

Personnel

- Director

- Senior Staff
- Postdocs
- Advisors
- Faculty (*Data for Diverse Publics*)

Key Activities

- Director shares semester assessment survey with participants and Faculty (May 6, 2024; due May 17, 2024).
- Director analyzes and summarizes semester assessment data.
- Director meets virtually with Senior Staff, Advisors, Faculty (including Senior Staff and Postdocs, teaching in the *Data for Diverse Publics* semester) to review assessment data; and share an update about the institute's progress.
- Senior staff begin organizing accommodations, flights, and facilities for the second summer program.
- Director drafts a report about the third semester and solicits feedback from Senior Staff and Advisors.

Key Outcomes

- Report about the third semester is finalized and shared on the institute website.
- Lesson plans and collective outcomes from each workshop are shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.

Summer Workshop II: Networking Communities

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors

Key Activities

- Director, Senior Staff, and Postdocs lead a four-day, in person program for institute participants at the Archaeological Research Facility at the University of California, Berkeley. Participants arrive on a Monday midday and depart the following Friday in the late afternoon. Each working day is divided into a morning session, during which participants work with and get feedback from members of the institute Core Team, and an afternoon session, during which participants give short presentations about their progress since the start of the institute.
- Director shares a short assessment survey with participants after each day.
- Director analyzes and summarizes workshop assessment data.

Key Outcomes

- Lesson plans and collective outcomes from each workshop are edited and prepared to be shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.
- Workshop assessment data are summarized and prepared to be shared with Senior Staff, Postdocs, and Advisors.

June 2024

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors

Key Activities

- Senior staff continue organizing accommodations, flights, and facilities for the second summer program.
- Director, Senior Staff, and Postdocs meet virtually to review curriculum and schedule for the second summer program.
- Director meets virtually with members of the AAI/Open Context Board of Directors and the AAI/Open Context Sustainability Advisory Board to share updates about the institute.

Key Outcomes

- Accommodations, flights, and facilities for the second summer program are finalized.
- Curriculum and schedule for the second summer program are finalized and updated on the institute website.

July 2024

Personnel

- Director
- Senior Staff
- Postdocs

Monday: Welcome

Tuesday & Wednesday: Socio-Technical Sustainability Roadmap

Thursday & Friday: Proof-of-Concept Community or Classroom Project

Participant Outcomes

- Opportunities to network with each other and institute Core Team.
- [Socio-Technical Sustainability Roadmap](#) (STSR) for individual research projects drafted.

- Outline of a short-term, feasible, proof-of-concept for outreach or pedagogical application related to individual research projects drafted.
- Brief update about progress since the start of the institute presented.

Collective Outcomes

- Annotated examples that demonstrate how good, long-term project documentation (like the STSR) relates to short-term, feasible, proof-of-concept applications.

August 2024

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors

Key Activities

- Director shares summer program assessment survey with participants and Core Team (August 5, 2024; due August 16, 2024).
- Director analyzes and summarizes summer program assessment data.
- Director meets virtually with Senior Staff, Postdocs, and Advisors to review assessment data; and share an update about the institute's progress.
- Director drafts a report about the second summer program and solicits feedback from Senior Staff and Advisors.

Proposed Outcomes

- Report about the second summer program is finalized and shared on the institute website.
- Lesson plans and collective outcomes from the second summer program are shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.

Phase V: Data for the Classroom

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors
- Faculty (*Data for the Classroom*)

Key Activities

- Director and Faculty (including Senior Staff and Postdocs, teaching during the *Data for the Classroom* semester) lead three virtual workshops for institute participants. Each workshop, scheduled monthly on a weekend day, is divided into a morning and an afternoon session.
- Director shares a short assessment survey with participants after each workshop.
- Director analyzes and summarizes workshop assessment data.
- Director and Senior Staff draft the NEH interim report (expected due November 2024).

Key Outcomes

- Lesson plans and collective outcomes from each workshop are edited and prepared to be shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.
- Workshop assessment data are summarized and prepared to be shared with Senior Staff, Advisors, and Faculty (including Senior Staff and post docs, teaching during the *Data for the Classroom* semester).
- Interim report submitted to the NEH (expected due November 2024).

September 2024: Data in and out of the Classroom

Faculty

- Leigh Anne Lieberman (Facilitator)
- Sarah Witcher Kansa
- Katherine Cook
- Beth Compton

Sample Bibliography

- Cook, K. (2018) "Open Data as Public Archaeology: The Monumental Archive Project." *AP: Online Journal of Public Archaeology* 3: 177-194.
revistas.jasarqueologia.es/index.php/APJournal/article/view/152

Sample Exercises

- Walk through a student-oriented, data-driven exercise that targets some aspect of archaeological data literacy.

Participant Outcomes

- A student-oriented, data-driven exercise that targets some aspect of archaeological data literacy using data from individual research projects.

Collective Outcomes

- Annotated collection of student-oriented, data-driven exercises that target some aspect of archaeological data literacy using data from individual research projects.

October 2024: Classroom Data Exercises

Faculty

- Leigh Anne Lieberman (Facilitator)
- Tiffany Earley-Spadoni
- Eric Poehler

Sample Bibliography

- Earley-Spadoni, T. (2017) "Spatial History, Deep Mapping and Digital Storytelling: Archaeology's Future Imagined through an Engagement with the Digital Humanities." *Journal of Archaeological Science* 84: 95–102. <https://doi.org/10.1016/j.jas.2017.05.003>

Sample Exercises

- Assess various syllabuses that prioritize students learning around archaeological data literacy.

Participant Outcomes

- Syllabus that prioritizes student learning around archaeological data literacy using data-driven exercises from individual research projects.

Collective Outcomes

- Annotated collection of syllabuses that prioritize student learning around archaeological data literacy using data-driven exercises from individual research projects.

November 2024: Institutional Impacts around Teaching with Data

Faculty

- Leigh Anne Lieberman (Facilitator)
- L. Meghan Dennis
- Jennifer Zovar

Sample Bibliography

- Muir, S., and Y. Oliver, (2021) *Strategies for Recruiting Students to the Humanities: A Comprehensive Overview*. Washington, D.C.: National Humanities Alliance. https://www.nhalliance.org/study_the_humanities

Sample Exercises

- Assess various resources (e.g.: textbooks, curricula, etc.) that prioritize student learning around archaeological data literacy.
- Brainstorm ways in which syllabus that prioritizes student learning around archaeological data literacy using data-driven exercises from individual research projects fits in larger institutional, departmental, and disciplinary missions.

Participant Outcomes

- Understanding of the pedagogical impact of individual research projects.

Collective Outcomes

- Comprehensive working list of the ways in which data-driven exercises that target some aspect of archaeological data literacy fit in larger institutional, departmental, and disciplinary missions.

December 2024

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors
- Faculty (*Data for Professional Communication*)

Key Activities

- Director shares semester assessment survey with participants and Faculty (December 2, 2024; due December 13, 2024).
- Director analyzes and summarizes semester assessment data.
- Director meets virtually with Senior Staff, Advisors, Faculty (including Senior Staff and Postdocs, teaching in the *Data for the Classroom* semester) to review assessment data; and share an update about the institute's progress.
- Director drafts a report about the fourth semester and solicits feedback from Senior Staff and Advisors.
- Director meets virtually with members of the AAI/Open Context Board of Directors and the AAI/Open Context Sustainability Advisory Board to share an update about the institute.

Proposed Outcomes

- Report about the fourth semester is finalized and shared on the institute website.
- Lesson plans and collective outcomes from each workshop are finalized and shared as part of the beta *Data Literacy for Archaeologists Practice Guide*.

Phase VI: Wrap Up and Dissemination

January - March 2025

Personnel

- Director
- Senior Staff

- Postdocs
- Advisors

Key Activities

- Director researches final, open access repository for finalized *Data Literacy for Archaeologists Practice Guide*.
- Director edits and assembles *Data Literacy for Archaeologists Practice Guide* from the beta version and solicits feedback from Senior Staff, Postdocs, and Advisors.
- Director meets virtually with members of the AAI/Open Context Board of Directors and the AAI/Open Context Sustainability Advisor Board to share an update about the institute.

Key Outcomes

- *Data Literacy for Archaeologists Practice Guide* finalized and published.

April - June 2025

Personnel

- Director
- Senior Staff
- Postdocs
- Advisors

Key Activities

- Director manages updates from institute participants about their progress on their individual research projects; solicits feedback from Senior Staff, Postdocs, and Advisors about individual research projects and public-facing outcomes.
- Director shares feedback from Senior Staff, Postdocs, and Advisors about individual research projects and public-facing outcomes with institute participants.
- Director drafts posts about participants' individual research projects.
- Director meets virtually with members of the AAI/Open Context Board of Directors and the AAI/Open Context Sustainability Advisory Board to share an update about the institute.

Key Outcomes

- Feedback about individual research projects and public-facing outcomes shared with institute participants.
- Participants' individual research projects finalized and launched.
- Posts advertising participants' individual research projects shared on the institute website.

July - August 2025

Personnel

- Director
- Senior Staff
- Advisors

Key Activities

- Director drafts a report about the wrap up work and solicits feedback from Senior Staff and Advisors.
- Director and Senior Staff draft the NEH final report (expected due November 2025).

Key Outcomes

- Report about the wrap up work is finalized and shared on the institute website.
- Final report submitted to the NEH (expected due November 2025).

Biographies

Core Team

Director

Leigh Anne Lieberman, The Alexandria Archive Institute / Open Context

Leigh Anne Lieberman has taught extensively at the university, secondary, and primary levels in both the United States and Italy. From 2018-2020, she directed the development of the Digital Humanities Initiative at The Claremont Colleges, a Mellon-funded program that aimed to create a robust curriculum in the digital methods for faculty, staff, and students across a seven-institution academic consortium. She is also currently co-directing [Digital Ancient Rome](#), an NEH Summer Seminar for K-12 Faculty. In the field, serves as the Manager of Data and Information Resources for the [Pompeii Archaeological Research Project: Porta Stabia \(PARP:PS\)](#); as the Head of Materials for the [Tharros Archaeological Research Project \(TARP\)](#); and as the Data Management Director for the [American Excavations at Morgantina: Contrada Agnese Project \(AEM:CAP\)](#). In her role with the AAI/Open Context, Leigh builds institutional partnerships with libraries, museums, and other cultural heritage organizations in order to develop sustainable initiatives.

Senior Staff

Sarah Witcher Kansa, The Alexandria Archive Institute / Open Context

As Executive Director of the AAI/Open Context, Sarah collaborates on projects that advance data publishing and data literacy in various archaeological and cultural heritage communities. She has a Ph.D. in archaeology from the University of Edinburgh and has spent more than 25 years conducting zooarchaeological research at sites in the Near East and Europe. She brings an understanding of the challenges across the data lifecycle based on her combined experience as both a data creator and an editor for datasets submitted to Open Context for publication. She has been PI or co-PI on grants from the NEH, NSF, and IMLS to the AAI/Open Context and has organized workshops and forums at professional society meetings over the past 15 years aimed at advancing good data practices. Sarah is President of the International Council for Archaeozoology (2018-2023 term) and Chair of the Digital Technology Committee of the Archaeological Institute of America (AIA). She also served on the Publications Committee for the Society for American Archaeology (SAA) and the American Society of Overseas Research (ASOR).

Eric Kansa, The Alexandria Archive Institute / Open Context

Eric Kansa oversees development of Open Context (<https://opencontext.org>), the AAI's open access data publishing service. His research explores Web architecture, service design, and how these issues relate to the social and professional context of the digital humanities. Eric also

researches policy issues relating to intellectual property, including Linked Open Data, text-mining and cultural property concerns. He served as a Software Engineer and Senior Software Engineer for California public health data reporting during the first two years of the COVID Pandemic. He has participated in a number of Open Science, Open Government, cyberinfrastructure, text-mining, and scholarly user needs initiatives, and has taught project management and information service design in the UC Berkeley School of Information's Clinic program. He has been a principal investigator and co-investigator on projects funded by the William and Flora Hewlett Foundation, NEH, IMLS, Hewlett-Packard, Sunlight Foundation, Google, NSF, and Alfred P. Sloan Foundation.

Postdoctoral Researchers

L. Meghan Dennis, The Alexandria Archive Institute / Open Context

Meghan Dennis is collaborating to develop the AAI/Open Context's Data Literacy Program as a Postdoctoral Researcher for Data Interpretation and Public Engagement. Meghan brings a background in digital archaeological ethics and the impacts of ethical representations of archaeology in interactive media, 20+ years in archaeological and heritage field practice, teaching at the secondary and collegiate level, and experience within the video-game industry. Currently, Meghan is an ethics officer with the [Computer Applications & Quantitative Methods in Archaeology \(CAA\)](#) organization, where she was involved in designing and implementing the organization's first code of ethics, and is a member of the organization's Code of Conduct working group. Combining her interests in public education, ethical practice, and games media, Meghan aims to develop further research in how the use of interactive media can influence youth participation in ethical interactions with heritage and archaeology.

Paulina F. Przystupa, The Alexandria Archive Institute / Open Context

Paulina F. Przystupa is a Postdoctoral Researcher in Data Visualization and Reproducibility at the AAI/Open Context. Paulina is of Filipino and Polish descent and a settler in North America. She studied at the University of Washington (Seattle, WA, USA) where she earned a B.A. (2012) majoring in History and Anthropology. She earned her M.A. (2014) at the University of New Mexico, which is where she is completing her PhD in Anthropology (2021). She is working on her dissertation examining the relationship between the built environment and the cultural education of children. Beyond her academic work, Paulina has worked in cultural resource management in both Australia and the United States as a field technician, assistant cartographer, and lab technician. She is also a research associate of the [Indigenous Digital Archive](#). She also writes about and reviews comics, movies, and shows at WWAC and moderates panels at popular culture conventions bringing an anthropological and academic perspective to popular media.

Advisors

Sarah Bond, University of Iowa

[Sarah E. Bond](#) is Associate Professor of History at the University of Iowa and an affiliated scholar at the Digital Scholarship & Publishing Studio at the University of Iowa. She works on how and why we should translate data, scholarship, and other types of academic research for the public. She is currently an editor for the open access Pleiades gazetteer which provides open geodata for linked reuse in Digital Humanities projects, but also has contributed to and run a number of her own digital projects focused on database construction, geolocation, and open access data. Additionally, Dr. Bond is a public historian who regularly writes for large publications such as the *Los Angeles Review of Books*, *Forbes*, *The Washington Post*, and *Hyperallergic* about research on the ancient world. From covering new GIS projects focused on Pompeii to museum use of 3D modeling, much of her work is focused on how to make the public literate about the digital and physical research currently being conducted in the ancient Mediterranean.

Shawn Graham, Carleton University

Shawn Graham trained in Roman archaeology but has become over the years a digital archaeologist and digital humanist. In 2016, he won a Provost's Fellowship in Teaching Award and was designated a Carleton University Teaching Fellow. He recently won a SSHRC Insight Grant for a project called 'The Bone Trade: Studying the Online Trade in Human Remains with Machine Learning and Neural Networks'. The project website is at bonetrade.github.io. He is part of the multi-institution SSHRC Partnership Grant funded project, 'CRANE: Computational Research in the Ancient Near East' led by Tim Harrison of the University of Toronto. Graham's sub-project involves using neural networks to complete archival photographs for photogrammetric reconstructions. He is also part of the SSHRC Insight Development Grant funded project '[Nanohistory](#)', led by Dr. Matt Milner of Memorial University, exploring graph-theoretic representations of historical events; his subproject seeks to reconstruct museum collecting histories using the nanohistory method. Most recently, he and his collaborator at the University of Maastricht, Dr. Donna Yates, won a SSHRC Insight Development Grant to explore knowledge graphs and the antiquities trade. Graham also recently launched the [XLab: A Virtual Cultural Heritage Informatics Collaboratory](#) with a Carleton Catalyst Grant.

Sebastian Heath, New York University, Institute for the Study of the Ancient World

Sebastian Heath is a Roman Archaeologist who incorporates digital methods into all aspects of his work. Areas of particular digital expertise include data modelling, graph databases, network analysis, linked open data, geospatial technologies, and 3D modeling. He has published on all these topics as well as on approaches to incorporating digital methods into teaching the Ancient World. He is currently Clinical Associate Professor of Computational Humanities and Roman Archaeology at NYU's Institute for the Study of the Ancient World.

Ethan Watrall, Michigan State University

An anthropological archaeologist who has worked in Canada, the United States, Egypt, and the Sudan, Ethan Watrall is Associate Professor in the Department of Anthropology at Michigan State University. He is Director of the Cultural Heritage Informatics Initiative and Director of the Digital Heritage Imaging & Innovation Lab. Ethan is Head of Tangible Heritage & Archaeology Projects at Matrix: The Center for Digital Humanities & Social Sciences, where he served as Associate Director from 2009-2020. Ethan also serves as Adjunct Curator of Archaeology at the Michigan State University Museum. His primary scholarly interests lie in how digital methods and computational approaches can be leveraged to preserve and provide access to archaeological and heritage materials, collections, knowledge, and data in order to facilitate research, advance knowledge, fuel interpretation, and democratize our collective understanding and appreciation of the past.

Faculty

The Data Management Lifecycle

Anne Austin, University of Missouri-St. Louis

Anne Austin is an Assistant Professor of Anthropology and Archaeology at the University of Missouri St. Louis. She has recently participated in a three-year NEH-funded project focused on archaeological data reuse entitled, "Beyond Management: Data Curation as Scholarship in Archaeology" (PR-234235-16). This project includes an interdisciplinary team of archaeologists and information scientists interested in better bridging the gap between archaeological data creation and reuse. The research included observations of archaeological data collection at four diverse archaeological field projects in conjunction with qualitative interviews with researchers within those projects. Separately, the team interviewed broader archaeological data reusers to understand their experiences with data reuse. The combination of field observations and interviews allowed the team to understand barriers to archaeological data reuse from the moment those data are created at the tip of the trowel. Austin and her colleagues have presented results from this study in both national and international venues including the annual meetings of the Society for American Archaeology and the European Association of Archaeologists. They have also published results in multiple peer-reviewed journals including *Advances in Archaeological Practice* and the *International Journal of Digital Curation*. This research has demonstrated how issues with archaeological data reuse not only impact future reusers, but also existing project team members as they attempt to synthesize data from multiple seasons and a variety of specialists working on archaeological field projects. Problems with reuse can also be impacted by the diversity of cultural, linguistic, and legal differences field projects experience when bridging team members and research questions at an international level. This research project has identified key findings related to archaeological data reuse and recommendations for best practices to assist project directors with overcoming these obstacles. Austin will provide project participants with both our findings and workshop ways they can apply

best practices to their current and future field projects to ensure they create reusable data for future archaeologists and the broader public.

Anne Hunnell Chen, Bard College

Anne Hunnell Chen is currently a postdoctoral associate in the interdisciplinary ARCHAIA Program for the Study of Ancient and Premodern Cultures and Societies. In Fall 2022, she will take up a role as Visiting Assistant Professor in Bard College's programs for Art History and Visual Culture and Experimental Humanities. Dr. Chen specializes in the art and archaeology of the globally-connected Roman world, and is committed to exploring how low-barrier Linked Open Useable Data (LOUD) can be harnessed not only to provide more equitable access to archaeological data in the digital realm, but also to empower stakeholder audiences as collaborative curators. She is the founder and director of the Yale Digital Dura-Europos Archive (YDEA), an archaeological data accessibility project whose documentation efforts are aimed at sharing-out workflows that help to overcome disciplinary data silos and work to dislodge enduring impacts of colonialism. Thanks to her work on YDEA, her role as the Annotations Activity co-coordinator for the international Pelagios Network, and time spent as a fellow in the Department of the Ancient Near East at the Metropolitan Museum of Art in New York, Dr. Chen has extensive experience working with GLAM professionals and collections. Additionally, she has published on Roman, Persian, and Digital Humanities topics, and taught equally wide-ranging coursework. She also serves as an historical consultant for the Virtual Center for Late Antiquity (VCLA).

Ixchel M. Faniel, OCLC Research

Ixchel M. Faniel, Ph.D., Senior Research Scientist, OCLC Research is interested in improving how people discover, access, and use/reuse content. For over a decade, she has examined how research data are managed, shared, and reused within various disciplinary communities with an eye toward improving the development and delivery of supportive research data management programs. During this time, she has examined archaeological data practices at different points in the data lifecycle – creation, sharing, curation, reuse. Focusing on the archaeological community in this way has allowed her to identify the challenges archaeologists experience meeting data reuse needs, partnering with data curators between data management planning and data deposit, and collaborating with their excavation teams to collectively curate data at the point of creation. With these findings she has been able to inform improvements in data creation and management practices that can have positive impacts on one's own use as well as others' reuse.

Michelle LeFebvre, Florida Museum of Natural History, University of Florida

Michelle LeFebvre is an Assistant Curator of Archaeology at the Florida Museum of Natural History (FM), University of Florida. She oversees the curation, management, and accessibility of the FM's South Florida Archaeology and Ethnography Collections. Centered within the synergy of culture and biology, she investigates long-term trends in human-environment engagements with an eye toward understanding the development of complex socio-ecological systems, how Indigenous biocultural legacies shape contemporary biodiversity, and how deep-time

perspectives may aid conservation efforts. Throughout her work in Florida and the Caribbean Archipelago, LeFebvre prioritizes equal, peer to peer, collaboration with local scientists, community leaders, students, and organizations. Archaeological data and museum collections accessibility and equity in collections care (e.g., representation of different voices and ontologies) are central to her role as an archaeologist and museum curator. Since 2016, LeFebvre has supported and helped lead efforts to open-access publish both legacy and current zooarchaeological data curated at the FM. Ultimately, she views LOD as not only a way to link communities of researchers but also local communities with the data derived from their histories, an increasingly essential component of shaping data literacy across a diversity of people.

Data for Professional Communication

William Caraher, University of North Dakota

William Caraher teaches at the University of North Dakota and is a field archaeologist, editor, and publisher who has worked in the US, Greece, and Cyprus. His research includes ancient, historical, and digital archaeology and includes the publication of books on the Bakken oil patch in North Dakota and the site of Pyla-Koutsopetria on Cyprus as well as the Oxford Handbook of Early Christian Archaeology and several digital datasets. As a publisher and founder of The Digital Press at the University of North Dakota and editor of the century-old Annual of ASOR and the book series for the Contemporary Historical Archaeology in Theory group, he works closely with authors to integrate data into their publications in an effort to create more dynamic publications.

Sarah Herr, Desert Archaeology

Sarah Herr, Ph.D. is president of Desert Archaeology, Inc. a private sector cultural resource management firm that works in the Southwest United States. Since 2015 she has been an editor of the Society for American Archaeology journal *Advances in Archaeological Practice*. The journal seeks to support and promote best data practices while acknowledging the sensitivities of data to stakeholder and descendent communities and in certain types of governance. Working with authors who work or live around the world has provided a variety of experience related to the publication of data. The journal also publishes papers on topics related to data use, reuse, replicability, and teaching data literacy.

Lisa Lodwick, University of Cambridge

Lisa Lodwick's research interests are focussed on agricultural practices in the later prehistoric and Roman periods, the utilisation of archaeobotanical data to investigate human-plant relationships and the use of open research practices in archaeobotany. She has a strong background in archaeobotanical research, having practiced archaeobotany for over decade, gaining a DPhil in 2015 on the primary analysis of plant macrofossils from Roman Silchester, UK. She also has wide experience undertaking synthetic data analysis of both archaeobotanical and settlement archaeology data, through publication of *The Rural Economy of Roman Britain* (2017) and accompanying Roman Rural Settlement Project ADS datasets. She has taught under- and post-graduate courses on archaeobotany at the Universities of Reading and

University of Oxford, and from 2022 will be a Lecturer in Environmental Archaeology in the Department of Archaeology, University of Cambridge. She has published on research data sharing and re-use in archaeobotany (2019 *Open Quaternary*), is the co-founder and editor of the *Theoretical Roman Archaeology Journal*, a platinum open access journal published by the Open Library of Humanities, was a previous member of the steering committee of Reproducible Research Oxford and is an advocate for open research practices in environmental archaeology.

Data for Diverse Publics

Pinar Durgun, Vorderasiatisches Museum, Berlin

Dr. Pinar Durgun is a curator at the Vorderasiatisches Museum in Berlin, where she works on curatorial and educational aspects of the ancient Anatolian and Mesopotamian collections. An art historically-trained archaeologist with a strong background in anthropology and museums, she is passionate about outreach and education. She is interested in how museums can help us understand, protect, and engage with the past and how they can better serve our communities today. Her research focuses on ancient Anatolia and western Asia, the history of death and burial, image and identity making, archaeological reproductions, digital museums, and museum ethics. She aims to make academic information about the ancient world accessible, engaging, and inclusive. Dr. Durgun creates and curates educational content about art and the ancient world for museums, academic/educational organizations, and for social media.

Edward González-Tennant, University of Central Florida

Edward González-Tennant earned his PhD in 2011 from the University of Florida for original work on the 1923 Rosewood Massacre. His research focuses on the application of digital technologies in archaeology and history, a transdisciplinary approach combining geographic information systems (GIS), 3D modeling, geophysics, and remote sensing. The use of these technologies allows Dr. González-Tennant to investigate the legacies of racial violence in African American history, how to decolonize collaborative archaeology in the Caribbean, the effects of ethnolinguistic differences on Chinese migration, and modeling the impacts of storm surge and sea level rise on heritage resources in rural locations. This work is possible because of a firm commitment to partnering with descendant communities, their allies, and the public.

Neha Gupta, University of British Columbia

Neha Gupta is an Assistant Professor in Anthropology at The University of British Columbia. Her research programme examines and addresses geospatial and digital methods in anti-colonial, decolonial and Indigenous archaeology. She directs DARE | Digital Archaeology Research Environment, a Canada Foundation for Innovation-funded research lab at UBC Okanagan that brings together First Nations and racialized women's perspectives, interdisciplinary expertise and community-led research with the development of new tools appropriate for archaeology in the digital age. Her research interests are geovisualization and GIS, post-colonial, decolonial and Indigenous studies of heritage, and the archaeology of India and Canada. She is particularly interested in the relationship between knowledge, place and power, and how geospatial perspectives can re-center the views and narratives of Indigenous peoples and

racialized groups in archaeology. Recent scholarship such as MINA | Map Indian Archaeology, Circles of Interaction, Open Digital Archaeology Textbook Environment and Digital Heritage Governance at Westbank First Nation examine and address colonial practices in archaeology. Her current project focuses on building an anti-colonial digital archaeology through Indigenous data governance, community-led archaeology, and Web maps.

Jarre Hamilton, University of California, Berkeley

Jarre Hamilton is a PhD candidate at the University of California, Berkeley. She is earning her doctorate in anthropology-archaeology, where she works to address issues of race, identity, and heritage sites through community-collaborative scholarship. Her work as a certified interpretive guide, environmental educator, and scholar focuses on creating outdoor educational spaces to engage a wide range of public audiences in discussions on science communication and programming, cultural heritage, community engagement, and the environment. In all her work, she is committed to unearthing the multitude of ways that BIPOC folks have imagined and practiced more agentive lives. She received her BA in anthropology from Appalachian State University and her MA in anthropology from the University of California, Berkeley.

Desireé Martinez, Cogstone Resource Management

Desireé Reneé Martinez is President of Cogstone Resource Management and a Registered Professional Archaeologist with over 25 years of experience in archaeology. Ms. Martinez is also a Tongva (Gabrielino) community member. She received her MA (Anthropology) from Harvard University and her BA (Anthropology) from the University of Pennsylvania. Ms. Martinez has extensive experience consulting with Native American leaders and community members in a variety of contexts including the collection of ethnographic and historic data from an indigenous perspective and the repatriation of ancestral and funerary objects at the national and international levels. Finally, Ms. Martinez is at the forefront of creating and implementing collaborative archaeological agendas at the State and National levels.

Sarah Miller, Florida Public Archaeology Network, Flagler College

Sarah Miller is the Regional Director for the Northeast and East Central Centers of the Florida Public Archaeology Network hosted by Flagler College in St. Augustine, Florida. She received her Master's degree in Anthropology from East Carolina University in 2001 where she developed archaeology education programs at Tryon Palace in New Bern, North Carolina. Upon graduation from ECU, Ms. Miller supervised field and lab projects with public involvement for the Kentucky Archaeological Survey, as well as reviewed compliance projects for the Kentucky Heritage Council. She currently serves on the Board of Directors (Secretary) for the Society for Historical Archaeology, Chair of the Society for Historical Archaeology's Heritage at Risk Committee, Chair of Public Outreach Grant Committee for the Southeastern Archaeological Society, Statewide Coordinator for Project Archaeology, and serves on the Editorial Board for the Journal of Archaeology and Education. Her specialties include historical archaeology, archaeology education, site stewardship, heritage at risk, advocacy, and historic cemeteries.

Data for the Classroom

Beth Compton, University of Western Ontario

Mary Elizabeth Compton (Beth) is a PhD candidate and Trillium Scholar at the University of Western Ontario, Canada completing a dissertation that involves working with Indigenous communities in Southern Ontario and in the Arctic to help begin to develop community-driven standards and protocols for the 3D scanning and printing of heritage objects. Beth's academic and professional career has focused on engaging diverse communities in both archaeological theory and practice and digital technologies. Drawing upon her background as an MSc in Archaeological Information Systems from the University of York (UK), Beth's work blends community engagement, archaeology, and digital humanities in a way that has created an extensive and diverse global network that draws upon academia, community, and the cultural sector. As a co-founder of Canada's first mobile makerspace and digital humanities classroom, the MakerBus Collaborative, she has directly engaged adults and youth in hands-on applications of digital humanities and has also led professional development workshops for educators.

Katherine Cook, University of Montreal

Katherine Cook is an Assistant Professor in the Department of Anthropology at the University of Montreal. She founded the Laboratory for Public Archaeology, which specializes in public engagement through digital and hybrid experiences, and co-founded Anthropolab3D, which specializes in digital methods training and research for archaeology students and professionals (with Dr. Isabelle Ribot). She has more than a decade of experience teaching with digital data to improve digital literacy among anthropologists, archivists, museologists, and historians, developing pedagogical approaches to address issues of sustainability, ethics, inclusivity, and access in the digital humanities.

Tiffany Earley-Spadoni, University of Central Florida

Dr. Tiffany Earley-Spadoni is a digital historian and field archaeologist whose research focuses on imperial landscapes in ancient Western Asia in the early first millennium BCE. Her forthcoming book (*Landscapes of Warfare: Urartu and Assyria in the Ancient Middle East*, University Press of Colorado) and varied publications focus upon digital research and landscape archaeological investigations. She received her PhD in Near Eastern Studies from the Johns Hopkins University in 2016, and was appointed Assistant Professor of Digital History at the University of Central Florida the same year. Dr. Earley-Spadoni is a talented and innovative educator who won an University-wide teaching award and whose digital, community-focused project *Infinite Armenias* was supported with an American Research Institute in the South Caucasus Collaborative Heritage Management Fellowship. She teaches graduate and undergraduate courses on theory and applications of digital methods. Most recently, she co-designed and presented a series of digital literacy workshops for the American Society of Overseas Research in partnership with AAI/Open Context.

Eric Poehler, University of Massachusetts Amherst

Eric Poehler is Professor of Classics at the University of Massachusetts Amherst. He has published widely on Roman urbanism, infrastructure, and architectural history, authoring or co-authoring more than 25 articles and book chapters, as well as the books *Pompeii: Art, Industry, and Infrastructure* (2011) and *The Traffic Systems of Pompeii* (2017). Poehler is also active in the digital humanities, formerly serving as the Director of the Five Colleges Blended Learning and Digital Humanities programs and as Co-Director of the Digital Humanities Initiative at the University of Massachusetts Amherst. His major digital project, [The Pompeii Bibliography and Mapping Project](#), was awarded the [Archaeological Institute of America's](#) 2018 Award for [Outstanding Work in Digital Archaeology](#). This project served as the basis of his latest project, the Pompeii Artistic Landscape Project, co-directed with Sebastian Heath and generously funded through the Getty Foundation.

Jennifer Zovar, Whatcom Community College

Jennifer Zovar is Associate Professor of Anthropology at Whatcom Community College in Bellingham, WA. She has a dedication to hands-on, interactive learning, and is currently working as co-PI on a project to expand CUREs (Course-Based Undergraduate Research) in the community college curriculum. In her approaches to teaching, she also draws on place-based, community-engaged learning, and strives to create a classroom that is both accessible and culturally responsive. Recognizing that many students, especially students from underrepresented communities, begin their career at a community college, Zovar is dedicated to teaching and outreach, helping students to see themselves as researchers. She is a board member in the Society for Anthropology in Community Colleges and is also an editor and chapter author for a new archaeology OER Textbook - *Traces: An Open Invitation to Archaeology*, which will be available in Fall 2022.