

BACKDIRT 2025

ANNUAL REVIEW OF THE COTSEN INSTITUTE OF ARCHAEOLOGY AT UCLA



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Front cover: Open-area excavations of a 9th–13th century AD castle atop the San Giuliano plateau (Lazio, Italy), including a medieval feasting hall and a Christian chapel erected atop Etruscan foundations dating to the 7th–5th century BC. Photo by Emily Varley, SGARP.

Back cover: An archaeologist's set of trowels. Photo by Randi Danforth.

Next page: Drone image of the site of Kimu, an early Swahili village on the bank of the Pangani River in northern coastal Tanzania. Photo by Ioana Dumitru and Jacob Bongers, in collaboration with Wolfgang Alders and Elinaza Mjema as part of the CALOR project in northern Tanzania.

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FROM THE DIRECTOR

JASON DE LEÓN

As I enter my third year as director of the Cotsen Institute of Archaeology, I find myself reflecting on the formative period I spent here as a struggling undergraduate student, trying to find both my way in the world and my community on campus. My time as a student at UCLA was concurrent with an intense wave of anti-immigrant sentiment in the wake of Proposition 187, the horrific attacks on 9/11, and the beginning of the militarization of the U.S.-Mexico border. It was a challenging time to be a young person on campus, and I found my solace and support in the Cotsen community, which instilled in me a passion for archaeology and its power to help us understand our current political world through the lens of the *longue durée* of history. Many faculty (some of whom are now my colleagues), staff, and students in the institute took me under their wing and fundamentally changed my life for the better. Given the sociopolitical turmoil we are currently experiencing globally, I am grateful to once again be in the Cotsen with a supportive community of people who are dedicated to the mission of archaeology and the important lessons it can teach us about the past, our troubled present, and perhaps an optimistic future.

It is likely that sometime in the distant future, historians will look back at 2026 and find the word *unprecedented* sprinkled throughout our archives and oral histories. However, as students of history, we know that political instability, climate change, moments of great inequality, and fascism are not twenty-first century inventions. Our ancestors weathered these storms many times in the past, and together we will find ways to

get through these difficult times with grace, hope, and a push for positive social change.

The Cotsen Institute of Archaeology is committed to supporting forward-thinking and ethically driven archaeological research while fostering a learning environment that is diverse, equitable, and inclusive. We have made great progress toward these goals in recent years, much of it highlighted throughout this issue. This includes an expansion of our Waystation Initiative, which recently piloted an on-campus summer training and professionalization program for undergraduates at local community colleges and Cal State universities. The program is intended to introduce students to provenance research, help them present at professional conferences, and prepare them to either transfer to UCLA or apply to graduate school.

As part of our ongoing commitment to student research, many of our wonderfully precocious undergraduates have been able to conduct summer fieldwork around the globe thanks to funding from our Cotsen Undergraduate Research Grant. Many of those same students have presented that research (or will soon) at upcoming professional conferences, including those of the Society for American Archaeology and the American Anthropological Association. I am grateful to Victoria Newhall, who managed our student mentorship and student-led public outreach programs for the second year in a row. Under Vicky's guidance, we expanded our efforts to connect with local schools (including our now annual visit to Johnnie Cochran Middle School) and organized our second K-12 open house in conjunction with the Ernestine Elster Annual Lecture. As we look to the future, the Cotsen will continue to expand our public outreach efforts and our support of undergraduate and graduate student research.

Since our last issue of *Backdirt*, we have had many things to celebrate.

We welcomed several new colleagues, including Koji Lau-Ozawa (Anthropology), Kelly Nguyen (Classics and Digital Humanities), Caitlin O'Grady (Conservation and Anthropology), and Lara Fabian (Near Eastern Languages and Culture), as well as a number of shorter-term affiliates like Wolfgang Alders and Nicholas Bartos (Classics).

We celebrated the retirement of our publications director Randi Danforth, who left some very big shoes to fill after her many years of service. Randi shepherded countless books through the publication process and probably wrangled more authors than she cares to count. Taylor McBride has now stepped into that vital role for the institute. Taylor is a Los Angeles native (and Clippers fan) who has returned to southern California after many years in New York, where she most recently served as the publications and interpretive manager at NYU's Institute for the Study of the Ancient World. Welcome Taylor!

Michelle Jacobson, our longtime development director and event organizer, retired last year to the East Coast to spend more time with her grandchildren. Michelle was my lifeline during my first year as director and was a constant source of advice, calming guidance, and literal note cards to get me through the gauntlet the director must face. She is

greatly missed. I am happy to report that Perla Torres has stepped into the roles of event organizer, manager of my research lab, and manager of our outreach efforts. Perla previously worked with me in Arizona as part of the nonprofit wing of the Undocumented Migration Project. (See her writeup in this edition.)

Our wonderful Cotsen Director's Council, composed of Harris and Margaret Bass, Kathleen and David Boochever, Debby Arnold and Walt Zipperman, Weezie and Charlie Steinmetz, Dulcy and Diedrich Bader, and Margaret Arvey, continued its support of our students, faculty, and staff through their generous philanthropy and guidance, which I have found to be indispensable over the last three years. I am also thrilled to welcome three new members to that council, Bijan Kharrazi, Jim Harris, and Dorothy Jewell.

As always, thanks to Glenn Wharton and Stephen Acabado for their tireless work managing the institute's Conservation and Archaeology IDPs. We look forward to welcoming our new cohorts of graduate students this coming year. In addition, many thanks to Aaron Burke for his tireless efforts as editor in chief of the editorial board at the Cotsen Press and for herding the many people who contributed to this issue.

As we were getting ready to send this issue to press, we got the heartbreaking news of the loss of our colleague Ioanna Kakoulli. For this issue, Glenn Wharton has coauthored a moving tribute to her life, her well-documented kindness and generosity, and her many intellectual contributions. Ioanna will be greatly missed by so many people. Her loss is still hard to process, but I find some small comfort in knowing that our discipline has good people like her, who strive to inspire students, create knowledge, and leave academia (and the world) a little bit better than they found it.

We had also intended to use this issue to celebrate the 100th birthday of our dear friend and beloved colleague Ernestine Elster who reached that milestone in December of 2025. We are saddened to share the news that Ernie passed away in February of this year. Ernie was the heart and soul of this institution and played a variety of roles here over the last five decades, including PhD student, research associate, publications director, benefactor, and all-around supporter of archaeology. Our next issue of *Backdirt* will include a formal tribute to Ernie and her countless contributions to the Cotsen Institute of Archaeology. We miss you dearly Ernie!

WOLFGANG ALDERS

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BAOBABS, MONSOONS, AND TSUNAMIS: EXPLORING THE HIDDEN LANDSCAPES OF THE SWAHILI COAST WITH GEOSPATIAL DATA AND TECHNOLOGIES

WOLFGANG ALDERS

 In fall 2025, I joined the Cotsen Institute as a lecturer, teaching a course called Geographic Information Systems for Archaeology and Cultural Resource Management. The class focused on hands-on training in the analysis and visualization of archaeological spatial data using ESRI ArcGIS Pro. It also introduced students to the vast ecosystem of open-access, free, and low-cost geospatial data in online databases and web portals. Starting as a niche experimental method in the 1980s, geospatial archaeology (which includes software-based geographic information systems [GIS]; satellite, aerial, and terrestrial remote sensing; and high-density digital survey and measurement tools like lidar, photogrammetry, and laser scanning) has matured through several phases of exponential growth to become a well-established subfield (Ullah et al. 2024). This has coincided with the expansion of geospatial science more broadly and the increasing availability of free, open-access geospatial data and resources. There has also been a vast proliferation of methods and tool kits for visualizing and analyzing data, as well as a deep reserve



of expertise spread across online forums and communities to address nearly any geospatial problem.

A lot of my work as a landscape archaeologist has focused on finding geographic, environmental, and historical spatial data within this ecosystem and combining it in unique ways to address relevant archaeological questions. This approach was born out of necessity. I am an archaeologist working in the tropical environments of coastal eastern Africa, a region called the Swahili Coast (**Fig. 1**), studying how communities there have adapted to environmental change and sociopolitical transformations. Over the past 2,000 years, coastal groups have created a vibrant, interconnected, urban mercantile society that has facilitated long-distance economic exchanges across the Indian Ocean in the process. Although this pivotal region links Africa to the world, the large-scale environmental and anthropogenic legacies of Swahili society remain relatively unexplored.

When I started work there during graduate school, I quickly realized that the transformative geospatial methods used in places like the Levant and the American Southwest were not so applicable. The

↑ **Figure 1.** View of Tongoni, on the northern Tanzanian section of the Swahili Coast. The gray stone ruins (center, foreground) were the monumental mosque and tomb complex of the medieval town. Photo by Ioana Dumitru, 2024.

Swahili Coast has a number of characteristics that limit the use of traditional methods in archaeological GIS and remote sensing: (1) a rainy tropical environment that produces dense vegetation and cloudy conditions, limiting site visibility in satellite imagery; (2) little monumental architecture or large-scale settlements built of permanent materials visible from space; (3) anthropogenic landscape modifications that are primarily vegetal rather than topographic (with very little topographic differentiation in general; most of the coast is a flat, low-lying plain); and (4) significant interdigitation of archaeological sites within modern towns, cities, and agricultural space. The challenges these characteristics pose for archaeologists interested in large-scale regional analysis with

ARCHAEOLOGISTS ARE PROBABLY UNDERESTIMATING THE SCALE AND DIVERSITY OF SETTLEMENT IN THIS REGION AND THE EXTENT OF LANDSCAPE-SCALE ANTHROPOGENIC TRANSFORMATIONS

GIS and satellite remote sensing has meant that we are probably underestimating the scale and diversity of settlement in this region and the extent of landscape-scale anthropogenic transformations. This has undervalued the significance of this pivotal zone, which linked vast parts of East Africa to the Indian Ocean world during phases of early globalization, from antiquity to the nineteenth century.

Researchers have noticed this limitation. A perennially cited paper is Fleisher and LaViolette's (1999) article on detecting the "hidden majority" in Swahili contexts, an ethnoarchaeological study that tracked the decomposition of a modern Swahili wattle-and-daub house over only five years. Showing how quickly this form of common vernacular architecture degrades in the tropical climate and becomes almost invisible archaeologically, the authors argued that researchers were underestimating the extent and diversity of ancient Swahili villages, towns, and cities, given that most studies up until then had focused on only the small handful of monumental, stone-built ruins that occupied the elite centers of Swahili settlements. In the years since, researchers have increasingly investigated landscapes beyond the stone-built cores of Swahili cities, turning up evidence for craft, industry, long-distance trade, religious practice, maritime technologies, and the management of a broad spectrum of diverse resources from approximately the eighth century AD onward. Still, researchers have lacked the funding and labor to conduct fieldwork to identify these newly recognized settlement forms, since surveys often require intensive shovel-test pit grids and test units (**Fig. 2**) to unearth deeply buried ancient wattle-and-daub architecture.

Despite the challenging characteristics of the eastern African coast, combined geospatial methods may help unearth the legacies of ancient Swahili settlement patterns, adaptations, and anthropogenic activities at a large regional scale. Since earning my PhD, I have experimented with techniques that combine environmental, historical, geographic, and topographic data in unique ways to better understand ancient Swahili landscape change.

For instance, in Zanzibar, Tanzania, I combined environmental data on hydrogeology and soil infiltration from a study on malaria transmission (Hardy et al. 2015) with land use data from the European Space Agency's



← **Figure 2.** Excavating part of an ancient wattle-and-daub structure in modern banana plantations in Zanzibar, 2024, with the author (left) and Hadija Fakhi Hamadi (right), a heritage officer in the Zanzibar Department of Museums and Antiquities. Photo by Hamad Suleiman.

Sentinel-2 WorldCover database; slope, aspect, and elevation data from the Shuttle Radar Topography Mission (SRTM); coral reef data from the Tanzania Sensitivity Atlas; soil type data from the Zanzibar Department of Rural and Urban Planning (Khamis et al. 2017); rainfall data (Colbert et al. 1987); and digitized features of a 1907 map of the island (Khan Bahadur 1907) that depicts streams, caves, wells, villages, and roads. Using a tool in QGIS called zonal statistics, I divided these environmental datasets into zones and weighted them by comparing them to the distribution of settlements on the 1907 map.

The result (Alders 2023b) was a high-resolution model that accurately predicted the location of Zanzibar's well-known precolonial towns, such as the port of Unguja Ukuu (eighth-tenth centuries AD), where researchers recently found a rock crystal seal ring inscribed with the Arabic word *lillah* (Sarathi et al. 2022), and Kizimkazi, the site of eastern Africa's oldest continuously used mosque, which has an inscription dating its construction to AD 1187 (Kleppe 2001). The model also accurately predicted the locations of smaller rural village sites that I had identified in surveys in 2019, the first discovery of rural agricultural villages (eleventh-fifteenth centuries AD) inland on the island, in zones that became plantations in the nineteenth century (Alders 2023a). This method contributes to an understanding of the environmental affordances that structured long-term settlement change on the Swahili Coast and provides a baseline for



↑ **Figure 3.** Ruined *mihrab* of a fifteenth/sixteenth-century mosque built of *Porites* coral in southwest Zanzibar at the site of Kiwani Vee, recorded during surveys in 2023. Photo by the author.

heritage conservation and future prospection (**Fig. 3**) using open-access software and freely available datasets.

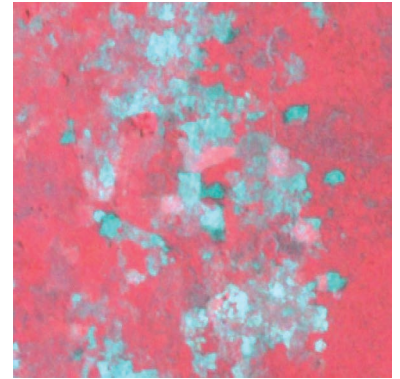
Another way to investigate Swahili landscapes is through satellite remote sensing. With researchers from Columbia University and Syracuse University, I authored a paper exploring the ways that multispectral (perceiving more than the visible wavelengths of light), multitemporal satellite data (images of the same area taken over multiple seasons) can be used to investigate landscape palimpsests, define anthropogenic activities, and delineate field systems in tropical environments, where dense vegetation has traditionally limited visibility (Alders et al. 2024). For the last seven years, PlanetScope satellites have started near-daily imaging of parts of the earth's surface, making multitemporal, multispectral, 3 m pixel imagery accessible to researchers. We applied composites of this imagery to landscapes across three Indian Ocean islands—Zanzibar, Mauritius, and Madagascar—and showed how the multispectral, multitemporal characteristics of this data can be used to draw out and quantify the subtle traces of anthropogenic modification to vegetated landscapes, which even lidar might fail to detect.

For instance, multispectral imagery drawn from multiple seasons can be used to distinguish and quantify the extent of shifting cultivation



(Figs. 4 and 5) and field construction in Zanzibar's eastern region, a place long characterized as marginal, "natural," and wild compared to the cultivated plantation zones of the west. This research, combined with surveys and oral history, has shed light on the way that Indigenous Swahili agricultural adaptations like *kupiga makongo* (cutting into limestone bedrock to conserve soils for planting) and swidden cultivation have shaped terrestrial landscapes for at least 1,000 years. I have also tried to address the problem of significant interdigitation between the Swahili archaeological record and modern urban land use by using similar multispectral satellite scenes to identify regions where rapid urban changes are obscuring, or threatening to obscure, areas of archaeological potential around the ancient core of Zanzibar Stone Town (Alders 2024). These models helped me stratify and plan surveys in the city's rural hinterland in 2023 and 2024, uncovering evidence for small rural nodes that were nevertheless connected to Indian Ocean trade networks as far back as the eighth century AD.

While most parts of the Swahili Coast do not exhibit large-scale landscape engineering in the form of earthworks, canals, or terracing, coordinated human activities still leave their mark on the vegetal record. Baobab trees (*Adansonia digitata*) are a particularly significant example (Fig. 6). They are a crucial resource for thousands of communities across Africa today. All parts of the tree have important uses, for food, medicine, forage, cordage, cloth, mats, glue, soap, and fuel. Furthermore, many baobabs function as cultural landmarks and ritual venues. Baobab trees appear to be propagated through human activities and are strongly associated with archaeological sites. Thus their distribution may be an enduring and overlooked Anthropocene legacy within African landscapes. However, they are increasingly threatened by rapid urbanization and intensifying land use in some regions. Climate changes leading to droughts may also be impacting baobab populations, though this remains



✦ **Figure 4.** A recently burned field plot in Zanzibar's eastern region, where farmers have developed methods for planting in extremely rocky soils over hundreds of years. Photo by the author.

✦ **Figure 5.** False color image of swidden field plots in Zanzibar's eastern region, used to highlight spectral differences. Red areas are vegetated. Gray and blue areas are field plots that are in use. The darker the blue, the more recently the field plot was opened and burned.



↑ **Figure 6.** The author, inside a large hollow baobab tree in Zanzibar in 2024. Photo by Khamis Sheha Haji.

1 <https://theconversation.com/zanzibars-baobab-trees-used-to-be-a-valued-part-of-society-drone-images-help-prove-it-258996>.

an ongoing debate (Venter and Witkowski 2024). Baobab resources are an important hedge against crop failure during droughts, so their loss exacerbates climate-induced insecurity, especially for rural communities.

Efforts to conserve and understand human-baobab entanglements are stymied by a lack of large-scale, high-resolution data. To address this, I worked with Jonathan Lim (University of Arkansas) and Logan Brunner (University of Canterbury) to map baobab tree distributions in Zanzibar, using free, open-access, high-resolution drone imagery. Mapping baobabs can contribute to long-term archaeological understandings of Anthropocene entanglements while simultaneously aiding ecosystem conservation and sustainable community resource management. We published this research in the *Journal of Archaeological Science* (Alders et al. 2025). You can also read about it on The Conversation.¹

Now, as a codirector of the Dynamic Coasts and Landscapes of Resilience (CALOR) project in northern Tanzania, I am trying to bring all these methods together. Codirectors Ioana Dumitru (University of Sydney) and Elinaza Mjema (University of Dar Es Salaam [UDSM]) and I are combining satellite remote sensing, predictive modeling, soil science, archaeological survey and excavation, and community engagement to investigate the deep history of Swahili adaptations to climate extremes, monsoonal flooding, and natural disasters at the interface of the Pangani River system and the Indian Ocean over the last 2,000 years in northern Tanzania. The project explores the intersection of elite formation, collective action,



◀ **Figure 7.** Surveying along the Pangani River can get quite muddy! Left to right: the author, Hilda Lelio (UDSM), and Mugasire Kisoma (UDSM). Photo by Ioana Dumitru.



◀ **Figure 8.** Earthenware pottery from surveys on the Pangani River in 2024. Photo by the author.

and the management of environmental crises like monsoonal flooding, drought, and, notably, a tenth-century tsunami that buried the village of Kimu on the banks of the Pangani River (Mjema 2018).

In 2024 we completed a systematic drone lidar survey, mapping the river mouth and bay across 80 ha with the help of Cotsen IDP alum Jacob Bongers. Our goals were to map existing archaeological sites in high resolution, detect new sites beneath dense vegetation, and model terrain to simulate flooding events related to monsoonal climate patterns and the tenth-century tsunami (Fig. 7). With high-resolution terrain models derived from lidar, we will be able to explore water levels of extreme flood events to evaluate how they would have impacted other settlements upriver.

By comparing these models with archaeological data (Fig. 8) related to subsistence, craft, exchange, and settlement reorganization, it will be possible to evaluate how coastal communities adapted and built resilient

OUR WORK SEEKS TO CREATE ETHICAL PARTNERSHIPS WITH STAKEHOLDERS IN PANGANI TO PRODUCE KNOWLEDGE ABOUT CLIMATE RESILIENCE AND DISASTER MANAGEMENT FROM A LONG-TERM PERSPECTIVE.

frameworks in response to extreme weather events and climate change over the past two millennia. This will also provide data to aid in conserving agricultural land and heritage resources with communities in the present. Tanzania is disproportionately impacted by climate change, experiencing significant coastal flooding during the rainy season. Our work seeks to create ethical partnerships with stakeholders in Pangani to produce knowledge about climate resilience and disaster management from a long-term perspective.

Like the earlier predictive modeling in Zanzibar, CALOR is also leveraging the vast quantity and diversity of geospatial and environmental datasets that are now available for use. For instance, we are experimenting with bathymetry (GEBCO), sea level rise projections (IPCC AR6 and NASA Sea Level Change Portal), land use data (ESA WorldCover 10 m), geology (USGS and OneGeology), meteorological data (NOAA and ERA5 climate reanalysis), coral reef and kelp distributions (UNEP-WCMC and ReefBase), and terrestrial biodiversity models (Map of Life, GBIF) to inform our broader biogeographical understandings of Swahili human-environment interaction.

Keeping up with the lightning speed of growth in geospatial science is challenging for specialists, and even more so for archaeologists who have to balance their engagement with other core concerns. But this is to be expected in a maturing field. As archaeologists first and foremost, we might never reach the expertise of a full-time GIS or remote sensing technician. But we do have synthesizing, organizational, and team-building skills that can help us leverage underutilized geospatial data and tool kits toward specific goals.

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WOLFGANG ALDERS

received his PhD in anthropological archaeology from the University of California, Berkeley, in 2022. He was a National Science Foundation SBE Postdoctoral Fellow at the Center for Advanced Spatial Technologies at the University of Arkansas, Fayetteville, from 2022 to 2024 and a visiting research scholar at the Institute for the Study of the Ancient World in 2024–2025. After lecturing at UCLA in fall 2025, he began a postdoctoral position as a Marie Skłodowska-Curie European Fellow at the McDonald Institute for Archaeological Research at Cambridge University. You can find his personal website here: wolfalders.github.io. You can follow the CALOR project at calorarchaeology.com or at [instagram.com/calor_archaeology](https://www.instagram.com/calor_archaeology).

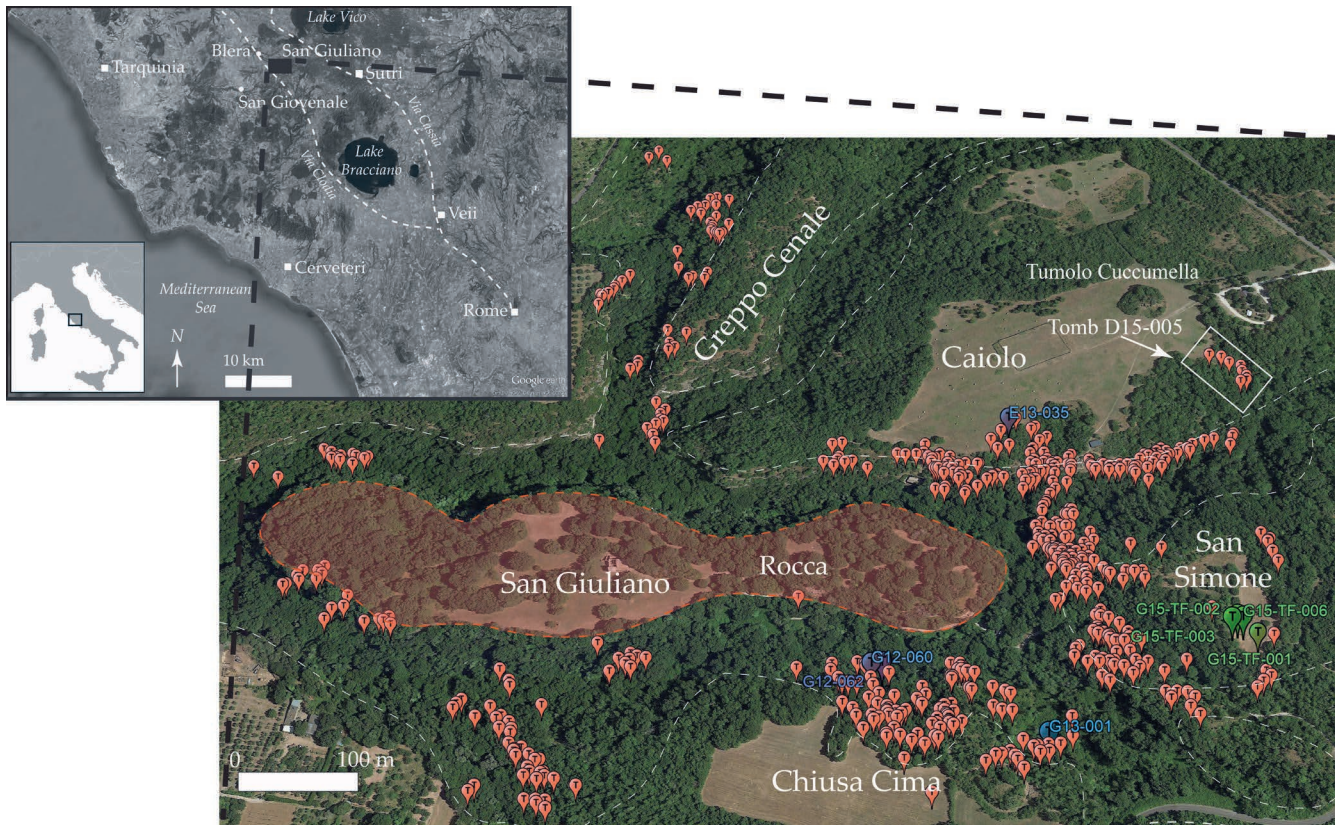
SEVENTH CENTURY ETRUSCAN CHAMBER TOMB DISCOVERED AT THE NECROPOLIS OF SAN GIULIANO, CENTRAL ITALY

DAVIDE ZORI, JAMIE APRILE,
AND COLLEEN ZORI

1 SGARP (www.sgarp.org) is a collaboration between an international consortium of universities led by Baylor University and Virgil Academy in Rome, under the auspices of the Soprintendenza Archeologia Belle Arti e Paesaggio per la provincia di Viterbo e per l'Etruria Meridionale (Ministero della Cultura permit # DG-ABAP Serv II 28/03/2025/001931-P) and with full support of the commune of Barbarano Romano and the Parco Regionale Marturanum.

The interdisciplinary San Giuliano Archaeological Research Project (SGARP) targets the archaeological past of San Giuliano, a site approximately 70 km northwest of Rome (**Fig. 1**).¹ San Giuliano lies within the hinterland of Etruria in the Cimini Hills, a forested and topographically challenging region of hills, plateaus, and ravines that forestalled political incorporation by coastal Etruscan city-states and hindered even Roman territorial advances. During the Middle Ages, this area formed a border between competing polities such as the Lombards and the Byzantines, and it later comprised a dynamic frontier of the Papal States. The region is understudied archaeologically and underrepresented in historical written sources. Today it continues to lie mostly unvisited by tourists in the broad shadow of Rome.

SGARP's overall goal is to reconstruct long-term changes in the human occupation of the San Giuliano plateau and the surrounding hills. The project seeks to investigate the Etruscan occupation, focusing on the location of the domestic settlement atop the San Giuliano plateau and the rock-cut tomb necropolis surrounding it, and to understand



the transitions that followed, including incorporation into the Roman Empire, abandonment of the San Giuliano plateau, reoccupation and transformation as part of the medieval *incastellamento* process, and final abandonment of the site sometime before AD 1300.

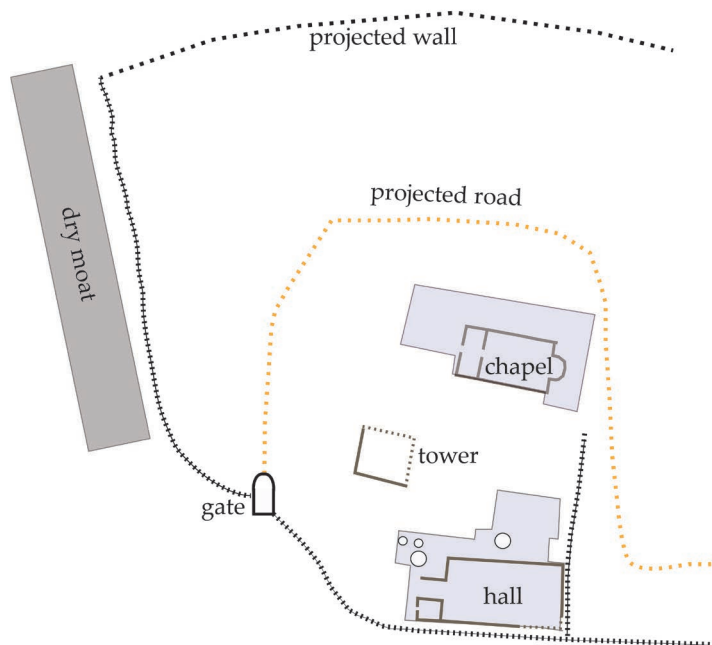
Excavation atop the San Giuliano plateau, where the Etruscan city once stood, has so far targeted the presumed acropolis area, currently known as La Rocca. Following abandonment after Roman conquest, the plateau was reoccupied by at least AD 800 and refortified with the construction of a medieval stone castle between AD 1000 and 1100. The castle and its defenses consist of circuit walls, a dry moat, multiple gates, a tower, a large hall with an associated granary, and a Christian chapel with a surrounding graveyard (Fig. 2). In the 2025 season, we focused on excavation of the medieval chapel, which incorporates remnants of the antique past, including the reuse of a Roman altar stone and construction atop the foundations of an earlier monumental Etruscan building. Our investigations indicate that the medieval occupation came to a relatively sudden end sometime in the second half of the thirteenth century, when the hall was leveled and the tower intentionally toppled, blocking access to the chapel. Our excavations, as well as ongoing isotope and aDNA analyses, are providing new insights into what life was like for the inhabitants of this eleventh to thirteenth century fortified settlement.

Some of the most exciting discoveries made by SGARP have been in our investigation of the ancient Etruscan funerary landscape of San Giuliano. During the 2025 season, we made the spectacular discovery of an untouched Etruscan chamber tomb dating to the seventh century BC.

↑ **Figure 1.** The aerial photograph shows the positions of the chamber tombs (red balloons labeled T) recorded by the SGARP survey. The tombs are concentrated in the escarpments of the hills and plateaus that surround the eastern end of the San Giuliano plateau, suggesting that this area was the focus of domestic habitation in the Etruscan period. Excavated chamber tombs (*tombe a camera*) are shown in blue, while excavated trench tombs (*tombe a fossa*) are in green. The insert at top left shows the region of northern Lazio, from Rome in the south to Lake Vico in the north. Rome and Etruscan cities are indicated by squares, while smaller centers are indicated by circles. The Roman roads—Via Clodia and Via Cassia—are shown as dashed lines.

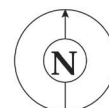


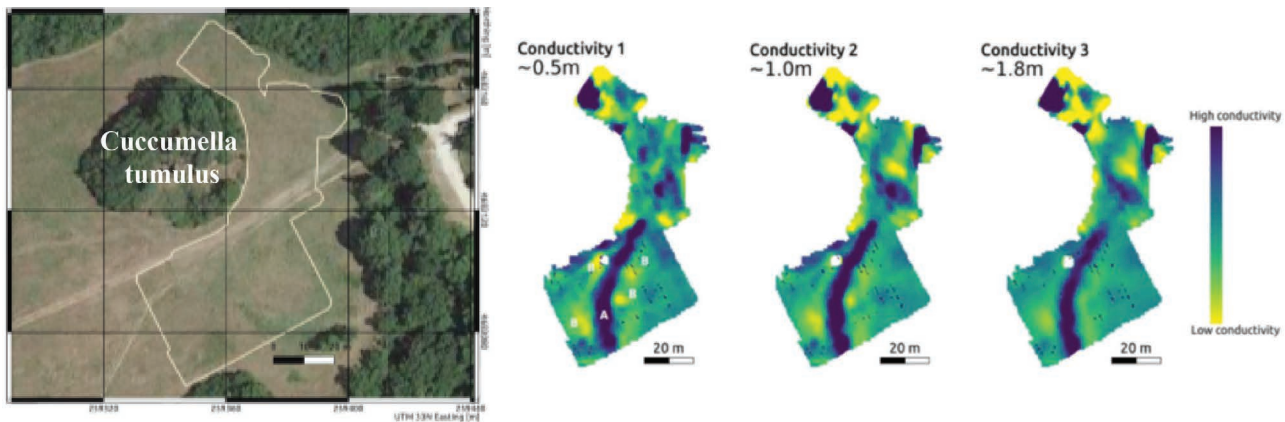
→ **Figure 2.** Above, drone photos show the areal expanse of SGARP excavations, focused on the elite hall and the chapel and its associated graves. Below, schematic of the medieval castle excavations on the San Giuliano plateau.



0 25 50 m

San Giuliano Plateau
SGARP 2025





Dubbed the Tomb of the Bird Vases, it was cut into the center of a large circular mound or tumulus, which the Etruscans had created by carving into the tuff bedrock. They had augmented its round shape by laying large tuff blocks around its edge. The tomb and the tumulus were not visible from the surface but were instead identified by careful work that began in 2016, the first season of SGARP investigations. We led with a pedestrian tomb survey of the San Giuliano necropolis (2016–2018 seasons), during which we mapped and documented more than 600 previously looted chamber tombs. GIS analysis of the orientations of visible chamber tombs revealed that the facades of some tombs turned roughly west, not facing the acropolis of the Etruscan city as expected but instead facing what we hypothesized might be a funerary road leading out of the sixth and fifth century necropolis below and onto the top of the Caiolo plateau. To investigate the existence of this road and any associated features, we carried out a geophysical survey in 2019, employing magnetometry, ground-penetrating radar, and conductivity. The results of the conductivity survey were enticingly suggestive, yielding clear evidence of a wide linear conductive anomaly extending from the location of the proposed road toward the monumental seventh century BC Cuccumella Tumulus (seen in blue in Figure 3). We hypothesized that the conductive anomaly was caused by a linear depression or cut into bedrock that had been filled with mixed earth and stone, which held more water than the bedrock and therefore conducted electrical current more easily. These findings further solidified the presence of a funerary road flanked by multiple mortuary structures. After a period of speculation enforced by COVID, we began our ground-truthing excavations in 2022.

Open-area excavations in 2022 confirmed the existence of a large linear depression that followed the orientation indicated by the geophysical anomaly, connecting the plateau edge with the Cuccumella Tumulus. Excavations in 2024 subsequently revealed a previously unknown tumulus, approximately 9 m in diameter, that had been cut down into the bedrock along the plateau edge (Fig. 4). Although it had been looted, a west-facing tomb cut into this tumulus in the late seventh century BC yielded significant finds, including a small cache of ceramic vases, bronze fibulae, and a pair of gold-plated bronze hair spirals decorated with granulation and filigree. These led us to name this the Tomb of the Golden Spirals.

↑ **Figure 3.** The ground conductivity survey on the Caiolo plateau that identified the linear anomaly leading from the edge of the plateau up to the Cuccumella Tumulus (geophysics survey by Dennis Wilken, Kiel University).



↑ **Figure 4.** This aerial photograph shows the looted tumulus we excavated in 2024 (Tomb of the Golden Spirals, right) and the beginning of the excavation of the dromos of the intact tomb (Tomb of the Bird Vases) within the tumulus excavated in 2025 (left). Both dromoi open facing each other across the ancient road.

In 2025 we expanded the excavation area to the west to investigate the opposing edge of the funerary road and encountered another tumulus, this one with its chamber entrance facing east. Further excavation revealed that—similar to the tumulus uncovered in 2024—the structure had been created by carving a curving channel into the bedrock around the back and supplementing the facade with cut blocks set on narrow platforms to form the characteristic rounded shape. The discovery of these two previously unknown tumuli, as well as the funerary road onto which they both open, revealed a nexus of ritual space on the edge of the Caiolo plateau, with vistas to the acropolis of the city atop the San Giuliano plateau as well as direct processional access to the large Cuccumella Tumulus at the summit of Caiolo.

There was significant excitement surrounding the discovery of the western tumulus during the 2025 season, as it afforded the greatest possibility yet of an unlooted chamber tomb. Our hopes were borne out the deeper that we excavated. The entry into the tomb was through a dromos, or entryway, that was more than 3 m deep, at the rear of which the team found—still mostly intact—a single enormous slab of stone covering the door into the chamber. Because our project had never before encountered such a stone in situ—they are typically found moved or broken by tomb looters—we first employed a scope camera to investigate the internal conditions of the tomb. This enabled us to ascertain whether any special precautions were needed before we allowed the objects within to come in contact with the air for the first time in more than two millennia (**Fig. 5**). When our team removed the massive stone slab that had protected the tomb's entrance for more than 2,600 years, we found ourselves looking at the remains of four individuals laid out



◆ Figure 5. Using a camera to inspect the inside of the Tomb of the Bird Vases before excavating the chamber.



◆ Figure 6. The first look into the Tomb of the Bird Vases. Two volcanic stone (nenfro) beds are on either side, with a bronze bowl and a handmade ceramic cup on the bed to the left (south). A cache of pottery is positioned behind the beds and atop a raised platform on the right (north).

on beds carved of volcanic stone, surrounded by a perfectly preserved snapshot of the material remains of Etruscan funerary practices (Fig. 6).

The internal construction of the Tomb of the Bird Vases is unusual among known tombs of the San Giuliano necropolis, helping to narrow its date to the mid- to late seventh century. The ceiling, as is conventional with Etruscan chamber tombs, mimics the roof of a house. This particular tomb, however, more closely approximates the appearance of a *capanna* (hut) ceiling, which slopes in a concave line toward a groove at the central ridgeline; this stands in contrast to the more typical straight diagonal roof type with a central ‘beam’ seen in the vast majority of later chamber tombs at San Giuliano. Furthermore, instead of the beds for the deceased being shaped from the bedrock on either side of the door, as is typical in the necropolis, the Tomb of the Bird Vases featured regularly emplaced rectangular tuff blocks that supported separate stone beds carved of nenfro, a volcanic rock distinct from the surrounding tuff bedrock (Fig. 7). Each of the wide stone beds had two circular headrests carved into the surface. Preliminary osteological and artifact analyses suggest the interment of an adult male–female pair on each of the nenfro beds (Fig. 8), but further confirmation awaits osteological, isotopic, and genetic study of the remains, along with more comprehensive analysis of the conserved artifacts.

An initial review of the objects contained within the tomb, including iron spear points, bronze ornaments, silver hair spools, beads, and objects of *pasta vitrea*, suggests the sexes of the individuals interred therein. Iron spear points, one found on either side of the tomb and positioned along

✦ Figure 7. Photogrammetry bird’s-eye view of the tomb. Image by Eos Arc.

➔ Figure 8. Documentation and conservation within the Tomb of the Bird Vases.





→ **Figure 9.** Ceramic vessels excavated from the Tomb of the Bird Vases on display in the Civic Museum of Barbarano Romano at the end of the 2025 season.



OF THE DOZENS OF BEAUTIFULLY DECORATED AND PAINTED CERAMIC VESSELS FOUND WITHIN THE UNLOOTED TOMB OF THE BIRD VASES, MANY ARE OF THE DISTINCTIVE ETRUSCAN-MADE BUCCHERO STYLE

the outside of each bed, are typically associated with male interments. Fibulae with long catch-plates were also arrayed around the likely male individuals, while hair spools of silver, found atop each of the beds, are typically associated with females. At the top or head of the internal side of the southern bed, probably associated with the female individual, lay another remarkable cluster of finds comprising a spindle whorl and a miniature vase of *pasta vitrea*.

When the untouched tomb was opened, the ceramics were found coated with a thin layer of clay. Many had been tipped on their sides and filled to varying levels with water and clay sediment. This indicated that the tomb had been subjected to periodic flooding, which had resulted in the shifting of objects within it. Nonetheless, many original

locations could be deduced or reconstructed through a careful process of documentation.

Meticulous cleaning of the tomb revealed that it contained 74 ceramic vessels, predominantly produced between the mid- and late seventh century BC (**Fig. 9**). These vary in size and function; they include drinking and serving wares, storage jars, and specialty objects such as small *ceramica depurata thymiateria* (incense burners), as well as several plates, bowls, and chalices. Some of these plates were likely intended for suspension—either on domestic walls or within the tomb at the time of interment—as indicated by the presence of pairs of holes that would have permitted the vessels to be hung.

Of the dozens of beautifully decorated and painted ceramic vessels found within the unlooted Tomb of the Bird Vases, many are of the distinctive Etruscan-made *bucchero* style, which had coalesced between the earliest Etruscan period characterized by interment in *tombe a fossa*

(trench tombs)—in which *bucchero* vessels were absent at San Giuliano—and the later flowering of the characteristic chamber tombs of the Archaic period. Other ceramics are of the Italo-Geometric and Etrusco-Corinthian style and were imported from southern Italy or perhaps even Greece. This tomb thus imparts direct access to Etruscan material culture from an intensely formative period in Etruscan civilization. The ceramic vessels, bronze ornaments, and ritual arrangements provide concrete evidence of how local central Italian traditions—themselves the product of centuries of complex interactions throughout and across the central and northern Italian Peninsula—incorporated ritual and cultural influences of the eastern Mediterranean.

The diversity of forms and wares suggests a deliberate selection of objects by those who furnished the tomb, reflecting a combination of personal sentiment, broader cultural values and trends, and ritualized function. A striking example comes from the southern funerary bed, where a simple hand-built and burnished brown impasto cup—possibly an heirloom vessel—was found in pride of place within a bronze bowl near the head of one of the deceased (see Fig. 7). By contrast, more elaborate vessels appear to have been placed on the chamber floor. These include stemmed and stemless brown impasto chalices and ribbed *kantharoi*; *bucchero oinochoai* and drinking vessels—chalices, *kantharoi*, cups, and a *kotyle*—decorated with incised concentric lines, rays, and open and closed fans; and a range of Italo-Geometric and Etrusco-Corinthian wares, among them the hanging plates and a bowl, a two-handled cup, several pitchers—four *oinochoai* and an *olpe*—and seven *aryballoi*, some of which may have hung on iron hooks inserted in the western wall. In addition to multiple red impasto jars and three brown impasto carinated jars, two remarkable white-on-red amphorae decorated with birds—likely swans, associated with concepts of rebirth within the Etruscan funerary cult—were also recovered, giving rise to the tomb’s name (Fig. 10).

The tomb and its rich assemblage of artifacts offer a rare glimpse into the burial rituals of Etruscan civilization from the late seventh century BC. For instance, the assemblage of pottery, including vessels for storage, pouring, and especially for drinking, encompasses the full range of banqueting gear. This shows the importance of the banquet—both in life and death—for Etruscan society, even before the full adoption of the flashier Greek red- or black-figure wares of the sixth century. Just as the banquet was one of the most important events for social interaction and political status during life, so too was the banquet a symbol of the abundant and festive afterlife that the living wanted to provide for their beloved deceased.



↑ Figure 10. White-on-red amphora with water birds, after which the Tomb of the Bird Vases was named.



➤ **Figure 11.** This incised, wave-decorated brown impasto plate was found below the southern bed, positioned directly beneath a drilled hole that would have collected liquids from the funerary bed and funneled them onto the plate below.

Upcoming analyses will focus on how these vessels were used before and during the interment of the deceased and whether specific vessel groupings may represent independent offerings associated with specific individuals buried in the tomb. Although these details will be unraveled in coming years, one particularly fascinating story has emerged already.

As previously noted, a large bronze bowl and a hand-fashioned heirloom cup were found on the southern funerary bed. These vessels were likely used to hold and subsequently anoint the bodies with sacred and probably perfumed liquids. The liquids were then directed down the slanted funerary bed via two carved channels, angling toward the middle in a V shape that comes to a point and culminates in a hole drilled through the slab. These channels and the hole are unusual features in Etruscan tombs and have not been previously documented elsewhere in the San Giuliano necropolis, but they were clearly meant to divert liquids from atop the bed down through the hole. This hole funneled the sacred liquid onto a distinctive plate carefully positioned just below the funerary bed (**Fig. 11**). The plate itself was different from other open vessels in the tomb assemblage, in part because most other vessels in the tomb were found in pairs. With decorative floral and wave elements incised into the surface facing down when it was discovered, this singular and beautiful plate was specially selected for collecting the fluids that sanctified the dead.

The new tomb adds a great deal to our knowledge of the site of San Giuliano. First, we believe we have identified a previously unknown funerary road that linked the large and very early Etruscan tumulus atop the Caiolo plateau—Cuccumella Tumulus—with later sixth and fifth century BC chamber tombs cut into the cliffsides below. This road travels



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✦ **Figure 12.** Authors, SGARP project leaders, and UCLA Archaeology/Anthropology PhD graduates from left to right: Colleen Zori, Jamie Aprile, and Davide Zori.

between the Tomb of the Bird Vases, whose doorway opens to the east, and the west-facing opening of the Tomb of the Golden Spirals, excavated in 2024. This helps us understand how the Etruscans designed their necropolis and how they moved through the sacred landscape as tomb construction, mortuary practices, and cemetery use changed over time. Second and perhaps more importantly, the intact tomb offers us an unparalleled opportunity to scientifically investigate the ritual practices and beliefs of the Etruscans in the seventh century BC, a period when the Orientalizing features of Etruscan civilization were emerging through a combination of interactions with other peoples in the Italian Peninsula and contact with the cultures of the eastern Mediterranean, especially Greece. The study of the assemblage of artifacts and the human remains has just begun, and we are excited about the potential for our investigations to shed new light on this important period (**Fig. 12**).

AN UPDATE FROM ITALY: PUBLICATIONS, FIELDWORK, AND VISIONS OF THE FUTURE

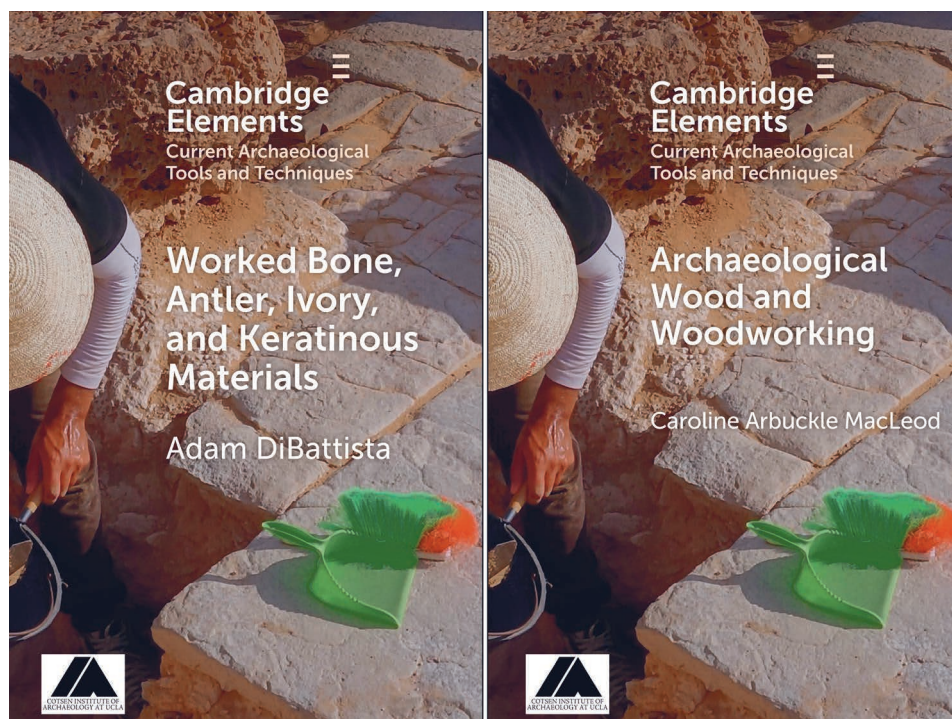
HANS BARNARD
AND WILLEKE WENDRICH

Two years ago we moved from the United States to Italy—but never left the Cotsen Institute of Archaeology behind. In this brief update we indicate how we remain involved in several projects housed at UCLA. Willeke continues as editor in chief of the *UCLA Encyclopedia for Egyptology*, administered through the Department of Near Eastern Languages and Cultures (NELC). This project comprises a series of peer-reviewed online articles on specific subjects within Egyptology, with abstracts in Arabic, made available through eScholarship.¹ Each article, varying in length from 5,000 to 25,000 words, is written by one or more experts in a specific field and often richly illustrated. There are now around 200 entries, of which the most recent are “Metaphor” by Camilla di Biase-Dyson (2025), “Medieval Arabic Reception of Egyptian Hieroglyphs” by Okasha el-Daly (2025), “Royal Inscriptions” by Shih-Wei Hsu (2025), and the second edition of “Survivals of Pharaonic Religious Practices in Contemporary Coptic Christianity” by Saphinaz-Amal Naguib (2025).

Another project in which Willeke remains involved is the Waystation Initiative,² housed at the Cotsen Institute and directed by Lyssa Stapleton. This project aims to facilitate the ethical return of archaeological and

¹ https://escholarship.org/uc/nelc_uee.

² <https://ioa.ucla.edu/content/waystation-initiative>.



← **Figure 1.** Two Elements written by graduates of the Interdepartmental Program in Archaeology at the Cotsen Institute, recently published by Cambridge University Press in collaboration with the Cotsen Institute.

ethnographic objects to their nations or communities of origin. It comprises a suite of programs and resources, including a broad stakeholder network, community engagement workshops, the development and dissemination of new standards for the voluntary return of cultural objects, and a certificate program for UCLA graduate students.

Hans is editor in chief of the series *Cambridge Elements: Current Archaeological Tools and Techniques*,³ published by Cambridge University Press in collaboration with the Cotsen Institute (**Fig. 1**). This series provides introductions to specific techniques used by archaeologists in the field or the laboratory. Each Element provides readers with a basic understanding of a selected technique, followed by clear instructions on its implementation, how to collect samples to be analyzed by a third party, and how to approach interpretation of the results. Elements are published as full-color digital documents, freely available for a two-week period after publication, and as grayscale volumes printed on demand. This hybrid format allows texts to be complemented with a variety of digital-only files, including videos, animated imagery, spreadsheets, databases, and software code. Titles currently in various stages of production include:

- *Archaeological Mapping and Planning*
- *Mobile Landscapes and Their Enduring Places*
- *Cultural Burning*
- *Knowledge Discovery from Archaeological Materials*
- *Machine Learning for Archaeological Applications in R*
- *Worked Bone, Antler, Ivory and Keratinous Materials*
- *Infrared Spectroscopy of Archaeological Sediments*

3 <https://www.cambridge.org/core/publications/elements/current-archaeological-tools-and-techniques>.

- *Retrospective and Prospective for Provenance Studies in Archaeology*
- *Archaeological Wood and Woodworking*
- *Bioarchaeology of Infants and Children*
- *Ceramic Analysis: Laboratory Methods*
- *Archaeoastronomy: Data Collection and Analysis*
- *Determining Provenance from Compositional Data*
- *A Spatial Analysis Model for Exploring Human-Environment Interactions*
- *GIS and Predictive Modelling*
- *The Archaeology of Bird Bones and Eggs*

INDUSTRIA

⁴ The center of the ancient settlement is at 45°09'33.6" N, 08°01'07.2" E, equivalent to UTM Zone 32T(N)-422870 E-50001120 N. Its elevation is around 215 masl.

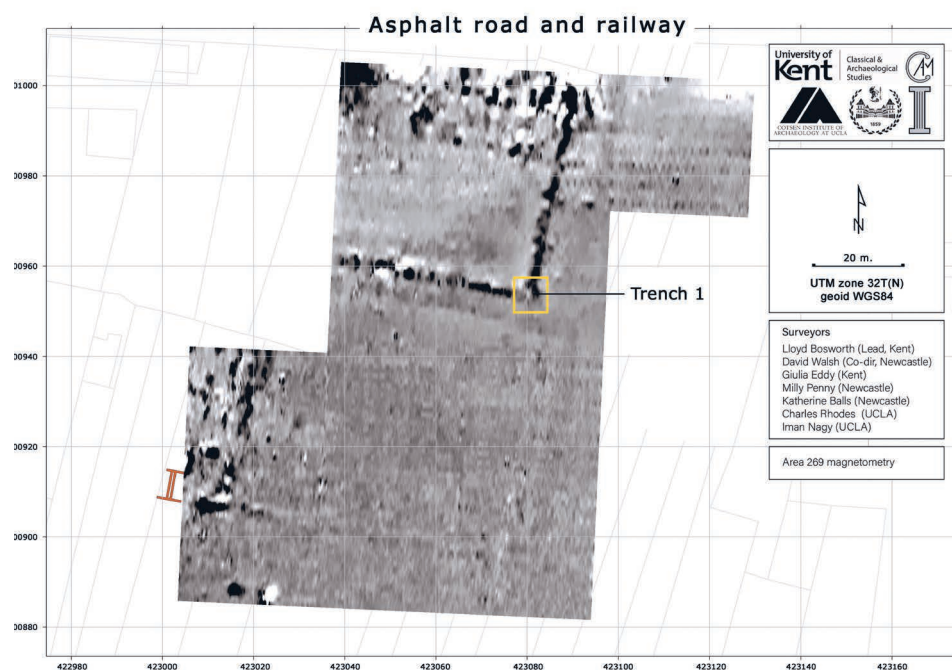
In the summers of 2024 and 2025, we continued our fieldwork at the Roman site of Industria,⁴ just east of Turin (Barello 2012; Barnard and Wendrich 2022, 2023; Fabretti 1881; Mercado and Zanda 1998; Zanda 2011). This project takes place under auspices of the Cotsen Institute in collaboration with the Politecnico di Torino, Groningen University (the Netherlands), the Institute for Field Research, the Direzione Regionale Musei Piemonte, and the Soprintendenza Archeologia, Belle Arti e Paesaggio di Torino, with permission from the Italian Ministry of Culture. In 2024 we were joined by Cotsen Institute graduate student Luís Rodríguez-Pérez and UCLA undergraduate students Eric Large and Mia Lucier, both through the Institute for Field Research. In 2025 Eric returned and was joined by, among others, UCLA graduate student Collen Cramer (NELC) and undergraduate student Isabella Thompson, both through the Institute for Field Research, and Sarah Beckmann, UCLA assistant professor of classics (Fig. 2).

→ **Figure 2.** The team working in Industria enjoys lunch in the garden of Agriturismo Casa Matilde. Photograph by the authors.





← **Figure 3.** Trench 1 at Industria, in a field of soybeans around 250 m southeast of the exposed center of the ancient city. Photograph by the authors.



← **Figure 4.** Geomagnetic profile of an area southeast of the exposed center of the ancient city, showing strong rectilinear anomalies and the position of Trench 1. Image prepared by Lloyd Bosworth.

The geophysical survey of the environs of the site, which was started in the summer of 2022 (Barnard and Wendrich 2022, 2023), continued in 2023, 2024, and 2025.⁵ Based on the results of this survey, two excavation trenches were opened in 2024,⁶ primarily to ground-truth our geophysical observations. Trench 1 was about 250 m southeast of the center of the ancient city, in an agricultural field with no visible remains on the surface (Fig. 3) but with strong rectilinear geophysical anomalies (Fig. 4). Trench 2 was just west of the exposed center of the ancient city (Fig. 5), within an area now owned by the Italian government (Fig. 6).

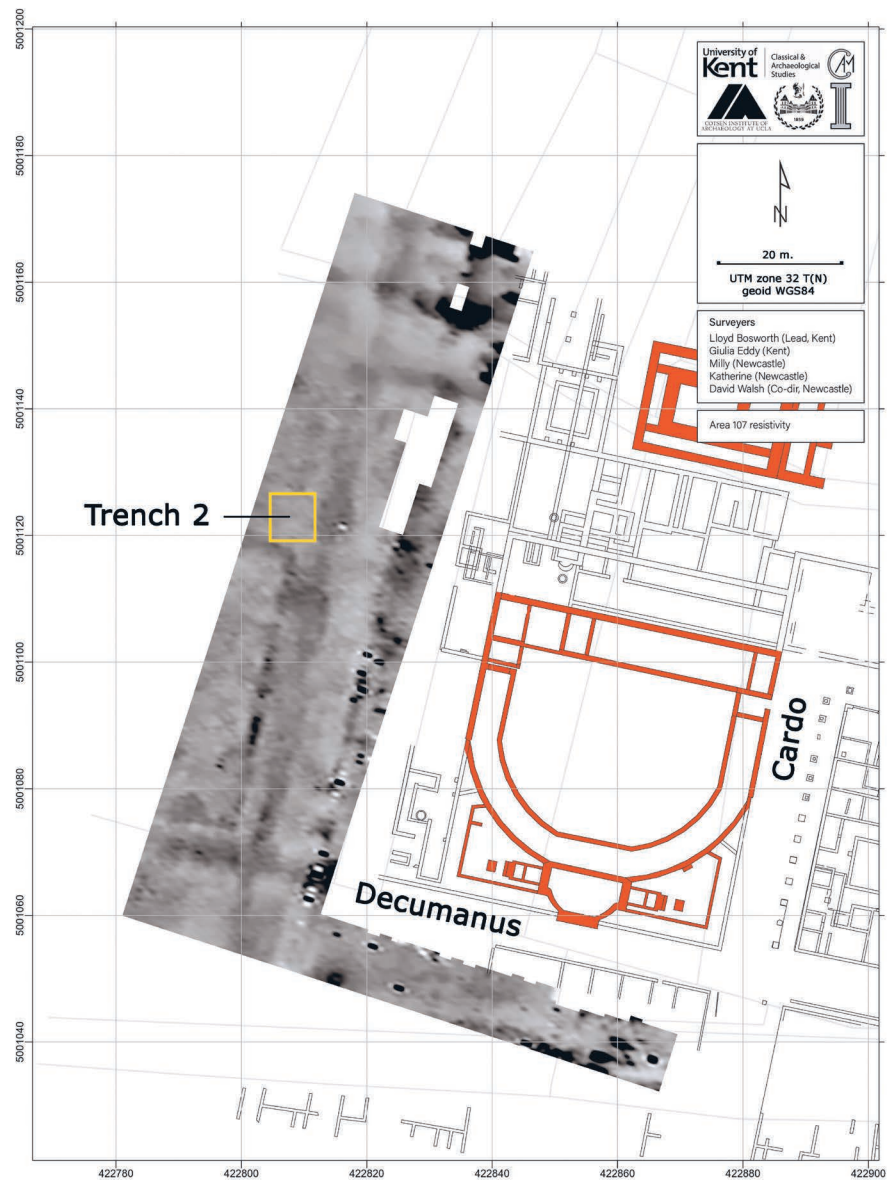
5 The instruments used were a Bartington Grad601-2 dual fluxgate gradiometer and a Geoscan RM85 Advanced resistivity meter with a parallel twin, four-probe array.

6 The center of Trench 1 was located at 423082.53 E-5000957.95 N-216.11 masl and the center of Trench 2 was at 422807.86 E-5001117.75 N-215.28 masl, both projected onto Zone 32T(N) of the WGS84 geoid.



→ **Figure 5.** Trench 2 at Industria, just west of the exposed center of the ancient city, visible in the background. Photograph by the authors.

→ **Figure 6.** Partial results of the electric resistivity survey of the unexcavated area around the center of Industria, showing strong rectilinear anomalies and the position of Trench 2. Image prepared by Lloyd Bosworth.



With the ancient remains farther below the surface than expected, the first Roman layers were reached only toward the end of the 2024 season. These were covered with geotextile and the excavated soil was put back, with the help of a mechanical digger, for the work to continue in the summer of 2025.

The summer of 2025 at Industria was impacted by several Atlantic storms making their way across the Alps from southern France into northern Italy. One consequence was that our trenches were flooded more than once, significantly impacting excavation. Despite such setbacks, we determined that the observed geophysical signatures corresponded to ancient remains (Fig. 7), which was confirmed by radiocarbon analysis.⁷ In combination with the known orientation of the Roman structures (about 11° off north), we are now able to infer some of the layout of the Roman settlement, which once extended far beyond what is currently visible (Fig. 8). It is thought that when the Po River slowly changed course and moved away from the settlement, a canal was constructed to facilitate the movement of goods and people. To investigate the possible position of such a canal, in 2025 a coring program was started west of the ancient city center (Fig. 9).

AOSTA, BENE VAGIENNA, AND LIBARNA

Although most Roman settlements in northern Italy developed into modern towns, the province of Piemonte (ancient Gallia Cisalpina) has two sites very similar to Industria: Bene Vagienna (ancient Augusta Bagiennorum) and Libarna. With the team working in Industria, we visited them in 2024 and 2025, respectively. Bene Vagienna, near Cuneo and southwest of Industria, was the main Roman city in the region, inhabited by the Ligurian tribe of the Bagienni between the first century BCE and the seventh century CE. The site preserves the remains of an amphitheater, a basilica, an aqueduct and bath, and one of the city gates, as well as a theater that is still used today.⁸

Libarna (near Alessandria, southeast of Industria) was founded by the Ligurian tribe of the Dectunini and flourished after the construction of the Via Postumia, connecting Genoa on the Tyrrhenian Sea with Aquileia on the Adriatic Sea, around 150 BCE. The city became a Roman colony in the first century CE, leading to a peak in its wealth and power. After a

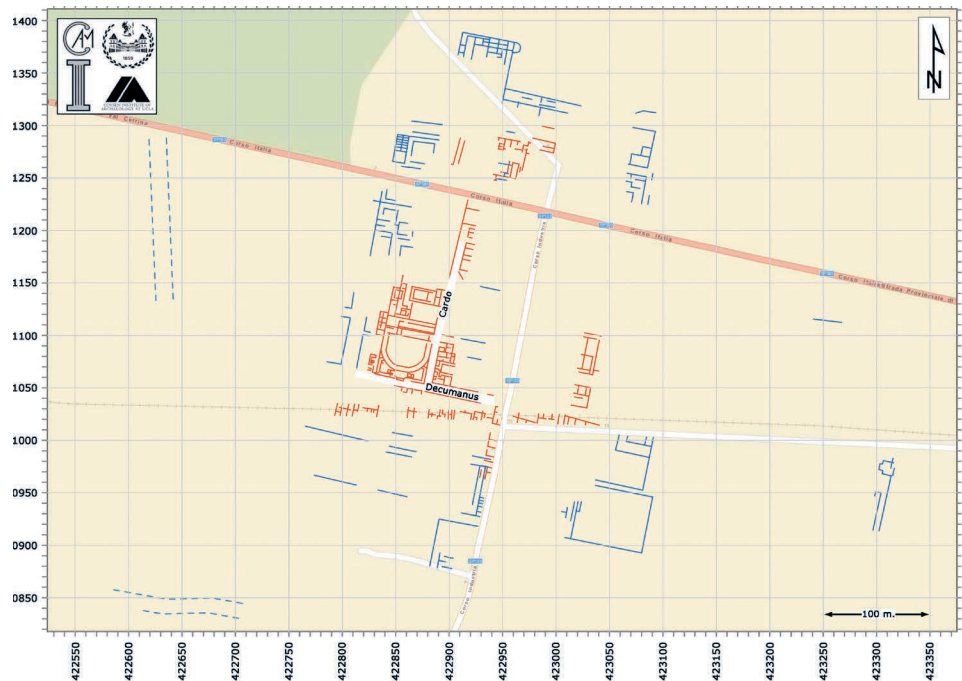


↑ **Figure 7.** Orthographic composite photograph of Trench 1, clearly showing the remains of an ancient wall and roof that collapsed before 430–549 cal CE. Image created by Luis Rodríguez-Pérez and Jordyn Milton using Agisoft Metashape Professional.

⁷ The Centre for Isotope Research at the University of Groningen, the Netherlands, dated sample CAMI24 US1007 49(b) from Trench 1 to 430–549 CE (calibrated using OxCal 4.4, probability 95.4%).

⁸ An interactive virtual reality rendering of this theater can be viewed at <https://win.noreal.it/pubblica/mdd/teatro/AR>.

→ **Figure 8.** Tentative interpretation of the geophysical survey of Industria. Red lines indicate previously excavated Roman remains; blue lines represent structures hidden below the surface. The dashed lines toward the west may indicate ancient canals, once connecting the city to the Po River. Image prepared by Lloyd Bosworth.



9 An interactive virtual reality tour of Libarna is provided at <https://www.libarna.al.it/virtualtour/en>.

series of wars, Libarna again declined and was abandoned around 450 CE. Although the center of the city was destroyed by railway lines and roads, many peripheral structures survive, including the amphitheater and the theater,⁹ as well as a mosaic floor depicting scenes from the myth of King Lycurgus and the nymph Ambrosia.

Given its direct economic links to Industria, each year we visit the Aosta Valley in the Alps north of Industria. The city of Aosta preserves impressive Roman remains, including a cryptoporticus, a theater (Barnard and Wendrich 2023:9–11), one of the city gates, and an Arch of Augustus. The connection to Industria is most apparent from Pont d'Aël, a Roman aqueduct and bridge southwest of Aosta that was financed by a member of the Avilius family, as proudly stated on a large inscription (**Fig. 10**). The Avilius family was the principal patron family of Industria. Together with the Lolli family, they managed and financed the development of the city.

COMMUNITY INVOLVEMENT

An integral and vital part of our project is close collaboration with the local community, in the broadest sense of the word, which involves the sharing of knowledge and skills between all stakeholders. On May 11, 2024, we participated in a day of traditional bronze casting, which returned this activity to Industria, where it once was the main driving force behind the economy. Organized by the Direzione Regionale Musei Piemonte and the Politecnico di Torino, demonstrations were given by members of the L'ARC Centro Ricerche Archeologiche Sperimentali and a group of enthusiastic volunteers from Villar San Costanzo (ancient Cannetum).¹⁰

Between April 23 and November 10, 2024, a temporary exhibition on Industria, titled *La Scandalosa e la Magnifica* (The Scandalous and Magnificent One),¹¹ was on display in the Museum of Antiquities in Turin

10 <https://www.parcocannetum.it>.

11 This title was inspired by a third–fourth century CE hymn to the Egyptian goddess Isis (Nag Hammadi Codex VI.2), which concludes “Listen to me [Isis], for I am the scandalous and magnificent one.”



◆ **Figure 9.** Mans Schepers (assistant professor at Groningen University, the Netherlands) sinks a core in a cornfield northwest of the ancient city center, assisted by students Sanne Smit and Eric Large (on the left). Photograph by the authors.

to celebrate its 300th anniversary (Panero et al. 2024). Finds from Industria, first explored by Giuseppe Rivautella and Giovanni Ricolvi in 1724, constituted the beginning of the antiquities collection of the Dukes of Savoy, which is still housed in the former Royal Palace in Turin. The focus of the exhibition was the regional worship of Isis, to whom a shrine was dedicated in Industria (Bongioanni and Grazzi 1988; Panero et al. 2024; Saragoza 2012; Zanda 1997; Zanda and Gaspani 2003). Not only did the team excavating the site visit this exhibition, but its curators and their guests returned the courtesy by paying a visit to our excavation. As part of a lecture series within the framework of the celebrations, Willeke delivered a lecture on our work (in Italian) in the ballroom of the Royal Palace on August 7, 2024.



Two more presentations on recent research at Industria were delivered by Hans (both also in Italian). The first was in the former Abbey of Santa Maria in Cavour, southwest of Turin, during the one-day conference *Nova Urbs: Updates and Reflections on Roman Cities in Piedmont: A Workshop in Memory of Fedora Filippi* (June 15, 2024). The second, undertaken with our friend and colleague Anna Lorenzatto on September 21, 2024, was the inaugural lecture of the Monteu da Po–Lauriano branch of the Italian University of the Third Age (UNITRE). UNITRE is part of an international community of scholars and volunteers who aim to stimulate and educate those in the third stage of life, with a focus on culture and the humanities.

By far the most disastrous of the storm systems already mentioned hit the region on April 17–18, 2025. The heavy rainfall resulted in several severe landslides, destroying roads and killing one inhabitant of Monteu da Po. The excavated parts of Industria were inundated and covered in a layer of mud. In close collaboration with local authorities, we set aside May 24, 2025, to clean up the site as well as possible. For the occasion we had T-shirts printed with an outline of one of the most famous finds from Industria, a bronze dancer, and the text “Industria Dream Team 2025” (Fig. 11).

About a month later (June 30, 2025) we handed similar T-shirts to 45 children who visited the site as part of their summer program. Under the overarching theme “Before Plastic,” we offered a number of activities, including storytelling, a mock excavation, basic basket and pottery making, reconstructing pottery, and writing names in Egyptian hieroglyphs. We took a similar approach during an open house on August 30, 2025, near the end of our excavation season. Visitors were offered a guided tour, including our open excavation trenches; a mock excavation; and detailed information on our archaeobotanical research, excavated building materials, and survey instruments. One special project was the creation of a mosaic of the new coat of arms of Monteu da Po (Fig. 12). This was donated to the municipality on September 20, 2025, during its official presentation, which was endorsed by the president and prime minister of Italy. In attendance were Congressman Giglio Vigna, a representative of the national gendarmerie (the Carabinieri), the mayors of the neighboring municipalities, the mayor of the Romanian twin town of Monteu da Po, and the marching band La Fenice.

MUSEO EGIZIO

After a hiatus because of the pandemic, the five-week field school of the Cotsen Institute at Museo Egizio (the world-renowned Egyptian museum in Turin), which was facilitated by the Institute for Field Research (Arbuckle MacLeod 2019; Newman 2018; Rondano 2017), is now in the capable hands of Caroline Arbuckle MacLeod of St. Thomas More College, University of Saskatchewan, and Danielle Candelora of the College of the Holy Cross (Worcester, Massachusetts). Both obtained a PhD in archaeology at UCLA. With Willeke on its scientific board, Museo Egizio celebrated its bicentenary on November 20, 2024, in the presence of Sergio Mattarella, president of the Italian Republic.

← **Figure 10.** The team working in Industria poses on Pont d’Aël, a Roman bridge and aqueduct in the Aosta Valley. The inscription visible at the bottom left reads, “IMP · CAESARE · AUGUSTO · XIII · COS · DESIG · C · AVILLIUS · C · F · CAIMUS · PATAVINUS — PRIVATUM,” which can be interpreted as “When Caesar Augustus was consul for the thirteenth time [3 BCE], Caius Avillius Caimus from Padua, son of Caius, [built this] using private funds.” Photograph by a friendly passerby.

→ **Figure 11.** The Industria Dream Team 2025 celebrating the successful cleaning of the site. Photograph by the authors.



→ **Figure 12.** Students and members of the local community create a mosaic of the newly designed coat of arms of Monteu da Po (modern Industria) during our open house. On the right is the finished product, which was donated to the municipality during its official presentation. Photograph by the authors.



From the above it will be clear that the Cotsen Institute remains an important and appreciated presence in northern Italy, a connection that offers great opportunities for UCLA undergraduate and graduate students. To secure this connection in the foreseeable future, in the summer of 2025 the Industria project was visited by Sarah Beckmann, assistant professor in the Department of Classics at UCLA. She has been associated with the project from its inception, and the time seems right for her to take on a more prominent role.

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MAKERS' MARKS: NEW ADVENTURES AT THE ROCK ART ARCHIVE

**JO ANNE VAN TILBURG
AND CATHARINA E. SANTASILIA**

The Rock Art Archive welcomes Catharina E. Santasilia to her new role as archive manager. Cat received her doctorate in anthropology at UC Riverside in 2019. She brings her expertise in archaeology through fieldwork in Belize and Mexico, and in archival and database management during the past two years with Jo Anne Van Tilburg's Easter Island Statue Project (EISP). Realizing that more hands were needed if the archive was to meet its stewardship and planned publication goals, we turned to our longtime colleague Brandon Lewis, a UCLA alumnus who today is a professor of archeology at Santa Monica College. Brandon's students have worked closely and often with the archive and the EISP team and have collaborated with other researchers on countless Cotsen projects. Coincidentally, Lewis was looking for new projects for his students to earn credits toward an archaeological certificate.

Earlier in the year, the archive upgraded its technological capacity with new computers and the assistance of Jason Liang and the Cotsen staff. The upgrades were put to the test when four enthusiastic students arrived during the first week of June. They spent several hours exploring rock art site records and learning the ins and outs of the archive's

database. Two weeks later they joined an archaeological excavation team in Belize with Lewis, who sent a new group of students our way. They reconnected with the archive and continued volunteering long after completing their certificates (**Figs. 1a and 1b**). One student has already transferred to UCLA, and we hope more will follow next year. The involvement of UCLA and Santa Monica College students in the archive is a valuable stepping stone for each of them, no matter what profession or ongoing education they ultimately choose. Many of the nearly 30 past UCLA work study students who worked closely with former volunteer Gordon Hull gained needed skills across many areas by interacting with the archive's diverse and supportive volunteer staff.



◀ **Figure 1a.** Volunteers John Bretney, Rachel Sison, and Noah Boone work on rock art slides at the archive. Photo by Catharina E. Santasilia.

↑ **Figure 1b.** Volunteer Audrey Neal is busy researching the Little Lake basketry collection. Photo by Catharina E. Santasilia.

In September, a visitor stopped by the archive, hoping to use our resources to learn more about the rock art on her property. We located several items, and she invited us to visit her family ranch in Ventura County. The students shifted their focus in the site record entry process to learn more about that region's rich rock art tradition. On Sunday, November 2, 12 of us departed Santa Monica early in the morning and headed 90 miles north of Los Angeles. At our meeting point, we connected with another California archaeology group, making the trip even more educational. After a 40-minute journey, crossing several (luckily mostly dry) creeks in our four-wheel-drive vehicles, we arrived at our destination (**Figs. 2a and 2b**). Everyone recognized how privileged we were to visit this sacred place, and because it is located on private land, the site is well protected while still available for educational visits.

The protocols for observing and recording rock art on private land are the same as those for public land.¹ Respect for Indigenous cultures is inherent and acknowledged. Since most painted rock art is in confined

¹ See www.rockartnetwork.org.

→ **Figures 2a.** The recently visited sacred rock art site in Ventura County. Photo by Catharina E. Santasilia.



spaces, such as small concavities on a cliffside or on the ceiling or walls of caves, only a few people at a time can view it. For many student volunteers, this was their first experience with rock art, and they were all genuinely enthralled. We are already contemplating future outings and considering how we can best make these visits productive while collecting data for the archive. Members of the Cotsen community are cordially invited to join us on any of our Rock Art Archive field trips.

This year we bid farewell to longtime volunteers Audrey Kopp and Ed Schoch, who both chose to retire after more than 25 years of dedicating their time, effort, and substantial expertise to the archive. Their enthusiasm and skills sustained the archive even as the pandemic wound down and until the archive opened again (**Fig. 3**). Their many contributions include involvement in Little Lake fieldwork and publications, maintaining and managing the bibliography database, and, not least, responding to public rock art inquiries. We are deeply grateful for everything Audrey and Ed have done over the years, and their legacy endures.

To express our sincere gratitude to them, we gathered our colleagues from the archive and EISP to toast their retirement. This allowed the retirees to meet some of their successors, who in turn had the opportunity to celebrate Audrey and Ed's accomplishments. The event was held in Santa Monica at a legendary Mexican restaurant we often frequent for celebrations. Audrey and Ed both contributed their skills to the preparation of Van Tilburg's *Te Moai Rapa Nui: Easter Island's Megalithic Statues*. The volume is designed as an illustrated archaeological atlas, and it includes approximately 150 maps by cartographer Alice Hom, herself a former archive staff member.

Longtime volunteer Ron Tallerkson, among the first to discover an intact brownware pot during our fieldwork at Little Lake—one of only



↑ **Figure 2b.** Detail of the exquisite pictographs.
Photo by Jonathan Duarte.

about 50 known in California—continues to contribute his cheerful, tireless efforts to updating the rock art library and bibliography. John Bretney, coeditor of *Rock Art at Little Lake: An Ancient Crossroads in the California Desert* (Cotsen Institute of Archaeology Press, 2012) continues his dedication to Native cultural recognition through volunteerism at the archive. John's wealth of knowledge about the California desert and its rock art sites enriches the student experience immensely.

Little Lake is an ongoing presence in the work of the Rock Art Archive, and connections to it were again revived when retired archaeologist C. J. (Jill) Minar contacted Van Tilburg to share a personal quest. In 1984, Dr. Adella (Dee) Schroth (1939–2018) was one of the first California archaeologists to embrace the newly emerging magic of computerized data filing. She employed the new technology in her analysis of large shell middens (Ca-Ora-388). In her professional career, Dee conducted CRM projects throughout California and published or posted countless reports of her fieldwork (44 entries on tDAR).



→ **Figure 3.** Audrey Kopp and Ed Schoch at their retirement luncheon. Photo by Jo Anne Van Tilburg.

As a graduate student at UC Riverside, Jill had consulted on Dee's dissertation fieldwork at Little Lake and in Pinto Basin, Joshua Tree National Park. Because Jill was interested in basketry, Dee had loaned her a collection of basketry purportedly from Little Lake caves. The collection consisted of woven fragments and some wooden items. According to Dee, it was "not spectacular to look at but very valuable in terms of basketry analysis." Dee's goal was for Jill to analyze the collection and write it up for her proposed volume on Little Lake archaeology. At the time, Jill was just beginning her graduate program and Dee was nearly finished. Their professional lines and research interests diverged, and neither the proposed basketry project nor the book came to fruition.

The Little Lake basketry collection stayed in Jill's possession, and she had always hoped to return it to Dee. In the meantime, Jill took



◀ **Figure 4.** One of the Little Lake basketry fragments now in the Autry collection. Photo by Diana Baldrice.

appropriate steps to protect it. She asked Fresno photographer Diana Baldrice to photograph the collection and to rehouse each fragment in archival-quality materials (**Fig. 4**). However, she didn't know to whom the collection actually belonged. After Dee's death, Jill remembered that in about 1992, Dee had said something about a fire and that the Little Lake records may have been lost. Jill guessed that the collection might have come from the San Bernardino County Museum, where Dee had worked. In 2018, Jill spoke with Tamara Serrano-Leiva, the curator there, but there was no record of Little Lake basketry, so she reached out to Van Tilburg.

Basketry is a craft of great interest in the area around Lone Pine, where many Native families live and work. Women from the area sometimes went down to Little Lake to collect other types of basketry materials. There was a lot to learn from them, but it didn't include information about Dee's basketry collection. In the meantime, Jill was "deep in the weeds" teaching at Fresno City College. The Little Lake basketry collection again went to the bottom of her to-do list.

After retirement, Jill heard from Tamara Serrano-Leiva again, and in 2025 Jill connected with curators Karimah Richardson and Sarah Signorovitch at the Autry Museum of the American West. The Autry curates Little Lake lithics collections made by archaeologist Mark Harrington. Members of the archive team had reviewed those collections at their original repository,

as well as others from Little Lake that were widely dispersed, including at Arizona State University. (That's a story for another day.) Discussions with the Autry ensued, and photos were sent; the Autry accepted the Little Lake basketry collection, which was personally delivered by Jill and Monica Bellas, another UC Riverside anthropologist.

[BASKETRY] AND THE POTTERY WE FOUND ARE DISTINCTIVE MARKERS OF "WOMEN'S WORK" WITHIN THE LARGER CONTEXT OF SOCIAL GATHERINGS AND SPIRITUAL OBSERVANCES AT LITTLE LAKE.

Basketry, however fragmented, was often decorated with motifs not unlike many seen in California desert rock art. It and the pottery we found are distinctive markers of "women's work" within the larger context of social gatherings and spiritual observances at Little Lake. All the women involved in this saga sought a permanent curatorial home for these priceless basketry fragments through a sense

of duty to legacy data. Beyond that, however, was a collective respect for the people—probably also mostly women—who had crafted the baskets. Recognizing how close she came to a less-than-happy ending for the Little Lake basketry collection, Jill cautions us all: "I encourage other archaeologists and senior scholars to consider the futures of collections in their care. It may be time to begin making plans before it is too late."

That admonition is generally taken to heart by rock art enthusiasts, nearly all of whom are volunteers and aficionados. It was also understood by the late Clement W. Meighan, a UCLA Department of Anthropology faculty member and founder in 1979 of the Rock Art Archive. His goal was to provide a home for orphaned data, and collectively we have accomplished that. The specific objectives ahead are multifaceted, with the main focus on continued updating and digitization of the many resources housed in the archive. One aim is to summarize our collections in a planned volume and on an interactive map of trends in design and aesthetics. Multiple tasks lie ahead, and new learning opportunities will no doubt emerge during our stewardship of this valuable archive.

CONTINUING THE EXCAVATIONS AT GARDEN FIELD, SUTTON HOO: BEYOND THE ROYAL BURIAL MOUNDS

RANDI DANFORTH

A surprising number of people became familiar with the spectacular finds of the Sutton Hoo excavation through the 2021 film *The Dig*, starring Ralph Fiennes as Suffolk archaeologist Basil Brown and Carey Mulligan as landowner and Brown's patron, Edith Pretty. It dramatizes the events of 1938–1939 when, invited by Pretty, Brown excavated the burial beneath Mound 1, using his instinct and deep familiarity with the landscape to carefully excavate what he soon identified as a magnificent ship burial. The mound contained the splendid treasures of an obviously significant individual, their opulence and quality defining him as a person of elite status. With the guidance of king lists in the eighth-century work *History of the English People*, he was later tentatively identified as Raedwald, an East Anglian king who lived in the early seventh century. This, along with an analysis of the artistic style of the Saxon objects and some coins of Merovingian origin minted in the same era, supported a date of AD 625 for Mound 1 (Carver 2017:38–41). The discovery lit up a nation, a distraction from the uneasy anxiety of what its citizens would later recognize as the distant rumblings of a world war.

The excavators saw no signs of a body, but later chemical analysis of the burial chamber suggested that one had originally been present. Although no wood survived, there were shadows of a dark deposit against the clean yellow sand of the subsoil, showing where wood of the



→ **Figure 1.** The author in the Garden Field trench, May 2025. Photo by the author.

➤ **Figure 2.** View of the Garden Field trench, with the Time Team tent at right. Photo by the author.

SURFACE AND GROUND PENETRATING SURVEYS HAD IDENTIFIED GARDEN FIELD AS AN AREA OF INTEREST, AND ANGLO-SAXON INHUMATIONS AND CREMATIONS IN POTTERY VESSELS HAVE BEEN FOUND THERE.

boat and the burial chamber had disintegrated over the centuries. The form of the ship was clearly outlined by lines of rusted iron rivets, which had fastened together the nine rows of oak planks that defined the hull. The king's most important grave goods—objects of silver, iron, bronze, gold, enamel, and garnet—had survived and are now restored and in the care of the British Museum. The Sutton Hoo site, with its 18 mounds, was given to the UK's National Trust, and archaeological work still goes on in other parts of this lovely property in rural Suffolk, near the banks of the River Deben and the town of Woodbridge (**Fig. 2**).

Garden Field, in an area next to the National Trust visitor center and museum, sits beyond the meadows where the royal burial mounds remain (some unexcavated). Surface and ground-penetrating surveys had identified Garden Field as an area of interest, and Anglo-Saxon inhumations and cremations in pottery vessels have been found there. They belong to an earlier cemetery of the sixth century, predating the grand seventh-century royal burials nearby. I was accepted as a volunteer to work here for two weeks in May and June 2025 (**Fig. 1**).

The project was conducted by a team from Field Archaeology Specialists Ltd. (FAS Heritage), a professional archaeology firm based in York, on behalf of Time Team (which produces archaeology video and podcast content), in partnership with the National Trust. Professionals on the team were joined by volunteers, including some from the surrounding Suffolk community, many of them experienced in archaeology, and Time Team Patreon subscribers. The progress of the four-week excavation seasons in 2024 and 2025 was reported on and recorded in videos, podcasts, and articles, which are available on YouTube and Time Team





↑ **Figure 3.** Artwork by Amanda Warren inspired by a bronze stag embellishing an iron standard found in Mound 1. Photo by the author.



➤ **Figure 4.** An assortment of spearheads and blades forged by a blacksmith. Photo by the author.

digital platforms. The project welcomed the general public via visits to the site, engagement with online content, and, exceptionally, participation as active volunteer members of the excavation team. This is community archaeology that fosters genuine buy-in from supporters and financial contributors, and with an extensive online presence, its reach is global. Crucial to this public engagement with Sutton Hoo's past is the National Trust, owner of the site, with work led by its regional archaeologist Angus Wainwright and Sutton Hoo specialist Laura Howarth.

The 270-acre Sutton Hoo property offers the varied activities of a park, and for the four-week periods of the two field seasons, the excitement of an archaeological excavation was added to the pleasant and varied natural environment, attracting many visitors. Besides watching archaeologists at work, they could check out exhibits in the Time Team tent, where interactive archaeology activities were aimed at families; engage with the artists in residence, who created artworks with early medieval themes (**Fig. 3**); watch weavers demonstrating historic textile techniques; and watch a pair of blacksmiths forge Anglo-Saxon-style blades (**Fig. 4**). The Time Team crews were constantly filming, interviewing, and recording audio for their digital content. Their own professional archaeologists did the presenting and interpreting, mostly aimed at a general audience. Work on site was directed by Justin-Garner Lahire (who liked to double as the digger driver) and Madeleine Hummler, who advised the volunteers and steered their work.

A campaign in the 1980s had surveyed the whole area and excavated a large part of the royal burial ground, examining eight mounds, including the burial of a young man and his horse. Among the most significant



finds at the time were bronze fragments of the Bromeswell Bucket, plowed up in Garden Field and dated to the sixth century. The bucket carries an incised scene from classical mythology that relates it to similar vessels from the Byzantine world. After the original discovery of the battered bucket in 1986, more fragments were found in 2000. During the 2024 season, its base was found. This added pieces to its reconstruction to reveal an artifact that perhaps found its way to an Anglo-Saxon burial via a warrior returning from duty in the eastern Mediterranean (Carver 2017:45). Analysis revealed that it had contained a cremation. The metal finds and the discovery of Anglo-Saxon graves dictated the location of two trenches in Garden Field for the 2025 excavation, where investigators hoped to learn more about the context of the bucket as well as the prehistory of the Sutton Hoo site and its Anglo-Saxon inhabitants.

Martin Carver, emeritus professor of archaeology at the University of York, led the excavations at Sutton Hoo from 1983 to 1992. He and other archaeologists who did this early work returned to Sutton Hoo in 2024 and 2025, providing continuity, invaluable institutional memory, and expertise for the new seasons of investigation. For me, it was a fantastic reunion with Martin, with whom I had volunteered in 1973 (Fig. 5) in the city of York in a rescue archaeology program to collect and preserve evidence from five sites before they were obliterated by urban development. The experience inspired my pursuit of an undergraduate archaeology degree, although my career eventually took a different path. I ended up full circle, working in archaeology publications at the Cotsen Institute many years later. Volunteering at Sutton Hoo brought me back to my original love for the field and this period of early English history.

Figure 5. The author in a trench at Bishophill, York, in 1973.

WEEK ONE: EXCAVATION IN THE FIELD

Justin Garner-Lahire, director of FAS Heritage, led the excavations in the two trenches in Garden Field. Madeleine Hummler (**Fig. 6**), who supervised the volunteers, taught them how to conduct a field-walking survey, use a trowel, process finds, and do site recording. The recording methodology used was based on Carver's field research procedure (Carver and Hummler 2025), a system that places data in a hierarchical organization of contexts (deposits), features (sets of deposits), and structures (groups of features). The parameters of the trenches in Garden Field had been located by a range of geophysical survey techniques (photogrammetry, magnetometry, metal detecting) that revealed the presence of early activity from prehistoric to early medieval times. The site surveys were made with a total station and tablet computer running CAD software. Documentation was also done with high-resolution digital photography and with a drone for low- and high-level aerial recording. Written descriptions and half-section drawings were routinely compiled to provide the fullest possible record.

The trenches were first machine-excavated with a toothed excavator bucket and then water-sprayed and field-walked by volunteers and scanned by a metal detectorist. All finds were flagged and then 3D-located with the total station. In my first week of work, which was the second of the four-week season, I joined a half dozen other volunteers in the walking survey of both trenches, collecting any possible worked flints (evaluated in the field by the supervisor before recording and bagging—thus minimizing overoptimistic identification by enthusiastic volunteers),

→ **Figure 6.** Madeleine Hummler, left, explains aspects of the excavation to visitors. Photo by the author.



debitage, metal fragments, and pottery, recording the locations with the total station, and bagging up the finds. We then proceeded to coarse-trowel the sandy soil, removing it inch by inch. We worked backward in a line, locating finds and depositing our spoil, bucket by bucket, on the growing mountain next to the trench, which would be used to backfill the excavation at the end of the season. Dry sieving was done when the finds distribution occurred in a high concentration.

Several burial urns containing cremations were found in situ in the upper site. The lower site proved to be less yielding; the disturbed earth there was mainly caused by plows, burrowing animals, and tree falls. This area was and is still agricultural, so farmers have frequently turned up artifacts in the course of their tilling work, leaving the plow marks to show where they crossed virgin soil.

Skilled metal detectorists volunteered for the Sutton Hoo seasons (Fig. 7) in collaboration with the Portable Antiquities Scheme, which encourages and facilitates the recording of finds made apart from archaeological excavations by members of the general public. Such collaboration is a relatively new aspect of professional archaeological excavation. In the past, detectorists were sometimes regarded as treasure-hunting hobbyists who undermined the work of archaeologists.¹ But their expertise and devotion to archaeological procedures have gained them respect. Many are now professionals who conduct metal-detecting surveys in collaboration with other archaeologists. They report findings and geo-coordinates of the locations of metals and other materials to excavation teams, identifying areas where test pits might be fruitful.



¹ See the fictional BBC series *Detectorists* for a poignant and pastorally set look at the sometimes comedic adventures of a couple of extremely keen metal detectorist hobbyists in Essex. Their discoveries consist mainly of enough aluminum can pop tops to provide a very comprehensive typology seriation, but they never give up hope that one day they'll find the greatest Anglo-Saxon hoard ever.

← **Figure 7.** A metal detectorist scans in the trench. Photo by the author.

WEEK TWO: PROCESSING FINDS IN SUTTON HOO HOUSE

During the second week, I was assigned to the finds room in Tranmer House (now Sutton Hoo House), Edith Pretty's former residence and now a museum about the discovery and excavations at Sutton Hoo. In a room upstairs (Fig. 8), supervised by archaeologist Jenny Glazebrook, we received the bagged field finds for processing. First we separated them into boxes by material: iron, nonferrous metals, pottery, and worked flint. Most of the pottery was coarse red ware, with a few sherds of earthenware and porcelain, and a negligible amount of glass. We then washed, dried, weighed, cataloged, and marked each one (Fig. 9). I brushed a stripe of Paraloid (a peelable, thermoplastic resin) on the surface of each flint so the marking would be reversible. Then I used a tiny pen nib and water-soluble white ink to inscribe catalog numbers on the surfaces (Fig. 10). We placed each artifact in a plastic bag cushioned with a piece of foam. As in 2024, after the 2025 season concluded, all finds were

→ **Figure 8.** The finds processing room in Tranmer House (now Sutton Hoo House). Photo by the author.





◀ Figure 9. Trays of washed and dried flints before marking. Photo by the author.



◀ Figure 10. Tools for marking. Photo by the author.

shipped to labs in York, where they will undergo analyses to date and identify them. FAS Heritage will publish the findings in its site report.

Each day we had volunteers in the finds room, including a group from the Restoration Trust, which facilitates culture therapy activities for individuals living with mental health challenges. Some local volunteers had prior experience, and they brought familiarity with the type of flints and pottery sherds that turn up most frequently. One volunteer recognized several hagstones in the mix. These are not artifacts but are naturally occurring roundish stones with holes in the middle; people collect them on the beaches in Suffolk and string them together as hanging charms. They were not among the assemblage submitted for lab analysis.

BUILDING A BOAT: THE SUTTON HOO SHIP'S COMPANY

A related but separate project has been going on for a few years in a large hangar (the Longshed) across the river on the waterfront in Woodbridge.² Here experienced volunteers and shipwrights have been constructing a full-scale reconstruction of the Anglo-Saxon ship found under Mound 1, using traditional tools, ancient techniques, and seasoned native oak donated from all over the UK (Fig. 11). This massive community endeavor, “one of the largest single focus archaeological projects so far seen in Britain” (Carver 2026:133), explores not only the context of early English history at Sutton Hoo but also the maritime history of Woodbridge. Everyone involved in or visiting the Sutton Hoo excavations makes a stop at the Longshed to experience an aspect of early medieval archaeology come to life. It is a truly fascinating and authentic window into the past (Fig. 12).

Co-founded by Carver (Fig. 13), the Sutton Hoo Ship's Company, an independent charity for which he now serves as trustee, supports this work. The first in a series of three books on the project authored by Carver (Carver 2026) has just been published. Organizers will launch the 90-foot boat sometime after its projected completion in 2027, putting 40 oars to water to explore how the Anglo-Saxons powered and navigated their giant craft, which predated the famous Viking longships by some 200 years. The progress has been well documented in film and all manner of media; there is already enormous interest in this experimental endeavor. The launch of the vessel into the Deben River will attract global attention and allow us to better understand transportation, trade, craft, social cooperation, and international exchange in early Britain.

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² Progress can be followed on the website at <http://saxonship.org>.



➤ **Figure 11.** Salvaged oak in front of the Longshed. Photo by the author.

⬆ **Figure 12.** View of the ship from stern to bow. Photo by the author.

⬅ **Figure 13.** Martin Carver shows visitors the oak strakes and iron rivets on the ship under construction. Photo by the author.



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COMING TO TERMS WITH THE ARCHAEOLOGY OF WARFARE

MONICA L. SMITH

Warfare is a challenging subject, and it should be. Violence, deprivation, and destruction are the dark side of human behavior (**Fig. 1**). The realities of warfare nonetheless repeatedly define nations through landscape-scale struggles, born in distant political capitals, that visit themselves upon the ordinary person. As a society, we are often ashamed of conflicts even as we celebrate the valor of the heroes who fight in them. As individuals, we nearly all carry a story of the ways in which our family has been touched or traumatized by conflict.

Literary and artistic renditions provide a reference to travails through a chain reaction of bravery and grief that we struggle to filter through a generational lens. We scrape around to find the encouragement of ancient words as a shorthand for our own disbelief and shock at the raw misery of conflict and its aftermath, like the young man from Steven Crane's *The Red Badge of Courage* who envisions his mother admonishing him with the Classical reference "come back with your shield or on it" while of course—as mothers will—she expresses only lament as he enlists.

As archaeologists, our reticence to contemplate warfare is further conditioned by a desire to seek out the wondrous positives of ancient civilizations. When we do look for signs of ancient conflict, we can be deflected by confirmation bias that defaults to a gentler understanding of the past. Architectural evidence for violence often is ambiguous,



with outcomes similar to the slow natural degradation and casual pilfering of centuries that turn thriving structures into ruins. Historical texts of warfare and casualties are often interpreted as exaggerated, and an understandable reticence to study human remains has foreclosed some of the most direct evidence of combat.

Like many others, for much of my career I elected to look past the cultural causes of disintegration and avoided the subject of conflict in my research. I much preferred to focus on the constructive parts of human society, such as cities and institutions. I also found that people who studied warfare tended to be a little pugnacious themselves, making them unappealing to talk to at conferences and dinner parties. Warfare was a

↑ **Figure 1.** Portion of an Assyrian relief of siege warfare from the Palace of Nimrud, Iraq, 730 BC-727 BCE. © The Trustees of the British Museum. Shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) license.

wasteful fact of both human society and academic conversation, and I wanted nothing to do with it.

But about three years ago I was contacted by old friends who were organizing a symposium about warfare for the Society for American Archaeology annual meetings. They were looking for someone to represent South Asia in their global session. Would I consider joining them? I initially hesitated but realized that my distaste for the subject was a blind spot that I should not ignore. I went to the conference and found myself amid a dozen of the nicest people I have ever met, all of whom had done tremendous work on the subject of warfare in both small-scale and complex societies. The conference session subsequently won an award, allowing us to meet again and engage in a deeper conversation at the Amerind Foundation in Arizona. The outcome was a book entitled *Warfare and the Dynamics of Political Control* (University of Arizona Press, 2025).



→ **Figure 2.** Roman soldiers doing construction work, second century BCE. Alamy.com MPNEJN.

My colleagues were deeply committed to understanding warfare as an often-irreplaceable component of political economy. Warfare was more than just a phenomenon of battles taking place at specific places and times. Instead, warfare was a matter of ongoing investment and strategy built into a lasting landscape of construction and logistics. The preparation for warfare engaged many more people than any battles that ensued, often resulting in dual-use infrastructure that improved local conditions and remained on the landscape for centuries (**Fig. 2**). The aftermath of recovery also resulted in new opportunities for at least some segments of society, including merchants and farmers, who benefited from new connections.

HOW TO STUDY AN INVISIBLE SUBJECT?

Understanding warfare in the Indian subcontinent is challenging, in part because of the historical expectation of pacifism that has permeated most outsiders' understandings of the region. The twentieth-century nonviolence movement received its most globalized proponent in the form of Indian activist and nation-builder Mahatma Gandhi, whose nurturing of the concept of peaceful public protest was elemental to South Asia's independence from Great Britain. Unfortunately, the real story of colonial devolution and the independence of India and Pakistan in 1947 (with a further disaggregation of Pakistan and Bangladesh in 1971) was violent at the time and remains volatile today.

Archaeological and historical assessments of warfare demonstrate that preparation for conflict and the reality of its aftermath were always a part of civilization in South Asia, as they were elsewhere in the world. Could warfare be approached as a scholarly subject, putting aside a sense of apology and dismay at its existence? I decided that my interest in warfare was guided by a desire to understand shifts in the logistics of conflict over time and the way in which preparation for warfare constituted a creative and consolidating factor in the societies of the Indian subcontinent.

The Bronze Age Indus period of the region that is now in Pakistan and western India is represented by a somewhat enigmatic cultural cohesion that does not at first glance seem to involve conflict. Nonetheless, the presence of walled precincts within cities such as Harappa and Dholavira starting more than 4,500 years ago has led researcher Mark Kenoyer to propose that the compounds were the domains of competing merchant communities. Aside from that, there is no iconography of violence and the script remains undeciphered, although the presence of considerable wealth in both small and large sites of the Indus period suggests the potential for strife. Around 1900 BCE, the Indus cities began to be abandoned, resulting in a nearly 1,000-year period of a return to small villages across the subcontinent.

In the mid-first millennium BCE, people once again started congregating in sites that we can call cities on the basis of their size and occupational density (Fig. 3). In the Early Historic period (circa third century BCE–fourth century CE), more than half of the subcontinent's urban settlements had massive encircling ramparts that enclosed their populations. Research by our joint Deccan College–UCLA team has focused on

◆ **Figure 3.** Ramparts at the Early Historic site of Kaushambi, north-central India. Photo by the author.



one such site in eastern India at Sisupalgarh near the modern state capital of Bhubaneswar. Excavations by our team, and prior work by the eminent Indian scholar B. B. Lal in the 1940s, confirmed that the site had been occupied prior to the emplacement of the city walls. The development of walls signaled the presence of a substantial population, with a rampart that was more than 4 km in length and still stands more than 9 m high.

The Early Historic period was not only a period of urbanism but also an era of writing that we can read to understand civic and political intentions. There were significant religious transformations in the form of distinctive sites of the Buddhist and Jain traditions, along with the eventual development of early Hindu temples. In this era, city walls were just one of the types of collective constructions that occupied the minds of architects and the hands of thousands of laborers. City walls were multipurpose: They constituted a silent sentinel of defense that could deter attacks but were also handy focal points of taxation and a clear

marker of belonging for the urban residents. Walls thus served as an ongoing symbol of urban identity and administration that had a constant effect, regardless of any actual conflict.

In the Early Historic period, the archaeological record of offense and defense is relatively rare, limited to occasional finds such as spearheads and the caltrops found by Professor Lal in his excavations at Sisupalgarh. Evidence for an ethos of warfare is pri-

marily found in epic poems such as the *Mahabharata* and the *Ramayana*, which are replete with extensive and gory battles among deities and demigods. We know that real human warfare occasionally took place too, as signaled by the written inscriptions of the third century BCE ruler Ashoka. An able administrator who built roads and monasteries, planted trees, and dug wells, he also described a battle in which he was victorious but remorseful, writing that “when an independent country is conquered, the slaughter, death, and deportation of the people is extremely grievous.” As in the Indus period, Early Historic warfare was primarily expressed in the multipurpose walling of cities, with the evidence for actual conflict relatively rare.

The political attitude toward warfare was considerably different in the medieval period, starting circa 900 CE, as political entities began to put their stamp in extensive rural areas to consolidate and contest territories. Cities became larger and denser, but the focus of warfare shifted to the countryside with the construction of thousands of rural forts, many of them in nearly inaccessible locations (Fig. 4). The placement of these fortifications in long chains of defensive outposts meant that the arms race of the area was focused on pinnacles and choke points as much as on weapons.

Historical texts reveal that warfare increased dramatically in scope and frequency in the medieval period, with devastating battles and sieges of civilian and military populations. The number of casualties and the incessant nature of long-term war parallel those of better-known conflicts, such as the English Wars of the Roses and the American Civil War. But

AS IN THE INDUS PERIOD, EARLY HISTORIC WARFARE WAS PRIMARILY EXPRESSED IN THE MULTIPURPOSE WALLING OF CITIES, WITH THE EVIDENCE FOR ACTUAL CONFLICT RELATIVELY RARE.



✦ **Figure 4.** Portion of the medieval fortification of Yadgir, south-central India. Photo by the author.

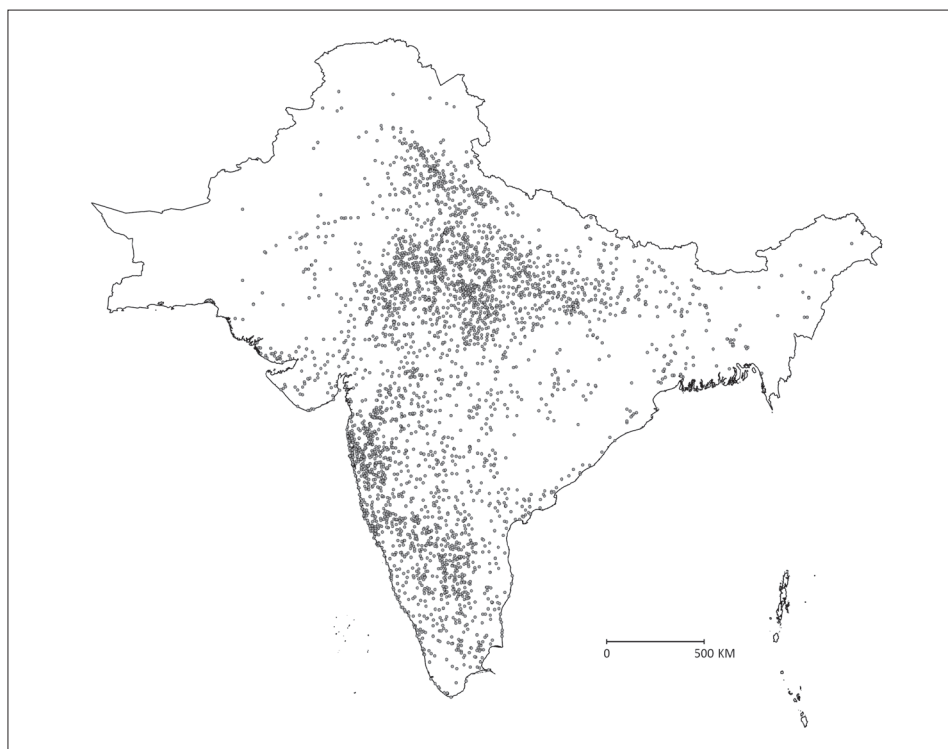
✦ **Figure 5.** UCLA archaeology PhD alumna Kanika Kalra at the gateway at the medieval fortification of Yadgir, south-central India. Photo by the author.

strife and death were not the only outcomes of a building program that resulted in a densely populated landscape of offense and defense. Some fortifications were used only occasionally for military engagements, as refuges and forward bases; some fortifications were started and never used; some fortifications became anchors of repeated rebuilding and remain on the landscape as points of reference (Fig. 5). Some of the most dramatic forts have been reclaimed as heritage properties, especially in the western state of Rajasthan, but the map of medieval fortifications shows that the entirety of the subcontinent was blanketed in military constructions.

NEW STRATEGIES FOR ARCHAEOLOGY: A BIG-DATA APPROACH

A map is one of the most basic elements of archaeological research and publications, providing a visual reference that does more than enable the reader to discern locations. As geographers will confirm, the making of a map is as deliberate as the creation of its accompanying text. For my research project on warfare, it seemed that nothing could be simpler than creating a map! Given that I had long created maps of Early Historic sites, I could go back and create a new version on which I indicated sites that were surrounded by ramparts to communicate the impact of defensive architecture.

→ **Figure 6.** Location of the nearly 4,000 medieval fortifications on the Indian subcontinent. Map by Connor Newton.



The medieval period was another matter altogether. I consulted my South Asian colleagues about maps of fortifications, and the answer came that there were none they knew of for the subcontinent as a whole. Fortunately, just at that moment I met an undergraduate UCLA student who had come by my office to ask about research opportunities. With a skill set in geographic information systems and an admirable tenacity for combing through publications, Connor Newton created a map of medieval fortifications that provided an illustration for the conference publication.

The process of making the map proved so interesting that we subsequently cowrote a follow-up publication for the *Journal of Big Data* describing the process and the outcome. To construct the map, we had to consider a variety of different types of reporting and publication. A few sites had been excavated, and some sites had been documented in the historical record. But many sites had yet to be visited by researchers, and it would have taken more than a lifetime to visit even one-tenth of the known medieval fortifications. We turned to media sites, blogs, and popular publications to create the dataset, making use of locals' knowledge to amass a comprehensive depiction of sites, even if the data from some sites were minimal. In one glance, a reader can now recognize the tremendous amount of labor and materiel represented in medieval warfare across the subcontinent (Fig. 6).

A PARTING SHOT

The outcome of my intellectual foray into warfare provided the opportunity to understand more about social complexity than I had anticipated. Warfare was not an aberrant or occasional activity related to the advent of states and nations but an ongoing and essential factor in political economy

and statecraft. On the Indian subcontinent, warfare was an opportunity for leaders to come to terms with challenging geography and to practice converting labor into a durable show of force. Regardless of the frequency of actual warfare, the constant preparation for conflict was a political skill set that kept people organized in peacetime as well as in the punctuated moments of battle.

Here at UCLA, many of us are focused on understanding the role of heritage in contemporary communities. Living amid the physical remains of past societies provides opportunities for discovery, tourism, and a sense of identity for those who live in the regions where we are privileged to do our work. Components of shared knowledge and “citizen science” greatly augment what an archaeological team can accomplish on its own. New approaches to information, ranging from social media to machine learning and artificial intelligence, enable us to engage with the truly large scope of ancient cultures. But the knowledge that we gain is only as good as the questions we ask. As I learned from overcoming my own reticence to study warfare, it is sometimes the questions that we have avoided that give us the biggest picture of all.

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BREAD AND STONE: TRADITIONAL FOOD AND HOMES IN THE SOUTH CAUCASUS

JAKE HUBBERT

Natia works deftly with flour-covered hands, the crackle of logs popping in the ancient stone oven behind her (Fig. 1). She stretches and works the dough thinner until she can nearly see through it. In quick succession she grabs a small pot and begins to ladle ghee onto the surface, followed by folding and more ghee. She repeats this process until she has a small square, which she stuffs with homemade white cheese. She has made what is known in the area as a *kada*, a Meskhetian version of the more famous Georgian cheese bread, *khachapuri*. Natia's family recipes are at the center of a relatively recent change in rural villages in Samtskhe-Javakheti, the southwestern region of the Republic of Georgia. This change involves communities tapping into and revitalizing lost or dying traditions with the rising tide of cultural tourism in the South Caucasus.

I spent time working with the Georgian-Australian Investigations in Archaeology expedition as the team's ethnographer, trying to understand how locals interact with archaeological sites and materials around them. I observed how residents are turning to their historic semi-subterranean homes and the traditions associated with them as a part of their connection to their past. While these homes have several notable features, locals are most concerned about one element in particular, the



stone oven, or *purnia*. The oven is set into one of the walls of the home's *darbazi*, or main hall. It has a large opening for bread and baked goods and a smaller opening to the right where people light and keep the fire while cooking. Natia boasts to tourists who visit that she cooks her *kada* in a 300-year-old oven, built by her ancestors. Indeed, the blackened and weathered stones speak of their age.

Residents in Chobreti and many other villages in the Samtskhe-Javakheti region have lived in their traditional semi-subterranean homes since the seventeenth century (Fig. 2). It was only in the 1960s, when Soviet authorities constructed new homes, that most people abandoned their old abodes in favor of the new. A large painting in Natia's restored home depicts her village in the late nineteenth century with semi-subterranean homes around the freestanding church, the only fully aboveground structure. Small objects like pots, pans, and even old leather shoes decorate her restored home, giving the space an air of authenticity. Members of the community have donated many of these items as tourists have flocked to Natia's home for a traditional experience.

↑ Figure 1. Natia prepares bread in her home kitchen. Photo by the author.

A LARGE PAINTING IN NATIA'S RESTORED HOME DEPICTS HER VILLAGE IN THE LATE NINETEENTH CENTURY WITH SEMI-SUBTERRANEAN HOMES AROUND THE FREESTANDING CHURCH, THE ONLY FULLY ABOVEGROUND STRUCTURE.



→ **Figure 2.** Natia at work over her oven. Photo by the author.

Seeing the success of the home in Chobareti, others are beginning to look at their traditional spaces and possessions in a new light.

Georgians are attempting to rediscover lost traditions and culture in the wake of the Soviet Union and with the rise of cultural tourism. Dalila Tsatava, the director of the Gastronomical Association of Georgia, has been leading the way in this effort, publishing books and working with remote villages all over Georgia with an aim to rediscover Georgia's lost culinary heritage. Her work has taken her to Samtskhe-Javakheti; her most recent book includes several local recipes that Natia serves at her home in Chobareti, such as goose dumplings (Tsatava 2023:46). On October 23, 2025, the National Agency for Cultural Heritage Preservation Georgia announced in a social media post that the construction techniques and knowledge of these homes had been granted immaterial cultural heritage status (National Agency for Cultural Heritage Preservation Georgia 2025). Locals in Chobareti and neighboring villages have begun to look toward government grants and institutions that might be able to help them preserve their homes and traditional ways of life.

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ON ARCHAEOLOGICAL PUBLISHING: THE URKESH GLOBAL RECORD

GIORGIO BUCCELLATI
AND MARILYN KELLY-BUCCELLATI

CURRENT ARCHAEOLOGICAL PUBLISHING STRATEGIES

The publication of the results of an archaeological excavation is a more complex issue than it may seem at first. A major conceptual factor conditions the very nature of the publication process: the excavation exposes portions of an ever larger whole, something that remains generally hidden in its wholeness until further excavations bring it to light. And yet the driving interest is in understanding this whole: a large building, a cluster of smaller structures such as burials, an assemblage of different ceramic types, and so on. And as excavations progress from season to season, they expose only fragments, which are expected eventually to cohere into this anticipated meaningful whole. One wants to publish the whole, but this very wholeness escapes us season after season.

This is the underlying cause of two problems that are intrinsic to the very nature of archaeological publishing. The first is what typically emerges as a chronic delay in the final publication: one waits for the whole to emerge in its fullness so as to do justice to the fragments, but, in the process, the fragments remain essentially unpublished. The second problem derives from the first. As the search for the whole progresses, one is inevitably led to be more and more selective in the identification of which fragments deserve full publication: they are those that most

lend themselves to explaining the nature of the whole as it is eventually understood, while other fragments are progressively jettisoned and may end up being physically discarded as well.

An additional factor is the broader public interest that excavations often generate. One is then induced to cut even further in order to offer a meaningful and appealing larger picture of the site as a whole.

We may distinguish six moments in the standard process of archaeological “publishing:”

1. *Preliminary reports.* These present a summary of the work done during a given season. They cover all operations and give details on what are perceived to be the major findings, whether movable objects or stationary structures.
2. *Final reports.* For major excavations, these reports cover a fully exposed building, such as a temple, or a complete assemblage of objects, such as ceramic vessels.
3. *Databases.* An important result of the digital turn has been the introduction of extensive databases, which typically include objects with full typological analysis.
4. *Legacy studies.* A recent development has focused on the publication of original field notes. These were not in fact intended to be published, but given that the author did not make full use of them, they are now made available for review.
5. *Overviews.* These consist of general documents for the wider public, including pamphlets, brochures, and visitor guides. Exhibits with descriptive panels and websites dedicated to a given site typically fall in this category.
6. *Displays.* This category includes the physical presentation of material from excavations, whether at the site itself (in which case conservation may be seen as a form of publication, the basis for the accompanying signage) or in museums, where explanatory notes accompany the objects that are exposed.

A WEBSITE APPROACH

The website model allows us to effectively combine the types of publication listed above into a single system. In this perspective, the website is conceived as a new epistemic system—that is, one that articulates and conveys knowledge in a uniquely designed digital format, allowing the totality of the fragments to be given in their distinctive identities while showing at the same time how they cohere into parallel and equally distinctive wholes. We will briefly describe the methodological aspects of a browser-based publication, which is well suited for such an epistemic system, and will then show how this approach applies to archaeological data.

METHODOLOGY

The epochal innovation that a browser makes possible, in comparison with printed media or even digital analogs such as texts in PDF format, is the potential to have multiple planes interact with each other. This may be defined as interplanarity. The use of hyperlinks has become second

nature for all of us. They are generally used as pointers to details, much like looking up a word in a dictionary: we are not interested in the dictionary as such, or in any large portion of it, but only in the single item we are looking for. It is the same approach we have in a supermarket, where we look for a specific commodity and are not interested in the group of commodities found on a shelf next to the one of interest.

By way of contrast, an interplanar hyperlink points, as the term implies, to a plane—that is, to a larger section within which the single detail is embedded and makes sense. This is a process analogous to what happens with critical thinking: when reading a printed text linearly, we develop parallel planes in our mind. These planes may consist of either facts or arguments, but they are all concurrent to the main argument laid out in the text we are reading. What the website format makes possible is to have this interaction among planes built into the system itself. There are practically no limits to the amount and nature of planes that are so interconnected. Each one depends on the others, and together they form a seamless, if very complex, epistemic whole, unlike any other we have been used to so far.

A major result is that databases are not to be seen just as repositories of data to be mined, because each individual item in them emerges as an “actor;” it is in fact capable of interacting directly with arguments laid out in parallel planes. For example, a single sherd in a database of tens of thousands of items may be linked to a typological discussion of wares and shapes, a discussion about the stratigraphy of a given structure where the sherd was excavated, a discussion about historical developments affecting the site as a whole, and vice versa.

ARCHAEOLOGY

A major difference vis-à-vis current archaeological publishing strategies lies in giving total prominence to the individual excavation unit, with regard to four aspects.

1. *Totality*. Every single observation or measurement ever made by any member of the staff is entered in the official record.
2. *Public status*. No observation is considered private. A fundamental reason is that even the smallest assumption conditions the overall strategy of the excavation and must be made explicit from the start.
3. *Immediacy*. Every observation becomes immediately part of the overall record. In practice, this means that every day during the excavations, the record is available in its final format.
4. *Permanence*. No observation made is ever removed from the record. When a mistake becomes apparent (for example, an error in measuring), the original observation is kept and a correction is added. In a sense, we may say that one publishes the “legacy” from the very start.

THERE ARE PRACTICALLY NO LIMITS TO THE AMOUNT AND NATURE OF PLANES THAT ARE SO INTERCONNECTED. EACH ONE DEPENDS ON THE OTHERS, AND TOGETHER THEY FORM A SEAMLESS, IF VERY COMPLEX, EPISTEMIC WHOLE, UNLIKE ANY OTHER WE HAVE BEEN USED TO SO FAR.

Each excavation unit has its own independent website, which grows on a daily basis as the record develops. Each website integrates as a matter of course any new argument with the database, which is growing as the excavation progresses. Independently and concurrently, other websites are produced, devoted to various synthetic aspects of the record, such as typologically distinct classes: they utilize the data from the excavation units and are tightly interlaced with them.

A fundamental presupposition of the whole system is the use of a basic “grammar” that is strictly adhered to by everyone during the excavation and in the subsequent analysis. This is more than an encoding manual in that it defines in a coherent theoretical manner all aspects of the categorization system.

IMPLEMENTATION: THE UGR SYSTEM

We have systematically applied this website approach in our excavations at Tell Mozan in Syria, ancient Urkesh. The system developed over the years, and it is now reaching a closure thanks to a research project made possible by the Balzan Prize, awarded to us in 2021. We will give here a list of the major components of the system—that is, some of the pertinent websites that together act in an interplanar mode to provide full publication of the data from the excavations. (The links will lead to the actual website. Some of the pages are still being worked on, so the websites are in a beta version; a full public opening is expected late in 2026).

- urkesh.org/UGR: An overall description of the system, with a complete list of all websites (including those on which work is still under way).
- urkesh.org/A16: A sample website devoted to a given excavation unit book. Based on the excavation of eight 5 x 5 m squares, it includes a database of some 61,000 ceramic vessels and sherds, and a total of some 64,000 pages.
- urkesh.org/JP: A sample website dedicated to a given sector of the built environment, in this case the large plaza fronting the temple and its wide terrace.
- urkesh.org/TCR: A sample website dedicated to a typological assemblage, in this case a ceramic inventory of some 350,000 items, with a full description of the categorization system.
- urkesh.org/MCV: A sample website dedicated to an aspect of the activities regarding the site as a whole, in this case conservation activities regarding structures at the site (a multiyear project at Mozan) and objects in the lab.
- urkesh.org/GRM: The grammar that governs the entire system, in both its theoretical and its practical aspects.

CONCEPTUALIZATION AND DURABILITY

There are two major reasons why websites have not become a regular part of scholarly discourse.

The first is that one does not generally conceive of websites as proper epistemic systems. In current practice, they do not develop an argument, or, if they do, it is in the static format of an analog file of the PDF type. Typically, one does not “write” or “read” a website: one places data into it, as if into a container, and one searches and queries for single items, which are retrieved in isolation one from the other. Terms like *browsing* and *surfing* are indicative of how one conceptualizes websites: one remains on the surface because in effect there is no depth to them. Our approach requires instead an extra effort that allows us to make full use of the rich network of relations that link the various planes with each other. “Writing” such websites has to be done with a vision toward interplanarity, and “reading” them has to be done with a full awareness of what such multi-tiered arguments entail.

The second reason why websites have not become a regular part of scholarly discourse is that websites are seen as essentially fragile and ephemeral. One step to ensure greater portability is the establishment of mirror sites in different locations. An even greater risk is found in the constant changes in hardware and software, which seem to guarantee that websites in their present form will no longer be available in a very near tomorrow. This is all the truer with complex systems like the UGR, which is intended to serve as a very specific epistemic system, where programming and platforms need to be constantly adjusted, in ways that standard backup systems cannot support. To remedy this, we have established a special permanent fund that will ensure all necessary upgrades as time unfolds, so as to provide the durability that is intrinsic and necessary to scholarly discourse.

We note, by way of conclusion, that archaeological data may be seen as natively digital in the sense that they emerge from the ground disconnected from each other and special effort is required to recompose them into a meaningful unity. The interplanar website approach we have described is ideally suited for this task, and an archaeological inventory, such as the one from Urkesh, constitutes an ideal test case for the implementation of the broader website theory we have briefly sketched here.

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Talks, 2024–2026

“Beyond the Horizon: Pericentric Complexity in the Chavín Phenomenon at Atalla, Peru,” Michelle Young, January 2025.

“Kubler in Cuzco: Shaping Architectural Modernity After the 1950 Earthquake,” Lucia Allais, June 2025.

“Abundant Waters: An Archaeology of El Niño and the Desert Farmers of Coastal Peru,” Ari Caramanica, October 2025.

“La Metalurgia Andina: De Insignia de Poder a Motor Económico de la Colonia,” Luisa Vetter, January 2026.

ARCHITECTURE WORKING GROUP

Talks, 2024–2025

“Earthen Architecture and Heritage Conservation: Case Studies from Spain,” Camilla Mileto and Fernando Vegas López-Manzanares, December 2024.

“Place, Indigenous Resistance, and Architectures of Protest in Contemporary Mexico,” Tania Gutiérrez-Monroy, February 2025.

THE UNDOCUMENTED MIGRATION PROJECT

JASON DE LEÓN

The last two years have been quite busy for the Undocumented Migration Project (UMP). We have continued our longstanding exhibition work, begun new field projects, and celebrated accomplishments and milestones by our students, staff, collaborators, and director.

HOSTILE TERRAIN 94

In 2025 the UMP celebrated its sixth year of sponsoring the participatory art exhibition *Hostile Terrain 94*. The exhibition is composed of more than 4,300 hand-written toe tags representing migrants who died trying to cross the Sonoran Desert of Arizona between the mid-1990s and 2024. This year, the UMP worked with 11 new hosting partners to bring the exhibition to universities, museums, and other cultural institutions across the country. To date, *Hostile Terrain 94* has been installed on five continents and at more than 170 locations around the globe. More than 600,000 additional tags have been filled out by thousands of exhibition participants. In the winter of 2026, the exhibition was installed locally at Chaffey College in Rancho Cucamonga and at Cal State Dominguez Hills. *Hostile Terrain 94* is also on display at the Museum of Us in Balboa Park, where it has been since 2021.



◆ *Hostile Terrain 94* being installed at Colgate University, winter 2025.



↑ Members of the UMP on a walking tour with Jure Gombač, a professor of history at the SMI.

UMP AND THE SLOVENIAN MIGRATION INSTITUTE

This past summer, the UMP was invited to join the Slovenian Migration Institute (SMI) for a site visit, a lecture, and a conference in Italy. The conference, titled *The Game: Walking the Balkan Route*, included a multidisciplinary walking seminar with European border scholars and former migrants. For three days, members of the UMP (including two undergraduate students) walked on a migrant trail through the Karst Mountains, from Croatia across Slovenia and ending in Trieste, Italy. The UMP highlighted parallels between migrant material culture found on the Balkan trail and objects found on the Arizona-Mexico border. The SMI and UMP are currently collaborating on an interdisciplinary project comparing the Balkans and U.S.-Mexican border. We hope to host a border walking tour in California and Arizona in 2027.



← Members of the UMP and Jure Gombač visit a storage facility housing migrant material culture.



← UMP researcher Nicole Smith (left) with Jure Gombač on the Balkan migrant trail.

OUTREACH: HOLLYWOOD FOREVER

For the third year in a row, the UMP presented *Hostile Terrain 94* as part of the annual Día de los Muertos event at Hollywood Forever. Thousands of community members attended the event and hundreds participated in an interactive workshop, filling out toe tags that represent migrants who have died in southern California. Through this public art event, UMP brings awareness to and honors migrants who have lost their lives while attempting to cross the U.S. border.

STUDENT ACHIEVEMENTS

Congratulations to Karla Hernandez, a PhD student in Chicano and Central American studies at UCLA, for earning her MA. Karla's research focuses on the impact of violence along the U.S.-Mexican border,



➔ People fill out toe tags at Día de los Muertos at Hollywood Forever.

particularly against women. Undergraduate Victoria Gutierrez completed her Lemelson Anthropological Honors Program thesis in 2025 with a paper focused on climate change and community building in Slab City near the Salton Sea. Victoria presented her thesis in November at the American Anthropological Association meetings in New Orleans. Undergraduate students Nicole Fentzke and Elizabeth Petrick conducted fieldwork with the UMP in Slovenia in the summer of 2025, and along with Nicole Smith, they also presented their work at the American Anthropological Association meetings.

NEW HIRE

Perla Torres was hired in early 2025 as program manager for the UMP and as outreach coordinator for the Cotsen Institute of Archaeology. Her dedication to migrant rights started in 2016, when she focused on social services as a case manager for the Office of Refugee Resettlement,

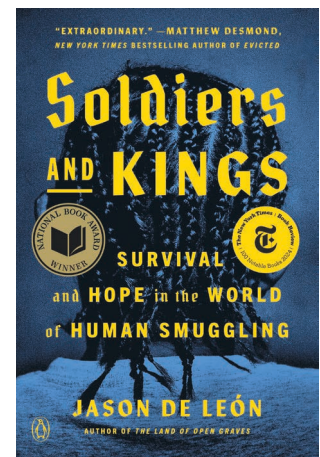


← UMP program manager, Perla Torres.

working on the reunification of unaccompanied minors at U.S.-Mexican border. She continued her work as a children's protection specialist for the border protection team of the Guatemalan consulate and as family network director for the Colibrí Center for Human Rights, helping identify more 300 remains found at the border. She continues to build solidarity, community, and a movement among families who have experienced loss at the border through UMP outreach efforts, research projects, and community engagement.

UMP DIRECTOR ACTIVITIES

UMP Director Jason De León stayed busy these last two years with his work running the Cotsen Institute of Archaeology, developing new research and outreach projects in the U.S. and Europe, and promoting his 2024 book "Soldiers and Kings: Survival and Hope in the World of Human Smuggling." Jason gave dozens of lectures about the book across the U.S. and internationally over the last twenty-four months including visits to Mexico, Denmark, Germany, Scotland, and Slovenia. Since its release in 2024, *Soldiers and Kings* has received several awards and recognitions including the 2024 National Book Award for Nonfiction.



IN MEMORIAM — PROFESSOR IOANNA KAKOULLI

DAVID A. SCOTT AND GLENN WHARTON,
WITH CONTRIBUTIONS FROM STAVROULA
GOLFOMITSOU AND JESSICA CATTELINO

We are profoundly saddened by the untimely passing of our UCLA colleague Professor Ioanna Kakoulli on January 1, 2026. She had been battling cancer for some time. She died in Cyprus, her native country, where she had been living most recently. We send our deepest condolences to her husband, Giorgos Bayadas, and to her family and wide circles of friends and admirers in Cyprus, the United States, and elsewhere around the world. Ioanna will be remembered for her warmth, energy, infectious enthusiasm, and academic achievements, as well as her outstanding devotion to the conservation of cultural heritage.

Ioanna was a founding faculty member of the UCLA/Getty Interdepartmental Program in the Conservation of Cultural Heritage and assisted in its inception from 2003 to 2005. Serving as chair from 2011 to 2017, she was a key figure in building the program into what it is today. Among her many contributions to the program, she established the Lore and Gerald Cunard Chair endowment, the Kahn Foundation endowment, and more recently the PhD program in the conservation of material culture.

In addition to her position in the UCLA/Getty Conservation Program, Ioanna held a joint appointment in her home department of Materials Science and Engineering. She served as codirector of the Molecular and



← Ioanna Kakoulli.
Courtesy of UCLA.

Nano Archaeology Laboratory and was founder of the archaeomaterials group. She was also active across the UCLA campus, serving in the Academic Senate as chair of the graduate council and a member of the executive board. In these capacities she was a strong advocate for graduate education and faculty governance. In addition, she was elected to the faculty executive committee in the School of Engineering and served as acting director of the UCLA Stavros Niarchos Foundation Center for the Study of Hellenic Culture. She was also on the advisory committee for the Cotsen Institute of Archaeology. Her interest in establishing the authentic origins of works of art led to her work with the U.S. Department of Homeland Security in investigating the illicit importation of antiquities into the United States.

When she arrived at UCLA, Ioanna brought with her extensive knowledge of spectral imaging, a DPhil in archaeological materials science from Oxford, and a postgraduate diploma and MSc in the conservation of mural paintings from the Courtauld Institute of Art, University of London. Her prior teaching career includes a notable period in Malta, where she played a key role in equipping the Malta Centre for Restoration's Diagnostic Scientific Laboratories and establishing a degree program in conservation studies.

Ioanna's research focused on five key areas: the science of archaeological materials and ancient technologies, forensic archaeology, the creation of new materials inspired by the mechanical and optical properties of ancient material culture, and the sustainability of biocultural heritage. Her interest in classical and Hellenistic painting materials led to

HER INTEREST IN ESTABLISHING THE AUTHENTIC ORIGINS OF WORKS OF ART LED TO HER WORK WITH THE U.S. DEPARTMENT OF HOMELAND SECURITY IN INVESTIGATING THE ILLICIT IMPORTATION OF ANTIQUITIES INTO THE UNITED STATES.

➔ Ioanna Kakoulli documents the condition of Byzantine and post-Byzantine wall paintings in the caves of the St. Neophytos Monastery near Paphos, Cyprus. Courtesy of UCLA.



➤ Ioanna Kakoulli with Conservation Program alumni Suzanne Davis and Dawn Lohnas Kriss and other interns at the Tarapaca Valley excavation in Chile, 2008. Courtesy of Dawn Lohnas Kriss.



seminal publications on ancient wall paintings. Over her career, Ioanna contributed to books and published numerous papers in scientific journals, including *Nature*, *Microscopy & Microanalysis*, *Analytical Chemistry*, and the *Journal of Archaeological Science*, expanding the scope of her scholarly contributions. Ioanna was the first female professor hired in UCLA's Department of Materials Science and Engineering, which marked an important and enduring collaboration between that department and the Conservation Program.



← Family photograph: Giorgos Bayadas, Ioanna Kakoulli, and Calypso Bayadas. Courtesy of Giorgos Bayada.

Ioanna was passionate about scientific research and the conservation of the cultural heritage of her homeland and the eastern Mediterranean more broadly, though her research interests ranged widely, including to Asia and Central America. She served as a visiting professor at MIT and the University of Cyprus and was on the board of the Cyprus American Archaeological Research Institute. For several years, she analyzed important wall paintings at the Enkleistra of St. Neophytos in Paphos, Cyprus. Her international collaborations include teaching various ICCROM courses, notably contributing to the module on the illicit trafficking of antiquities within the First Aid in Times of Crisis program. Ioanna also served on numerous scientific boards for conferences and symposia, furthering dialogue and research in the field of conservation and the characterization of materials.

Ioanna supervised more than 40 graduate students in the UCLA/Getty Interdepartmental Conservation Program, in the Department of Materials Science and Engineering, and elsewhere around the world. She will be greatly missed at UCLA and within the broader worldwide community devoted to the conservation, protection, and scientific research of cultural materials. She is survived by her loving husband, Giorgos Bayadas; her stepdaughter, Calypso Bayadas; her mother, Nadina Kakoulli; her sister, Tatiana Sarrafi; and her brother, Christoforos Kakoullis.

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THE ARCHAEOLOGY PROGRAM

STEPHEN B. ACABADO

The past two academic years in the UCLA Archaeology Interdepartmental Program (IDP) were defined by student progress and sustained training. We welcomed new graduate students into the program while supporting others through the completion of their degrees. These milestones reflect how the IDP continues to function as a focused, interdisciplinary training environment, one that prioritizes mentorship and preparation for a range of professional paths in archaeology and related fields. This work continues amid ongoing uncertainty around funding and institutional support for graduate education, challenges that affect students and programs across higher education. Even so, the IDP has remained committed to maintaining standards of training and student welfare.

Over the past two academic years, we admitted five new doctoral students: in 2024, Mac Elizalde, Karla Saracay, and Wenyi Zhao; and in 2025, Talia Neelis and Akphivath Vitou. Each entered the program with defined research interests and a willingness to work across disciplinary and methodological boundaries. Their projects reflect the kinds of questions that the IDP is designed to support, which require engagement with multiple literatures and different scales of analysis. I thank the admissions committee for their attention to fit, not only in terms of research alignment but also in terms of how each student would contribute to the intellectual life of the program.

At the same time, we celebrated the graduation of four students in 2025: Rachel Wood, Maryan Ragheb, Eddie Cleofe, and Baisakhi

Sengupta. Their post-graduation paths highlight the range of outcomes that archaeological training at UCLA makes possible. Rachel Wood is currently part of the Getty Graduate Internship Program in Public Programs at the Getty Villa, applying her training to public engagement and institutional programming. Maryan Ragheb is now a part-time lecturer at CSU-Fullerton, continuing her work in teaching and curriculum development. Eddie Cleofe remains at the UCLA Career Center, where his role bridges academic training and career preparation, an increasingly important space for graduate education. Baisakhi Sengupta has returned to India and is in the process of exploring professional opportunities that build on her doctoral work, taking time to assess options that align with her interests and long-term goals.

We also recognize the achievements of our 2024 graduates. Danielle Kalani Heinz is now Assistant Professor of American Indian Studies at CSU-Northridge. Georgi Kyorlenski is serving as the Mayer Center Curatorial Fellow for Art of the Ancient Americas. Kirie Stromberg is the Rand Postdoctoral Fellow at Pomona College. Their placements reflect the program's commitment to preparing students for careers in teaching, museums, and research.

These transitions speak to the program's current strengths. The IDP emphasizes depth of training alongside flexibility in intellectual and professional development. Students are not directed toward a single model of what an archaeologist should become. Instead, they develop skills in critical analysis, project management, clear writing, and working across institutional and cultural contexts. This training prepares graduates for a range of paths, including academic positions, museum and heritage work, university administration, and roles beyond the academy.

The program's interdisciplinary design remains one of its core assets. Archaeology at UCLA draws on anthropology, classics, history, geography, environmental science, and allied fields. This structure allows students to tailor their coursework and research to their questions rather than forcing questions to conform to a rigid curriculum. It also encourages collaboration among students, across departments, and with communities and institutions beyond UCLA. That collaborative orientation continues to shape how our students approach fieldwork, archival research, laboratory analysis, and public-facing scholarship.

None of this is possible without sustained faculty engagement. Advising in an interdepartmental program requires time and a willingness to support projects that do not always fit neatly within a single discipline. The faculty affiliated with the IDP continue to provide that support, often well beyond formal advising obligations. Their commitment is evident in students' progress through milestones and in the quality of the work that emerges from the program.

The work of our staff is central to the program's operation. The day-to-day functioning of the IDP depends on staff who bring institutional

THESE MILESTONES REFLECT HOW THE IDP CONTINUES TO FUNCTION AS A FOCUSED, INTERDISCIPLINARY TRAINING ENVIRONMENT, ONE THAT PRIORITIZES MENTORSHIP AND PREPARATION FOR A RANGE OF PROFESSIONAL PATHS IN ARCHAEOLOGY AND RELATED FIELDS.

knowledge and consistency to their roles. Their work ensures that students can focus on research and writing while navigating the practical demands of graduate training. The program's stability owes much to their efforts.

We are also deeply grateful to our supporters and donors. Fellowship support, research funding, and discretionary resources provide students with the time and flexibility needed to complete demanding archaeological projects. In a field where research can require extended field seasons—often international—and laboratory work, this support is essential.

As chair, I see this past year as evidence of continuity rather than transition. The program is doing what it is meant to do by admitting strong students and preparing them for a wide range of professional paths. This work depends not only on academic training, but also on sustained attention to graduate student welfare, including clear advising and stable support structures. In a shifting academic landscape, maintaining an environment that values both rigorous training and student well-being is essential, and this kind of progress is worth acknowledging and sustaining.

THE CONSERVATION PROGRAM

GLENN WHARTON

It was an intense year at UCLA, and the UCLA/Getty Interdepartmental Program in the Conservation of Cultural Heritage was not spared. On January 7, 2025, flames lapped over the mountain at the Getty Villa as the rapidly spreading Palisades Fire approached. Our students carefully put down the objects they were working on and fled down the Pacific Coast Highway. We were displaced from our research and training labs for the next nine months. Fortunately, our friends at the Fowler Museum offered us their textile lab, where we taught courses for the remaining academic year—thank you Chris de Brer! Even more fortunately, the Getty Villa was spared and we moved back into our beautiful labs this fall. Then there was the termination of two NEH grants, their refunding, and the current appeal by the federal government to reinstate the termination. Oh, and three ladder faculty recruitments that we had been working on for years were all frozen in the spring due to a state budget crisis.

We kept good spirits despite these temporary setbacks. We also doubled down on fundraising, and donors stepped up. Andrea Morse Straus made a generous gift to support student research and travel over a three-year period. Alumna Casey Mallinckrodt followed with another annual pledge for student research and travel. Jeff Cunard is now supporting our Distinguished Speaker Series. We also obtained substantial support for a new student endowment that will require matched gifts from additional donors. Perhaps most touching, Casey Mallinckrodt organized an alumni giving campaign to support our recent graduates.

→ **Figure 1.** MA students Pilar Brooks and Melina Edic share conservation expertise and hear stories about family heirlooms at a La Historia Historical Society Museum workshop. Photo by Anya Dani.



She raised \$1,600 in small gifts, which our graduates appreciated not just for the financial help but as a symbolic gesture welcoming them into our growing alumni network. We also received small gifts from those who attended our annual reception hosted by the Getty Conservation Institute and other events. All these donations are particularly meaningful during stressful times. People we speak with about their support comment on our program's increased visibility in areas of sustainability, community engagement, and social justice within cultural heritage conservation. The hard work of our program members is paying off.

Another type of support comes from our community partner organizations. Anya Dani, our director of community engagement and inclusive practice, organizes collaborative projects with our partners. In recent communications, staff from La Historia Historical Society Museum expressed heartfelt thanks to Anya, Nicole Passerotti, and students who conducted workshops within a course titled Conservation & Community. Community members told stories about their family heirlooms while learning about their technical history and how to care for them. La Historia aims to make lasting contributions to the cultural identity of Mexican American lives in El Monte and South El Monte by preserving the legacy of these communities. Participants share stories that have shaped community identity through artifact displays and community events. Clearly our aims are aligned. Anya develops similar programs with other partner community organizations.

We also build pride from the success of our students and alumni. Seven students graduated from our program over the past year. The following are their current placements and thesis/dissertation titles:

- Taylor Brehm (MA), conservator, RLA Conservation, Los Angeles. Thesis: "Removal of Overpaint from a Cherokee Mask in Collaboration with the Museum of the Cherokee People"
- Chris de Brer (PhD), director of conservation, Fowler Museum, UCLA. Dissertation: "The Wild, Wild West: Materiality and Provenance"

of Ancient West Mexican Ceramics and the Future of Museum-Based Collections”

- Cheyenne Caraway (MA), conservator, Williamstown + Atlanta Art Conservation Centers, Atlanta. Thesis: “Light Aging Analysis: Lightfast Qualities of Natural Dyes on River Cane and Commercial Reed Substrates Used in Choctaw Basketry”
- Rachel Moore (MA; now a PhD student). Thesis: “Hopi Wicker Basketry: A Look at the State of Tangible and Intangible Preservation”
- Moupi Mukhopadhyay (PhD), Andrew W. Mellon fellow in conservation science, Los Angeles County Museum of Art, Los Angeles. Dissertation: “Technical Study of the Kerala Wall Paintings”
- Kathryn Peneyra (MA), conservator, Williamstown + Atlanta Art Conservation Centers, Atlanta. Thesis: “Propolis for the Sustainable Treatment of Bronze Disease on Remote Archaeological Sites”
- Makayla Rawlins (MA), program assistant, Your Neighborhood Museum, Los Angeles. Thesis: “The Properties of Juncus: Implementing Indigenous Knowledge into Conservation Repairs”

Our current MA students are in their second year of the program. They spread out over the globe last summer for their internships and returned to start their thesis research. Maria Fernanda Martin del Campo Lorenzin interned at the Field Museum of Natural History in Chicago. This fall she began her thesis research on colorant identification on Tikuna masks from the Amazon in Brazil. Pilar Brooks interned at the Museum of Fine Arts, Houston. Her thesis project will be on emerging models for collaboration between conservators in Western museums and community representatives in Africa. Melina Edic interned with Caitlin O’Grady at Kaymakçı Archaeological Project in Manisa, Turkey. She is conducting laboratory analysis for her thesis to understand the formation of pseudomorphs in copper corrosion. Hattie Hāpai interned at the British Museum in London. Extending her internship research on display methods for *‘ahu ‘ula*, traditional Hawaiian feather capes, she will conduct archival and ethnographic analysis for her thesis to understand historic display methods and current Native Hawaiian concerns about their exhibition. Paige Hilman interned at the Fowler Museum at UCLA. In her thesis she will investigate colorant identification and gel removal of insoluble calcareous accretions from painted low-fired archaeological pottery.

Our current PhD students are at various stages of coursework, research, and writing. Saiful Bakhri is in his fourth year, currently performing archival and ethnographic research at Borobudur and at two different programs



↑ **Figure 2.** MA graduates, 2025 (left to right): Makayla Rawlins, Taylor Brehm, Kathryn Peneyra, Cheyenne Caraway, and Rachel Moore.

➔ **Figure 3.** MA student Maria Fernanda Martin del Campo Lorenzin at the Field Museum performing microfade testing on a Samoan mat during her summer 2025 internship. Photo by J. P. Brown.



that teach the conservation of traditional Indonesian cultural heritage. His dissertation research aims to bridge the gap between teaching traditional preservation practices and modern cultural heritage conservation. Chongwen Liu, also in his fourth year, is taking a deep dive into the medical field to adapt emerging models of knowledge graph-driven artificial intelligence for cultural heritage knowledge conservation management. The working title for his dissertation is “Advancing Knowledge Access and Decision Making in Cultural Heritage Conservation with Knowledge Graph (KG)-Driven Artificial Intelligence (AI).” Rachel Moore was admitted to our PhD program during her third year as an MA student. She will obtain both degrees. She completed her master’s thesis on tangible and intangible preservation of Hopi wicker basketry. She will extend this research for her doctoral studies by conducting extensive ethnographic and technical research on Hopi basket production. She will take her knowledge back to Hopi in honor of her grandmother, who was a basket weaver. Naomi Rosenkrantz, a second-year student, is investigating the cultural, material, and technological exchange of color making between Europe and the Americas in the sixteenth century, with a focus on colonial Mexico. She plans to conduct pigment and dye analysis as evidence of Indigenous knowledge, combined with research on colonial codices that describe color making practices.

Anya Dani wears many hats in our program. In addition to serving as our director of community engagement and inclusive practice, she is the chair of our DEIA committee. She also serves on our Mellon Opportunity for Diversity in Conservation Advisory Board and on our faculty advisory and program admissions committees. She develops partnerships at UCLA and with institutions that collect materials related to African American and other communities in Los Angeles. Last summer she



← **Figure 4.** Andrew W. Mellon-funded Opportunity for Diversity in Conservation workshop, 2025. Back row (left to right): Bianca Garcia, Seya Masalkar, Darlene Peralta, Grace Li Qi Reynolds, Victoria Vargas, Brittany Lin, Rebeka Peshlakai, and Nicole Passerotti. Front row (left to right): Lisa Imamura, Gabriela Martinez, Lillian Liu, Ariana Barela, Danielle Bethel, Alejandra Valadez, Naja Woodard, Madisyn Schweitzer, Lauren Broussard, Rylan Nguyen, Jasmine Keegan, and Ellen Pearlstein. Photo by Juan Juan Chen.

taught the first-ever course on conserving black cultural heritage, titled *Caring for Black History: The Preservation of African American Cultural Heritage*. This past winter she cotaught our Conservation & Community course with Nicole Passerotti, which included the workshop at La Historia mentioned above. Nicole and Anya collaborated with Ronel Namde, associate conservator of photographs at the Getty Research Institute (GRI), on the workshop. The GRI generously provided supplies for the event. Another recent workshop also involved Ronel Namde, along with students Pilar Brooks and Maria Fernanda Martin del Campo Lorenzin and the special collections staff at the Los Angeles Central Library. This workshop also taught community members to protect family heirlooms. Anya is also finishing a coproduced podcast series titled *Preservation for the People* with Justin Dunnivant and the Black Art Conservators group.

Assistant Professor Caitlin O'Grady continues her research on the history of conservation and archaeology with a specific focus on expertise as international currency. She participated in two international workshops: *Archives and Archaeology in Paris* and *Antiquities in the Modern Laboratory: World Fairs and Anchoring Innovation in Antiquity in Nijmegen*, the Netherlands. Last summer, she conducted fieldwork in Turkey at the site of Kaymakçı, a Bronze Age citadel site, where she serves as director of conservation for the Kaymakçı Archaeological Project. She supervised MA student Melina Edic's internship at the site, where she conserved recently excavated materials. Her own research at the site includes interpretation of raw material processing and ancient pottery repairs. She was also invited to join the board of the National Center for Preservation Training and Technology, a branch of the National Park Service located in Natchitoches, Louisiana.

Assistant Professor Thiago Puglieri was on sabbatical last year as a visiting scholar at the Getty Research Institute, focusing on Indigenous colorants from the Amazon and the ethics of scientifically investigating Indigenous sacred and ceremonial items. He completed a book chapter on research ethics and two manuscripts on Tikuna Blue, an understudied pigment developed in the Amazon. His research has since been featured in the media and presented at national and international events. He also co-organized a key workshop on intercultural education in Benjamin Constant, a city in the Brazilian Amazon, exploring the use of his scientific results in a community of need. He further participated as a member of the local scientific committee for the 2025 Synchrotron Radiation and Neutrons in Art and Archaeology Conference (SR2A). In his research, he has worked with professionals from institutions such as UCLA, LACMA, the Getty, the University of São Paulo, and the Federal University of Amazonas, in addition to members of the Tikuna community.

In addition to teaching and serving as chair of the Conservation Program, I am co-principal investigator with Professor Emerita Ellen Pearlstein on the two NEH-funded grants referenced above. The first, funded in 2023 with \$350,000 for three years, is the second phase of the Sustainability in Conservation Education initiative. Working with Justine Wuebold as research facilitator, in the first phase we learned that regardless of whether respondents want to incorporate sustainability into their work, many face opposition or institutional resistance. We also found systematic exclusion of sustainability in our own teaching and in other conservation graduate programs internationally. The work is informed by intellectual and scientific research on integrating sustainability into the curricula of other fields across the sciences, social sciences, and humanities. We are currently developing our third publication from this initiative. The second NEH-funded initiative is titled Community, Collaboration, and Cultural Heritage Conservation. Activities include support for master's thesis research of three students, who are engaging with basketry materials of their own communities and collaborating with an Indigenous American museum on establishing complex treatment protocols to reverse previously disfiguring interventions on a sacred mask.

Our staff members have also been busy over the past year. Shaharoh Chism has served as student affairs adviser for the Conservation Program since 2017, playing a key role in navigating the complexities of student budgeting, financial support, and academic scheduling. Over the past year, she contributed to the 2025 admissions cycle and co-planned the 2025 graduation. In addition to overseeing day-to-day advising responsibilities, Shaharoh collaborates closely with both the department chair and the chief administrative officer to ensure that student needs are met and departmental goals are achieved. She also serves as a liaison to the Division of Graduate Education, helping to communicate and implement broader UCLA academic policies within the program. Her work reflects a strong commitment to the academic and personal success of the program's students.

William Shelley has served as our laboratory manager since 2020. In this capacity, he works with our faculty to borrow objects from local collecting institutions for courses and manages the purchase and maintenance of our analytical equipment. He works with work study student Fiona Dunlap on our program's online collections database, reorganization of our study collection storage, and inventory of our laboratory supplies. He also continues to work with the Getty Conservation Institute's Managing Collection Environments Initiative to develop sustainable and cost-effective methods to improve the climate in our labs at the Getty Villa.

Nicole Passerotti has taken over from Ellen Pearlstein as principle investigator/director of the Andrew W. Mellon-funded Opportunity for Diversity in Conservation Initiative. Bianca Garcia Martinez serves as associate director. During the summer of 2025, 15 participants attended the annual workshop, designed for people from underrepresented communities who are interested in conservation careers. Since the program was inaugurated in 2017, 85 people have participated in the workshops and 13 have been accepted to conservation graduate programs. The initiative is truly changing the demographics of our field. During the past year, Ellen Pearlstein conducted an analysis of the impact of the program for a report funded by the Mellon Foundation.



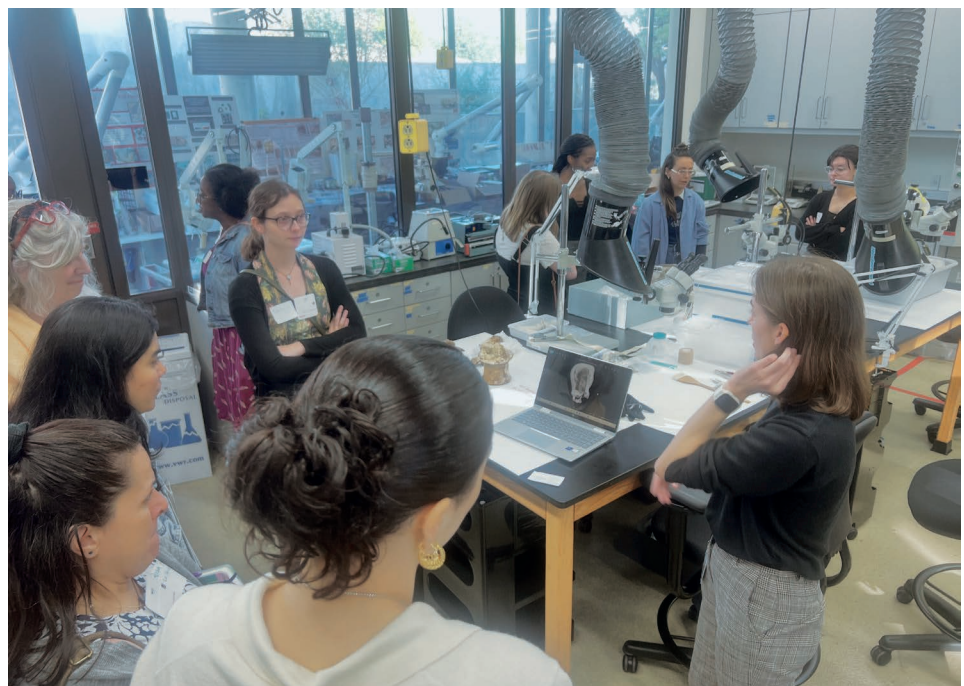
← **Figure 5.** MA student Hattie Hāpai demonstrates pottery restoration at UCLA's Exploring Your Universe science fair, November 2, 2025. Photo by Naomi Rosenkrantz.

We have been fortunate in hiring lecturers over the past year. Elizabeth Drolet, a program alumna who directs Art and Archaeological Conservation Services in Los Angeles, taught courses on organic materials conservation. Jennifer Kim, of Los Angeles Art Conservation and Your Neighborhood Museum, taught a metals laboratory course. Laura Maccarelli, head conservation scientist at LACMA, taught a course titled Science of Conservation of Materials and Methods. Flavia Ravaoli, a

research associate and senior objects conservator at the Fitzwilliam Museum, and Branden Cesare Rizzuto, a PhD student at the University of Toronto, taught courses on structure, properties and deterioration of materials. We also hosted a visiting graduate researcher, Anauene Dias Soares from Brazil, supervised by Thiago Puglieri.

The program continues its ongoing activities, including its Distinguished Speaker and Conservation Conversation lecture series. During the past year, speakers included:

- Damon Crocket, lead scientist at the Lens Media Lab in the Institute for the Preservation of Cultural Heritage at Yale University
- Hector Manuel Meneses Lozano, director, Museo Textil de Oaxaca
- Xiao Ma, professor, School of History of Science and Scientific Archaeology at the University of Science and Technology of China
- Julianne Polanco, California state historic preservation officer
- Heidi Swierenga, senior conservator, and Karen Duffek, curator of contemporary visual arts and Pacific Northwest at the Museum of Anthropology, University of British Columbia
- Luis Armando Muro Ynoñán, curator at the Field Museum of Chicago



→ **Figure 6.** MA students Melina Edic and Maria Fernanda Martin del Campo Lorenzin speak to guests at the Getty Villa laboratory open house, October 23, 2025. Photo by Glenn Wharton.

Hosted by the Getty Conservation Institute, our annual reception was held at the Getty Center in April. It attracted a full audience, including students, colleagues, and donors interested in learning more about our program. We held an animated student-led open house after returning to our Getty Villa lab in October. Guests included undergraduates interested in the field of conservation, as well as community partners, colleagues, and donors. Our students also participated in UCLA's Exploring Your Universe science fair for children in November, introducing them to fascinating careers in cultural heritage conservation. This love for our field is what drives us all.

NEW CONSERVATION PROGRAM LABORATORY MANAGER

WILLIAM SHELLEY

If you are a graduate student in the UCLA/Getty Conservation Program, you either know William Shelley or benefit from his work as program laboratory manager. Being a professional conservator and himself a 2016 graduate of the master's program, Shelley is uniquely qualified to make sure the laboratories necessary for graduate students' use are consistently supplied and technologically up to date. As Glenn Wharton, chair of the program, puts it, "We were incredibly fortunate to hire William. Having gone through our program himself, he understands the student experience. This makes him highly effective in helping make our courses and the functioning of our research lab work well for both students and faculty."

Working with both professors and students, he ensures there are sufficient supplies for academic requirements as well as for all the treatments involved. As an example, he says he often creates mockups on which students can practice conservation techniques so that "their first experience is not on an actual object" being studied. He also assists with and has been trained to do X-radiography. He has developed a close relationship with the antiquities conservation department at the Getty, where he was an assistant conservator before coming to UCLA.

Shelley describes himself as the "registrar" for the Conservation Program, keeping track of objects that come in from local institutions or museums, which must eventually be returned. "Somebody has to be



↑ Fig. 1. William preparing a block lift of a fragile object during an excavation in Turkey.



➤ Fig. 2. William blowing glass at a local glass studio.

responsible for arranging those loans and the paperwork required for each object,” he notes. It can be intimidating, he adds, “especially when

you have very small objects, to make sure that nothing unexpected happens.” He continues, “We also have a small study collection of our own objects, so the students and professors can use those objects without having to worry about asking permission from the lender. This is especially important when we want to practice taking a sample, test a new treatment, or use certain chemicals. With our own objects, students can go ahead and use those before they work on others.”

When objects are originally submitted for examination, “the initial agreement is that the objects will be housed at the Getty Villa,” Shelley explains. “Then our students will examine them and prepare treatment proposals.” Proposal usually include all the steps students would like to carry out, such as cleaning, repair, or a full-scale reconstruction. Shelley can help by reviewing a proposal, which will then be sent to the lender, who must sign off before the students can start work. He gave an example of a ceramic pot that had been put together elsewhere. The pieces were poorly adhered and were failing. So the students took the vessel apart and put the pieces together more professionally.

“Our lab is a little unique in that it is an off-campus lab, located within the Getty Conservation Institute (GCI) at the Getty Villa in Malibu,” Shelley notes. His duties include making sure that members of the Conservation

Program “follow all of the health and safety requirements” of the Getty, as well as those of UCLA. The Conservation Program also has a lab housed at the Cotsen Institute; it is primarily an analytical lab. Students using the program’s labs include MA and PhD candidates.

Shelley received his BA in art history from the University of Miami, Florida, and a post-baccalaureate certificate in conservation from the Studio Arts Center International in Florence, Italy. He completed his third-year graduate practicum internship in Kalamata, Greece, working at both the Laboratory of Archaeometry at the University of Peloponnese and at the thirty-eighth Ephorate of Prehistoric and Classical Antiquities. He also completed internships at the Toledo Museum of Art, the Maryland Archaeological Conservation Laboratory, the Anthropology Conservation Laboratory at the National Museum of Natural History, and the Western Archaeological and Conservation Center.

When looking for graduate programs, he wanted a school that offered fieldwork and education in three-dimensional objects. UCLA offered both, plus the opportunity to go abroad to work on excavations. As for the future of the program in which he is so deeply involved, he is working with program chair Glenn Wharton on incorporating sustainability “not only into our program but into our lab.” He sees one of his main responsibilities as greening the lab and making it more sustainable, as well as helping faculty with “practicals” within their syllabi.

In terms of the lab, this effort might include determining how to better recycle materials such as gloves and to reuse them whenever possible. “That’s one physical thing we can do,” he notes. Another is to use chemicals that are less harmful

to the environment, both when they are produced and when they are used: “So the disposal is one thing, but creation is another.” He adds that Wharton has brought in a visiting researcher from Italy whose primary work will be on green chemicals in the field of conservation.

Shelley is the coauthor of “Preliminary Research into Curricula in Sustainability for Cultural Heritage Conservation,” published by the American Institute for Conservation. He also authored “The Modern History of the Twin Obelisks of Benevento,” published in *Aegyptiaca: Journal of the History of Reception of Ancient Egypt*. This paper documents the work he did on conservation at the Getty Villa and on display of an Egyptian obelisk in Italy.

He has little free time between work and his family—currently including a four-year-old daughter and a three-year-old son. If he did have more time, he might return to making glass in local studios. Another favorite activity is visiting local botanical gardens, which he can do with the entire family, no matter what size it is.

ANOTHER [EFFORT] IS TO USE CHEMICALS THAT ARE LESS HARMFUL TO THE ENVIRONMENT, BOTH WHEN THEY ARE PRODUCED AND WHEN THEY ARE USED: “SO THE DISPOSAL IS ONE THING, BUT CREATION IS ANOTHER.”

FROM THE PUBLISHER'S DESK

TAYLOR MCBRIDE

The past year has been one of marked change at the CloA Press. After nearly 12 years of the esteemed leadership of Randi Danforth, the reins were passed to me. I joined the Cotsen Institute in September 2024 and have learned a lot about the institute in my first year as publications director. In this time, we've been working on a host of new initiatives. With the help of Cotsen director Jason De León, we've upped our presence at conferences and SHA—and also made appearances at the Los Angeles Book Festival. It's a pleasure to meet people in Los Angeles, regardless of their involvement in our local community or to engage in our local community more.

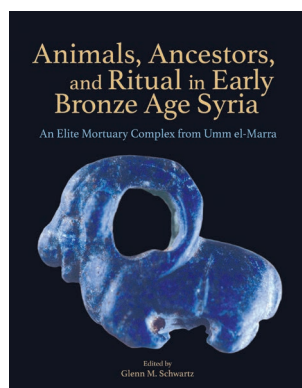
We continue our series of Author Spotlights throughout the year, celebrating authors and their recent publications. We welcomed Camilla Norman, author of *People of Ancient Daunia: Voicing the Statue-Stelae*, in December 2024.



→ **Figure 1.** Selection of CloA Press books presented at the 2024 Society for American Archaeology (SAA) annual meeting in Denver.

RECENT PUBLICATIONS

We are excited to announce our recent publications at the press, which include additions to our *Monumenta Archaeologica*; *Monographs*; and *Ideas, Debates, and Perspectives* series.

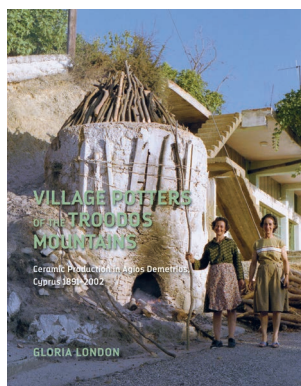


***Animals, Ancestors, and Ritual in Early Bronze Age Syria: An Elite Mortuary Complex from Umm el-Marra* by Glenn Schwartz (February 2024)**

Winner of the G. Ernest Wright Award at ASOR's 2024 annual meeting

This book is a final report of the excavation of Early Bronze Age remains at Tell Umm el-Marra (perhaps ancient Tuba) on the Jabbul plain of northern Syria, conducted 1994–2010. In the Early Bronze Age, urban, complex societies first

emerged in Syria. By focusing on a “second tier” urban center, the work at Umm el-Marra complements results from larger, better-known early cities such as Ebla, Mari, and Brak. Especially significant at Umm el-Marra is the large elite mortuary complex raised up in the center of the community. In this complex, tombs with human remains and objects of gold, silver, and lapis lazuli were accompanied by the burials of high-prestige animals (donkey/wild ass hybrids known as *kungas*). Unique in the archaeology of third millennium BC Syria, the Umm el-Marra necropolis of elite humans and animals allows for the reconstruction of funerary practices in detail and illuminates the importance of ancestor veneration, social memory, and animal agency in the development of Syria’s first urban civilization.

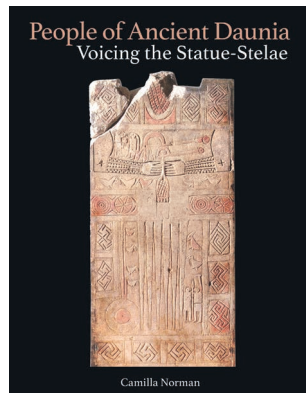


***Village Potters of the Troodos Mountains: Ceramic Production in Agios Demetrios, Cyprus, 1891–2002* by Gloria London (May 2024)**

In this volume, Gloria London offers an ethnoarchaeological study of four generations of female potters working in a remote Cypriot mountain village. Their coil-built jars, jugs, cookware, beehives, ovens, and decorative pots provide quantitative data on pot dimensions, production rates, firing times, and rate of loss. The material evidence of potting practice is informed by 40

years of ongoing observation and conversations with the potters and their families. The history of production encapsulates the rich diversity of the responses to economic and social challenges by individual potters, their extended families, and social networks within and between the mountain villages of the recent past. This addition to the archaeology of rural landscapes and the preservation of the intangible cultural heritage of the Troodos serves archaeologists worldwide concerned with craft specialization and standardization, learning frameworks, markings on

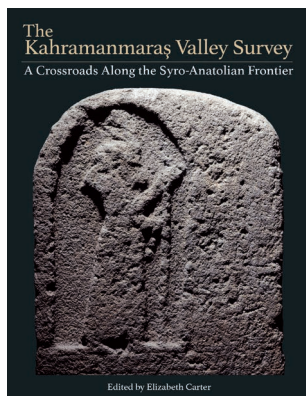
pots, identifying production locations, and modeling the potential micro-histories of potters that can be postulated from settlement evidence.



***People of Ancient Daunia: Voicing the Statue-Stelae* by Camilla Norman (June 2024)**

Norman provides an in-depth analysis of the statue-stelae of Early Iron Age Daunia (northern Apulia, Italy), a group of stone slabs, each incised to represent the garb and accoutrements of a person. Many have additional figurative images drawn on their robes showing ritual practices, everyday activities, and scenes of local legend. Beyond the funerary record, the material culture of Daunians is relatively poorly

known. The stelae, however, are rich sources of self-representation, offering an unparalleled window into the lives of a proto-historic people. This is the first time a holistic study of the stelae has been undertaken and the first presentation of the material in English.



***The Kahramanmaraş Valley Survey: A Crossroads Along the Syro-Anatolian Frontier*, edited by Elizabeth Carter (March 2025)**

This volume presents a study of local landscape histories in the Kahramanmaraş Valley—a previously understudied but pivotal crossroads along the Syro-Anatolian frontier. The area's Holocene vegetation history is explored in relation to climatic changes and human impact through the pollen analytical results of a deep core obtained from a former Sağlık (Gavur) lakebed. Extensive

surface surveys carried out in the region between 1993 and 2000 form the basis of settlement pattern studies, beginning with the first permanent settlement of the valley in the Neolithic and ending with the Islamic era. Analyses of a long historical record, diverse physical environments, and a significant number of archaeological sites—along with the results of a series of intensive full-coverage and transect surveys around Domuztepe—are used to outline the myriad ways the ancient residents of this region between Syria and Anatolia made it their home for more than 7,000 years.

INSIDE THE EXPERIMENTAL AND ARCHAEOLOGICAL SCIENCES LAB (EASL)

VANESSA MUROS

It was another busy academic year for the Experimental and Archaeological Sciences Lab (EASL). The lab was filled with students conducting research and learning how to use various analytical techniques for the study of ancient materials and technology. We continued to provide research support for graduate students in the Interdepartmental Archaeology Program and affiliated departments. The EASL participated in several open house events organized by the Cotsen Institute as part of its growing outreach efforts. The lab created volunteer opportunities for undergraduate students, introducing them to the fields of archaeological science and cultural heritage preservation.

OPEN HOUSES

The Cotsen Institute held three open house events during the last academic year, and the EASL was open for each of them. The events varied in their focus, with different programs geared toward K-12 students, community college and transfer students, UCLA undergraduates, and the public. We highlighted different types of archaeological research that can be conducted in the lab and set up different stations for visitors. One station focused on experiments we conducted to reproduce Egyptian faience. Others showed visitors what type of information can



↑ Eric Large (2025, Anthropology) makes DIY earthquake straps to protect artifacts stored on shelves.



➤ Furen Peng (visiting graduate researcher, 2024–2025) and Yunong Gu (PhD candidate, Archaeology) take a sample from a replica object as part of the provenance research course.



➤ Feier Li (2025, Chemistry) analyzes pigments on a tomb figure using pXRF.

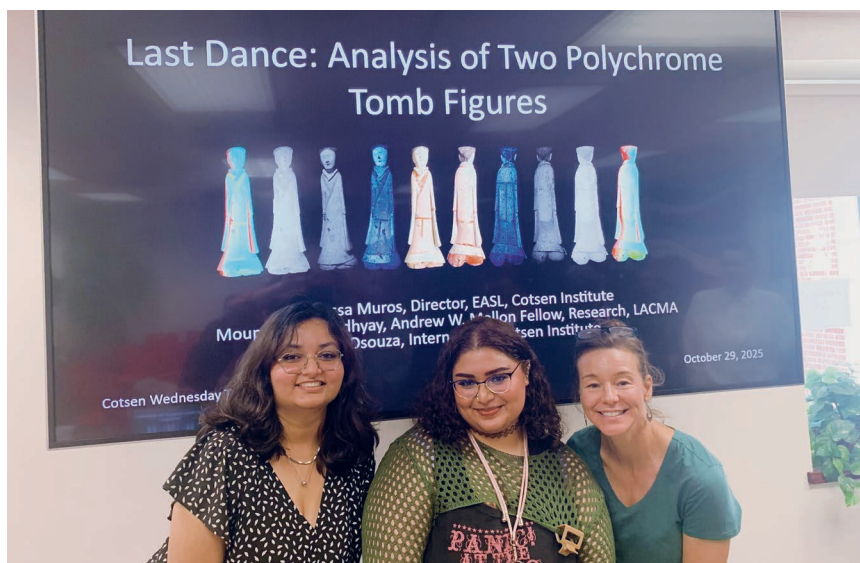
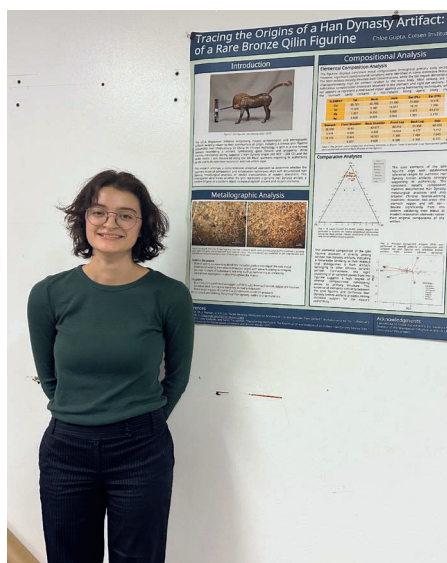
be obtained using microscopy or portable X-ray fluorescence (pXRF) spectroscopy to analyze archaeological materials. For a K-12 student event, visitors were able to make vessels using modeling clay and could even try out the pottery kick wheel.

TRAINING OPPORTUNITIES

For two years, the EASL has been offering volunteer and internship opportunities for undergraduate students and recent graduates interested in gaining experience in archaeological science or art conservation. Some volunteers have helped create a slide reference set for the study of pigments. Others have participated in research related to the Waystation Initiative. This work mainly focuses on the preservation of artifacts the Cotsen Institute is temporarily stewarding prior to their voluntary return. Volunteers have also helped with artifact photography, condition reporting, making archival storage supports, data entry, environmental monitoring, and emergency preparedness activities. They have conducted technical studies on objects to answer questions about materials and their manufacture, provenance, and authenticity. Through these outreach efforts, we introduce students to different aspects of archaeological research and work undertaken at the Cotsen Institute with which they may not be familiar. We are also able to offer unique training opportunities to students, providing lab-based skills that can be used in their future graduate studies or careers.

COURSES

In the winter of 2024, lab director Vanessa Muros began teaching a course for those seeking a graduate certificate in cultural heritage research, stewardship, and restitution, part of the Waystation Initiative. The lab-based course (M205A, Laboratory Topics in Archaeology: Provenance Research) introduces students to various scientific methods used to examine and analyze archaeological objects. Over the course of the quarter, students conduct a technical study on an assigned artifact using equipment available at the Cotsen Institute. They learn how to create a sampling and analysis



methodology, take and prepare samples, conduct analysis, and interpret data to identify materials and manufacturing methods and to determine provenance and authenticity. Though most of the students are in the Waystation certificate program, students from other programs have also taken the course to apply what they learn to their own graduate research. In the future, we hope to offer the course to undergraduate students.

ONGOING PROJECTS

In collaboration with the Digital Archaeology Lab (DAL), we are developing technical imaging capabilities at the Cotsen Institute to support the documentation and analysis of archaeological materials. Technical imaging encompasses a variety of specialized photographic methods to visualize and document features that are not detectable with the naked eye. Techniques include ultraviolet fluorescence, visible-induced infrared luminescence, and infrared reflectance. While this work is primarily conducted in the lab, certain components of our imaging systems can be taken to the field when on-site documentation is required.

The techniques were recently applied to the study of pigments on two Han Dynasty ceramic tomb figures that were voluntarily returned to China in June 2025. Initial analysis focused on non-imaging techniques, including pXRF, polarized light microscopy, and X-ray diffraction, to identify pigment composition. After equipment setup and the testing of protocols on mockups, imaging was carried out on the tomb figures to confirm the initial pigment identifications and to gain additional insight into pigment application, including layering and mixing practices. The combined results of this work were presented as part of the Cotsen's Wednesday talk series in fall 2025, highlighting the value of integrating technical imaging with other analytical methods in archaeological research. Work on finalizing workflows and protocols continues, and we hope to have the system fully up and running by the end of the current academic year. To keep up with our progress on the technical imaging setup and other projects in the lab, check out our website¹ or follow us on Instagram @easl_ucla.

✦ Chloe Gupta (2025, Anthropology and Classical Civilization) presents the results of her analysis on a Han Dynasty figurine at the tenth Cotsen Graduate Conference.

✦ Moupi Mukhopadhyay (2024, Conservation), Dani Dsouza (2024, Classical Civilization), and EASL director Vanessa Muros present the results of imaging and analysis conducted on tomb figures.

¹ ioa.ucla.edu/labs/experimental/

THE WAYSTATION INITIATIVE

LYSSA C. STAPLETON

The 2025–2026 academic year marks the entry of the third cohort of students into the Waystation’s Graduate Certificate Program in Cultural Heritage Research, Stewardship, and Restitution. This year’s cohort includes six students from programs across campus: art history, history, East Asian languages and cultures, and the Master of Library and Information Science (MLIS) program (**Fig. 1**). The previous year’s cohort included all five incoming conservation MA students as well as students from the Archaeology IDP and the MLIS program (**Fig. 2**).

→ **Figure 1.** The current Waystation certificate program cohort on a visit to the Getty Villa for a lecture on provenance research. From left: Jingwen Zhang, Xuetong Shen, Margaux Gackerie, Estafanía Gallo, Wilde Davis (not pictured: Roxanne Valle). Photo by the author.





← **Figure 2.** The 2024-2025 Waystation certificate program cohort on a visit to the Getty Center to view provenance research material from its archives. From the left: Katrina Kuxhausen, Zichan Wang, Mati Castillo, Melina Edic, Hattie Hāpai, Paige Hilman, Pilar Brooks, Fernanda Baxter, and Furen Peng (visiting graduate researcher, Shandong University). Photo by the author.

Our certificate program students are not the only ones working toward the Waystation's goals. We have a dedicated crew of undergraduate and postgraduate interns working on dynamic projects that are integral to the initiative.¹

GRANTS, GOALS, AND NEW DEVELOPMENTS

The Waystation will soon launch its own website, which will be live by the time of publication.²

In December 2024, the Waystation received a \$350,000 Tier II Research and Development Implementation Grant from the National Endowment for the Humanities (NEH). The project, titled Developing a Standard for Shared Stewardship and Voluntary Return of International Cultural Objects, supports the creation of best practices for institutions returning international cultural materials to nations and communities of origin and/or seeking to establish stewardship agreements. These resources, including frameworks for community engagement, culturally sensitive stewardship, and voluntary return, will be made available through our new website.

The NEH grant funds several steps leading to the development of best practices. Among them are workshops and a two-day community convening, designed to shape the structure and content of the best practices, particularly in areas requiring input from Indigenous communities, such as engagement, collections care, provenance research, and stewardship. The grant also provides support for compensation for community consultants and a graduate student researcher.

Originally, the two-day convening was scheduled for spring of 2025 to coincide with the return of cultural material belonging to the Larrakia people of Australia from the Fowler Museum's collection. The gathering, which was to include Charrúa people of Uruguay, Guarani-Kaiowá and Tupinambá people of Brazil, Lenca/Maya people of El Salvador, Mapuche people of Chile, and the Mijikenda people of Kenya, among others, was postponed when our NEH grant was precipitously terminated only six weeks before it was scheduled to take place. The grant was reinstated

1 Students interested in interning with the Waystation should email us at waystation@ioa.ucla.edu.

2 <https://waystation.ucla.edu>.

→ **Figure 3.** Zichan Wang (doctoral candidate, UCLA Archaeology IDP), left, and Zhaoli Wang (Shandong University Museum), right, stand with items being returned to China. Photo by the author.



in late June following a ruling in *Thakur v. Trump et al.* However, the Trump administration is expected to appeal and may take the case to the Supreme Court. For now, the Waystation continues advancing the development of its best practices while seeking alternative funding to ensure progress toward its goals.

RETURN OF CULTURAL HERITAGE TO CHINA

In June 2025, the Waystation completed the return of eight cultural objects to the People's Republic of China (**Fig. 3**). This return was carried out as part of a broader agreement among the Waystation, Shandong University's Qingdao campus, and China's National Cultural Heritage Administration to facilitate the restitution of Chinese archaeological materials in the Waystation's care.

NEW INTERNATIONAL COLLABORATIONS

In May I traveled to Peru to participate in the Cusco Forum, a conference of Latin American nations dedicated to the enforcement of the 1970 UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Property. I was honored to be included in a special panel titled Trends and Perspectives on the Protection, Return and Restitution of Cultural Property Within the Framework of the 1970 UNESCO Convention (**Fig. 4**).

While in Peru, I met with representatives from the Ministry of Culture, the Ministry of Foreign Affairs, and the University of Engineering and Technology (UTEC) in Lima. These meetings advanced discussions with the Ministry of Culture about a collaboration that will both support Peru's cultural heritage protection efforts and allow Waystation-affiliated students to conduct research on Peruvian objects that we are temporarily stewarding. We are deeply grateful for the support of our Peruvian colleagues in the United States as well as in Lima, including Andrés Garrido, head of the Public Diplomacy Department, Embassy of Peru; Jaime



← **Figure 4.** From the left: Lyssa Stapleton, UCLA; Blanca Alva, independent specialist; Claudia Alemán Urteaga, minister and director of cultural heritage at the Ministry of Foreign Affairs of Peru; Evelyn Centurión Cancino, director of recoveries, Ministry of Culture, Peru; Cecilia Polo, International Affairs and Illicit Trafficking of Cultural Property Unit, National Service of Cultural Heritage; Cristina Vargas Pacheco, director of collection protection, National Library of Peru. Courtesy of Peruvian Ministry of Foreign Affairs.

Casafranca, consul general, Peruvian Consulate of Los Angeles; Juan Montoya, Ministry of Foreign Affairs, Peru; Claudia Aleman, Ministry of Foreign Affairs, Peru; and Evelyn Centurion, Ministry of Culture, Peru.

The Waystation has also established parameters for a pilot collaboration with UTEC, supporting partnerships between students in UTEC's Masters Program in Collections Management and Preventive Conservation and UCLA students working with the Waystation. Envisioned by Professors Juan Carlos F. Rodríguez Reyes and María Inés Velarde, together with Vanessa Muros and myself, this collaboration will enable joint planning for the long-term care of objects repatriated to Peru. The Waystation thanks Solsiré Cusicanqui Marsano for facilitating these connections and strengthening the Waystation's ties across Latin America.

With the assistance of Aída Velasco, consul for cultural and educational affairs at the Consulate General of Mexico in Los Angeles, the Waystation has also initiated conversations with Mexico's Instituto Nacional de Antropología e Historia (INAH). The goal is to establish a collaboration with INAH parallel in spirit to those underway with Peru and China.

Spring 2025 proved to be an especially active period for the Waystation. In addition to the return of objects to China, the Peruvian partnership meetings, and planning for the postponed convening, the Waystation accepted a group of lithics from the estate of Jay and Deborah Last and organized a workshop on Mexican lithics. The workshop, titled *Archaeometric Analysis of Ancient Mexican Lithics: Identifying Raw Materials and Methods of Manufacture*, was led by Emiliano Melgar Tisoc, an INAH researcher at the Templo Mayor in Mexico City and a specialist in lithic studies (**Fig. 5**). Melgar was on campus to discuss his new book, *Lapidary Objects from the Great Temple: Styles and Technological Traditions*, and generously dedicated time to analyze materials from the Last Collection and share his expertise with the Cotsen Institute community.

→ **Figure 5.** Emiliano Melgar Tisoc conducts his Waystation workshop in May 2025. Photo by Mati Castillo.



PATHWAYS TO ACADEMIA: THE UCLA CULTURAL HERITAGE SUMMER PROGRAM, 2025

In spring 2025, Jason De León and I were awarded a grant from the University of California–Hispanic Serving Institutions Doctoral Diversity Initiative (UC–HSI DDI) to support a pilot summer program for students from historically underrepresented communities enrolled at local colleges. Partnering with Professors Julianne Bernard (East Los Angeles College) and Kenneth Seligson (California State University, Dominguez Hills), the program accepted eight city college and undergraduate students (**Fig. 6**).

The UC–HSI DDI provides resources to expand pathways toward faculty diversity through programmatic, pedagogical, mentoring, and policy development initiatives. The program’s overarching goal is to help underrepresented students advance toward doctoral education and the professoriate. According to the UC–HSI DDI 2024 request for proposals, “UC has experienced a 73% increase in Latinx undergraduate enrollment over the past decade—from 34,971 in 2011 to 60,651 in 2023. As of fall 2023, the UC system achieved the 25% Latinx undergraduate enrollment threshold required for HSI designation; however, only 12% of UC doctoral students were Latinx.” UCLA is actively pursuing federal designation as a Hispanic Serving Institution.

The Waystation’s four-week experiential summer learning program was a collaboration between UCLA and two HSI campuses—California State University, Dominguez Hills (CSUDH), and East Los Angeles College (ELAC). Its goal was to deepen students’ understanding of how cultural heritage connects past, present, and future while equipping them with research and professional development skills essential for graduate study.

Through mentorship and collaborative learning, participants developed research designs, crafted abstracts, and prepared for academic conferences. They examined the ethical, legal, and social histories of collecting ethnographic and archaeological materials, exploring topics such as repatriation and repatriation, heritage and social justice movements, and global efforts to safeguard cultural heritage.



→ **Figure 6.** Cultural Heritage Summer Program students on a visit to the Getty Villa: David Rivera (UCLA), Saul Soto (ELAC), Samantha Amarilles (CSUDH), Elizabeth Rodriguez (LA Harbor College), Abigail Haling (Chapman College), Hector Hernandez (CSUDH), Gobbi Lynn (ELAC) (not pictured: Bianca Marshall). Photo by the author.

Working collaboratively, students designed research projects centered on Waystation-held objects slated for return to nations or communities of origin. They also drafted abstracts for professional conference submissions and prepared for an Ethics Bowl, scheduled for the final week of the program. Each student established a research project, and all eight will present papers or posters at the 91st Annual SAA Meeting, April 29–May 3, 2026, in San Francisco. Between the conclusion of the summer session in early September and the SAA meeting, students will continue to receive mentorship from Bernard, De León, Seligson, and myself to ensure they are fully prepared to present their research.

The Waystation's SAA symposium, titled *International Cultural Heritage Restitution: From Provenance Research to Collaborative Return*, includes 13 papers by 16 authors. Among them are several of our summer program students, Archaeology IDP student Katrina Kuxhausen, 2024–2025 visiting graduate researcher Anauene Dias Soares, former Waystation undergraduate intern Chloe Gupta, and diverse international scholars.

The summer program concluded with a two-day Ethics Bowl titled *Heritage and Social Justice—Who Owns Culture?* There, students engaged in structured debates based on two case studies, working in opposing teams of four. Case Study 1, *Operation Cerberus Action*, examined law enforcement's 2009 response to the looting of Native American sites in the Four Corners region of the United States. Case Study 2, *The Restitution Study Group and the Return of the Smithsonian's Benin Bronzes*, explored the perspectives of Black Americans with ancestral ties to Nigeria regarding the Smithsonian's return of cultural objects to Benin. Each session featured three judges and a moderator (Stapleton). Judges included program mentors Bernard and Seligson; Erica Jones, senior curator of African Arts and manager of curatorial affairs at the Fowler

Museum; Kristine Martirosyan-Olshansky, director of the Armenian Lab at UCLA's Cotsen Institute of Archaeology; Paige Hilman, an MA student in conservation; and Jessica Strayer, the NAGPRA/CalNAGPRA administrative manager at the Fowler Museum.

WAYSTATION INITIATIVE IMPACT AND FUTURE DIRECTIONS

The inaugural Cultural Heritage Summer Program was a resounding success, and the Waystation is exploring options to make it an ongoing opportunity. Expanding undergraduate engagement directly supports the Waystation's broader goals: advancing collaborative research while fostering ethical stewardship and inclusive pathways for emerging cultural heritage professionals.

The Waystation Initiative remains deeply committed to promoting ethical stewardship through hands-on training, mentorship, and interdisciplinary collaboration. Its certificate and internship programs cultivate ethical reasoning, research proficiency, and cross-cultural communication—skills that strengthen students' academic work and professional trajectories. At the same time, the Initiative's broader efforts in shared stewardship, voluntary returns, and culturally informed collections care continue to model responsible and reciprocal practices for the field.

NEW GRADUATE STUDENTS, 2024-2025

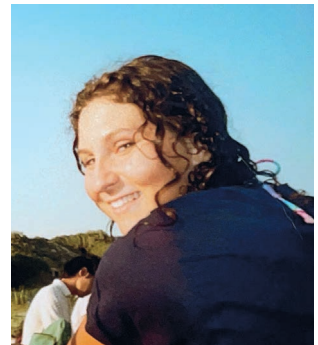
WENYI ZHAO

Wenyi Zhao (趙文滢) is pursuing her MA and PhD degrees in the Archaeology IDP at UCLA, with a focus on the archaeology of early China. She received her BA in history and a certificate in classical Chinese philology from Yuanpei College, Peking University, in 2024. Her training is interdisciplinary, encompassing early Chinese history, paleography, philology, and archaeology. Since 2022, she has participated in multiple archaeological excavations and surveys in southern Shanxi and northern Shaanxi in China, as well as a geological survey in northwestern China. Her current research focuses on socially marginal populations in early China, including human sacrifices, human retainers, enslaved individuals, and convicts, as well as the development of state penal and forced labor systems and practices of state violence.



TALIA NEELIS

Talia Neelis is pursuing a PhD at the Cotsen with a focus in prehistoric Cypriot archaeology. In 2025, Talia earned a BA in ancient Mediterranean and Near Eastern studies with a minor in art history from the University of British Columbia, where she was awarded the Governor General's Silver Medal. She is interested in craftwork as a relational process across regions, landscapes, and social networks during the third and second millennia BCE. Her involvement in the Kalavassos and Maroni Built Environments Project (UBC, Cornell) and the Kissonerga-Skalia Excavation (CAARI, HARP) on Cyprus and in the Eastern Boeotia Archaeological Project (UVic, Wellesley College) inspired her to pursue an interdisciplinary research focus. Talia explores culturally specific crafting knowledge through materiality-centered frameworks, feminist epistemologies, and archaeometric methodologies that center ontological relationships between humans and earthly matter. This research combines ceramic analysis with applications of GIS. Her undergraduate thesis studied the semiotic and phenomenological properties of gender representation in Late Bronze Age Cypriot figurines. Talia hopes to continue to explore how gender archaeology and post-humanist theory can be materially grounded in archaeological research. At UCLA, she will continue to study the Cypriot record while expanding her geographic focus across the eastern Mediterranean.



ARCHAEOLOGY MENTORSHIP PROGRAM

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K-12 OUTREACH AND COMMUNITY ENGAGEMENT

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COMMUNITY COLLEGE TRANSFER DAY AND THE COTSEN PRIZE WINNER

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ARCHAEOLOGY MENTORSHIP PROGRAM

Now in its fifth year, the Archaeology Mentorship Program (AMP) continues to grow as one of the Cotsen Institute's flagship student initiatives promoting diversity, equity, and inclusion in archaeology and allied fields. Since its founding in 2020, AMP has paired 45 graduate mentors with nearly 200 undergraduate mentees, offering individualized guidance, academic support, and professional development opportunities. This past year, IDP students and cofounders Carly Pope and Taylor Carr-Howard, alongside PhD candidate in anthropology and AMP's current graduate director Victoria Newhall and Cotsen director Jason De León, developed a comprehensive study assessing the program's longitudinal impact on participant confidence, retention, and career pathways. A forthcoming publication in *Advances in Archaeological Practice* will evaluate AMP's outcomes and highlight its potential as a model for increasing equity and representation in the discipline.

K-12 OUTREACH AND COMMUNITY ENGAGEMENT

On February 5, 2025, the Cotsen Institute hosted its first K-12 Archaeology Day, welcoming nearly 200 visitors for a hands-on introduction to the archaeological sciences. Activities included dig boxes, pottery making, rock art painting, and a photo booth, with volunteers from AMP and the Cotsen community guiding participants through the labs. As part of the day's events, Mélie Le Roy presented a guest lecture, "**Valuing Children in Life and Death in French Late Neolithic Societies**," offering a compelling perspective on childhood and mortuary practice.

Later that month, on February 20, Cotsen students returned to Johnnie Cochran Middle School to hold a day of mock excavations (also done the year before), reaching nearly 400 students. These outreach efforts form part of AMP's and the Cotsen's shared commitment to accessible, experiential learning in archaeology.

COMMUNITY COLLEGE TRANSFER DAY AND THE COTSEN PRIZE WINNER

On April 9, 2025, the Cotsen Institute partnered with the Anthropology Department to host its first annual **Archaeology and Anthropology Community College Transfer Day**, welcoming more than 30 prospective transfer students from regional community colleges for a day of events and programming. The event celebrated mentorship, access, and academic pathways into archaeology. Julianne Bernard of East Los Angeles College was awarded the **2025 Cotsen Prize** in recognition of her outstanding record of mentorship in the field.



✦ **Figure 1.** Participants try pottery reconstruction during the Cotsen Institute's first K-12 Archaeology Day, held February 5, 2025. Photo by Holland Fox.

✦ **Figure 2.** Students contribute to a collaborative rock art wall as part of hands-on learning activities during K-12 Archaeology Day. Photo by Holland Fox.



✦ **Figure 3.** Cotsen graduate students lead mock excavations with nearly 400 middle school students at Johnnie Cochran Middle School, February 20, 2025. Photo by Alex Casteel.



✦ **Figure 4.** Cotsen Institute director Jason De León with Julianne Bernard, recipient of the 2025 Cotsen Prize, during the inaugural Archaeology and Anthropology Community College Transfer Day, April 9, 2025. Photo by Victoria Newhall.

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Private philanthropy plays a vital role in fueling discovery and enabling future achievements. The Cotsen Institute of Archaeology at UCLA is a premier research organization that promotes the comprehensive and interdisciplinary study of the human past. It is home to both the Interdepartmental Archaeology Program and the UCLA/Getty Interdepartmental Program in the Conservation of Cultural Heritage. The Cotsen Institute stimulates interaction among scholars and students of nine academic departments, who are engaged in pioneering research that can shed light on our society today.

Your contributions will help:

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