

4th Annual International Congress on Roman Bioarchaeology: Transcending Boundaries

Kathryn E. Marklein^{1,2*}, Elizabeth A. Bews^{3*}, Mario Novak^{4**}

¹Department of Anthropology, University of Louisville, Louisville, Kentucky, USA

²Center for Archaeology and Cultural Heritage, University of Louisville, Louisville, Kentucky, USA

³Department of Anthropology, University of Montana, Missoula, Montana, USA

*Guest editors

⁴Institute for anthropological research, Zagreb

**Editor-in-Chief

Special Issue August 1st, 2025

Editorial

The International Congress on Roman Bioarchaeology (ICORB), with support from the Institute for Anthropological Research, will hold its 4th Annual Meeting at the Archaeological Museum in Zagreb, Croatia, from 31 August to 2 September 2025. Established in 2021, ICORB was developed as a venue to promote interdisciplinary collaboration among scholars working on archaeological remains from across the Roman world and beyond. The annual conference provides an opportunity for international researchers to share ongoing research involving Roman-era archaeobotanical, zooarchaeological, mortuary, and human remains. The conference emphasizes cross-disciplinary dialogue, merging traditional archaeological methods with new theoretical frameworks, and ultimately encourages scholars to ask new questions and push methodological boundaries. Presentations and posters at the annual conference go beyond merely showcasing results; they become springboards for discussion and reinterpretation, with scholars offering real-time feedback on research and theoretical developments. The goal of ICORB is to function as a collaborative engine of ideas, where archaeologists, anthropologists, classicists, and

historians engage deeply with shared evidence to treat ancient individuals not as data points, but as lives to be reconstructed and understood. This fuels ICORB's identity as a humanistic science forum, where ideas about Roman-era identity, health, migration, and inequality are constantly tested and forced to evolve.

While much of the research at ICORB takes a population-based approach to the analysis and interpretation of anthropological remains, Anna Osterholtz's keynote address on osteobiography highlights the importance of starting any analysis of the ancient Roman world at the individual level. Drawing upon what Mattingly (2007, 2013, 2023) has termed discrepant experiences in the Roman World, Osterholtz encourages the use of an osteobiographical approach in the Roman period, especially when researchers seek to transcend the predominant Roman narrative - male, elite, urban, Mediterranean-centric - to include peripheral and marginalized experiences (Osterholtz et al., 2025). To this end, many of the papers and posters at ICORB 2025 draw from liminal (e.g., limes) sites, focus on underrepresented groups (e.g., individuals with disabilities), or investigate

transitional periods (e.g., the Hellenistic-Roman transition). Collectively, this work underscores ICORB's commitment to expanding the scope of Roman bioarchaeology—shifting the focus of research from traditionally dominant narratives to illuminating the diverse lived realities of individuals navigating the complexities of life in the Roman world.

Marginalized Voices

The study of marginalized voices in Roman bioarchaeology has gradually emerged as a critical response to traditional narratives that prioritized elite, literate, and male perspectives (Redfern, 2025). Early Roman bioarchaeological research focused primarily on monumental remains and high-status burials, inadvertently minimizing the lived experiences of women, enslaved individuals, children, and migrants. By the late 20th century, however, shifts in archaeological theory—especially with the influence of feminist and postcolonial critiques—prompted scholars to re-evaluate the skeletal and contextual evidence of non-elite populations (Gardner, 2013; Versluys, 2014). Advances in osteological analysis, including paleopathology, isotopic studies, and aDNA research, enable deeper insights into diet, mobility, labor, and health disparities among marginalized groups. As exemplified by multiple papers at this year's conference, the field continues to expand, with increasing attention to intersectionality and ethical representation, ensuring that the diverse experiences of all individuals—not just the powerful—are included in narratives about the Roman past (Bews and Marklein, 2025).

Rural Perspectives

While most of the Roman population lived in rural communities, bioarchaeological work has focused primarily on cemeteries and settlements in urban

areas, likely because rural sites are more difficult to locate and modern urban expansion mandates salvage excavations that inadvertently uncovers archaeological remains (Tirado, 2010). However, survey and subsequent excavation work have slowly reintroduced rural perspectives into the Roman-period narrative. In Italy, Sicily, Greece, and Croatia, human osteoarchaeologists and zooarchaeologists evince the importance of understanding diet, mortality, and biological health in the context of rural communities, economies, and networks. Through human remains, many studies at this year's meeting capture the breadth of rural experiences, whether in small, agrarian communities or elite estates, and provide commentary on rural identity or status. Other presentations consider differences in population health based on settlement location as a reflection of possible rural-urban dichotomous landscapes (Sammut et al., 2025).

Violence and the Military in the Roman World

Violence and warfare were deeply embedded in the fabric of the Roman world, shaping not only the Empire's expansion, but also its social norms and individual identities (Novak, Carić, and Osterholtz 2025). For centuries, studies of Roman military culture focused heavily on historical texts, monumental architecture, and elite representations of warfare—emphasizing strategy, imperial conquest, and the successes or failures of military endeavors (Drinkwater 2022). However, these narratives often obscured the physical and psychological realities of violence for soldiers, civilians, and entire populations of subjugated peoples. Recent bioarchaeological and archaeological approaches have begun to address this imbalance by examining interpersonal trauma on skeletal remains, patterns of weapon-related injuries, and the spatial organization of mass graves (Šlaus, Kunić, and Pivac 2018; Lösch et al.

2014). Through paleopathological analysis, researchers are uncovering evidence of repeated stress injuries, blunt-force trauma, and surgical interventions—offering direct insight into the toll of military service and interpersonal violence. Scholars at this conference emphasize the importance of contextualizing violence within broader frameworks of gender, class, and ethnicity, as well as the long-term consequences of militarization on communities.

Life on the Roman Periphery

As most written Roman history reflects an Italian and Mediterranean-centric perspective, life on the periphery—whether provincial regions or the limes—is best illuminated through archaeological inquiry. The study of biological material from archaeological sites has enabled researchers to utilize human, plant, and animal remains to reconstruct the lives and experiences of those considered to be “others” by those residing in Rome. Moreover, the study of biological remains has shown how informative this archaeological research is to create a representative archaeological record that reflects the breadth of life within and around the Roman Empire (Bews and Marklein, 2025; MacKinnon, 2007). Bioarchaeological research along the Danube River in present-day Austria, Bulgaria, Croatia, Hungary, and Serbia has shown how important these landscapes and peoples were to imperial border control, economic stability, and cultural diversity. Such cultural diversity is complemented by archaeogenetic research presented at this conference, for aDNA has the potential to reveal population origins, genetic relatedness, and captures changes to genetic diversity due to major demographic shifts. Overall, from individual osteobiographies to population-level analyses, data from frontier communities continue to transform our understanding of health, mortality,

and lived experiences on the geographic periphery of the Roman world and are critical to reframing the Roman world as the mobile and global expanse that it was.

A Mobile and Global Empire

Despite archaeological tendencies to classify past populations into dichotomies such as core-periphery or urban-rural, the reality is that the Roman world was a complex network of markets and peoples (Pitts and Versluys, 2015; Nikita, 2024). Tracing migration on local, regional, and interregional levels through zooarchaeological, human osteological, and biomolecular data underscores how interconnected individuals, communities, and populations were in the Roman world (Antonio et al., 2019; Prowse, 2016; Valenzuela-Lamas and Albarella, 2017). Presentations on strontium isotopes and ancient DNA from individuals in Italy, Hungary, and Poland show how people moved and populations transformed during the Roman period. Mobility of individuals is also revealed by subsistence practices and animal provisioning through zooarchaeological remains, as reflected in studies from Noricum, Pannonia, and Hispania. Exploitation of marine resources into rural Spain, in particular, highlights the extensive and effective trade networks in place during the Roman period.

Periods of Transition

Defining the “Roman Period” chronologically is challenging, largely because Roman rule extended to different regions at different times. For instance, while the Roman Empire was established in 27 BCE on the Italian Peninsula, areas of Southwestern Anatolia did not officially become part of a Roman province until 43 CE (Schuler and Zimmerman, 2019). Further complicating matters, the period following the fall of the Western Roman Empire—traditionally dated from 330 CE to 1453 CE—is

increasingly referred to as the Eastern Roman Imperial Period rather than the Byzantine Period, marking a shift in scholarly convention. Given these complexities, scholars have begun to explore the concept of “transitional periods” as a more meaningful framework for understanding how cultures and lifeways evolved under Roman influence (Bews, 2025). In regions such as Greece and Anatolia, recent studies examine how the transition from Hellenistic to Roman rule affected health and everyday life. Likewise, research in areas of present-day Slovenia and Georgia investigates whether the collapse of Roman authority fundamentally altered the health or demographic makeup of local populations. By moving beyond the rigid chronological categories of Pre-Roman, Roman, and Post-Roman—however they may be labeled regionally—this approach highlights the nuanced, gradual nature of change experienced by those living within Rome’s shifting frontiers.

Mortuary Practices

In an empire as geographically vast and culturally diverse as the Roman Empire—encompassing countless populations, languages, and religions—it is unsurprising that burial practices were equally varied. Traditionally, however, Roman mortuary customs were reductively classified into broad categories such as inhumation or cremation, and archaeological reports often prioritized the description of elaborate grave goods over more nuanced lines of inquiry (Trigger, 2006). This approach routinely overlooked the effects of taphonomic processes, the osteological data offered by human remains, and the significance of burials lacking funerary artifacts (Perry, 2007). In recent decades, however, bioarchaeology has undergone a methodological shift. Burial analysis now commonly incorporates archaeoethnology, osteology, paleoparasitology, paleogenetics, and

broader archaeological context. At this conference, scholars working on sites across the Empire highlight the value of interpreting mortuary treatment in tandem with post-mortem processes, disease, parasitic evidence, genetic data, and a burial’s geographic setting—among other factors. This integrated, contextual approach allows researchers to identify patterns in burial practices across time and space, offering a more comprehensive understanding of identity, health, and social structures in the Roman world. Only by embracing this complexity can we move beyond elite-centric narratives and begin to reconstruct the lived experiences of all members of ancient society.

Advancing Archaeological Science

Lastly, in addition to Roman bioarchaeology serving to unearth and illuminate unwritten or lesser-known histories in the Roman world, the discipline as an archaeological science excels in the application of new methods and techniques (Killgrove, 2018; Scheidel, 2018). Whether from context (e.g., cremains) or preservation, Roman period samples and collections pose challenges for researchers when reconstructing accurate narratives of the Roman past. Minimally destructive analyses, such as stable and radiogenic isotopes, remain a well-tested and informative avenue for diet and lifetime mobility (Prowse, 2025). In this conference, researchers employ multi-isotopic approaches to human remains from Sicily and across the Lower Danube Valley to investigate differential dietary access/decisions by sex, age, and provenance. Additionally, lead isotope concentrations are also utilized in analyses from Romania and Croatia in tandem with osteological and paleopathological data as indicators of possible lead exposure. These and other novel approaches, such as biomolecular analyses of dental calculus (Wright, 2025) and

paleoparasitology (Ledger and Mitchell, 2025), demonstrate not only the versatility of Roman bioarchaeological methods but the relevance of this research in other archaeological investigations.

Conclusion

The people gathered at this year's ICORB will continue to propel the field forward as they share new findings and foster interdisciplinary collaborations through innovative papers, engaging posters, and thought-provoking roundtable discussions. The conference will also

provide a vital forum for addressing ethical challenges and exploring responsible approaches to designing, conducting, and publishing research for both academic and public audiences. In an increasingly interconnected world shaped by economic inequality, climate disruption, and resurgent nationalism, the Roman past offers crucial case studies—on empire and identity, migration and mobility, resilience and collapse—that can sharpen our understanding of today's global challenges and inform more nuanced, historically grounded responses in the present.

References

- Antonio, M. L., Gao, Z., Moots, H. M., Lucci, M., Candilio, F., Sawyer, S., ... & Pritchard, J. K. (2019). Ancient Rome: A genetic crossroads of Europe and the Mediterranean. *Science*, 366(6466), 708-714.
- Bews, E. A., & Marklein, K. E. (Eds.). (2025). *Roman Bioarchaeology: Interdisciplinary Perspectives on Life and Death in the Roman World*. University Press of Florida.
- Bews, E.A. (2025). *As the Romans Did: A Bioarchaeological Analysis of the Impact of Roman Imperialism on Population Health and Diet in Southwestern Anatolia* (Doctoral dissertation, University of South Florida).
- Drinkwater, J. F. (2022). The Battle of Mursa, 351: Causes, course, and consequences. *Journal of Late Antiquity*, 15(1), 28-68.
- Gardner, A. (2013). Thinking about Roman imperialism: postcolonialism, globalisation and beyond?. *Britannia*, 44, 1-25.
- Killgrove, K. (2018). Bioarchaeology in the Roman Empire. In *Encyclopedia of Global Archaeology*, 1-9). Springer.
- Ledger, M. L., & Mitchell, P. D. (2025). Paleoparasitology: Studying Parasites in the Roman Empire to Understand Disease, Diet, and Living Conditions. In *Roman Bioarchaeology: Interdisciplinary Perspectives on Life and Death in the Roman World*, 149-171. University Press of Florida.
- Lösch, S., Moghaddam, N., Grossschmidt, K., Risser, D. U., & Kanz, F. (2014). Stable isotope and trace element studies on gladiators and contemporary Romans from Ephesus (Turkey, 2nd and 3rd ct. AD)-implications for differences in diet. *PLoS One*, 9(10), e110489.
- MacKinnon, M. (2007). Osteological research in classical archaeology. *American Journal of Archaeology*, 111(3), 473-504.
- Mattingly, D. J. (2007). *An Imperial Possession: Britain in the Roman Empire, 54 BC-AD 409*. Penguin UK.
- Mattingly, D. J. (2013). *Imperialism, power, and identity: Experiencing the Roman Empire*. Princeton University Press.
- Mattingly, D. J. (2023). *Between Sahara and Sea: Africa in the Roman Empire*. University of Michigan Press.
- Nikita, E. (2024). Human Mobility in the Central and Eastern Mediterranean during Hellenistic and Roman Times: The Potential and Limitations of Bioarchaeological Research. *Nature Anthropology*, 2(2), 10005.
- Novak, M., Carić, M., and Osterholtz, A. (2025). Empire of Violence: Bioarchaeological Aspects of Violence in the Roman World. In *Roman Bioarchaeology: Interdisciplinary Perspectives on Life and Death in the Roman World*, 172-201. University Press of Florida.
- Osterholtz, A., Novak, M., Carić, M., & Paraman, L. (2025). Death and burial of a set of fraternal twins from Tragurium: An osteobiographical approach. *Journal of archaeological science: Reports*, 62, 105071.
- Perry, M. A. (2007). Is bioarchaeology a handmaiden to history? Developing a historical bioarchaeology. *Journal of Anthropological Archaeology*, 26(3), 486-515.
- Pitts, M., & Versluys, M. J. (Eds.). (2015). *Globalisation and the Roman World: Archaeological and Theoretical Perspectives*. Cambridge University Press.
- Prowse, T. L. (2016). Isotopes and mobility in the ancient Roman world. In *Migration and Mobility in the Early Roman Empire*, 205-233. Brill.
- Prowse, T. L. (2025). Stable Isotope Analysis in Roman Bioarchaeology. In *Roman Bioarchaeology: Interdisciplinary*

- Perspectives on Life and Death in the Roman World , 77-100. University Press of Florida.
- Redfern, R. C. (2025). Identity in the Roman World and Its Relevance Today. In *Roman Bioarchaeology: Interdisciplinary Perspectives on Life and Death in the Roman World* (pp. 227-250). University Press of Florida.
- Sammur, S., Marklein, K. E., & Bews, E. A. (2025). Critiquing the Urban-Rural Dichotomy in Roman Period Bioarchaeology. In *Roman Bioarchaeology: Interdisciplinary Perspectives on Life and Death in the Roman World* (pp. 202-226). University Press of Florida.
- Scheidel, W. (Ed.). (2018). *The science of Roman history: biology, climate, and the future of the past*. Princeton University Press.
- Schuler, C., & Zimmerman, C. (2019). Patara: History of the City from the Classical Period until the Establishment of the Province of Lycia. In *Patara: City, Harbor, Cult*, 346-365. Türkiye İş Bankası Kültür Yayınları.
- Šlaus, M., Domić Kunić, A., & Pivac, T. (2018). Reconstructing the life of a Roman soldier buried in Resnik near Split, based on the anthropological analysis of his skeleton. *Collegium antropologicum*, 42(4), 287-294.
- Tirado, J. B. Looking for the rustici: the impact of rescue archaeology on the study of the Roman countryside. *Journal of Roman Archaeology*, 32, 765-771.
- Trigger, B. G. (2006). *A History of Archaeological Thought*. Cambridge University Press.
- Valenzuela-Lamas, S., & Albarella, U. (2017). Animal husbandry across the Western Roman Empire: changes and continuities. *European Journal of Archaeology*, 20(3), 402-415.
- Versluys, M. J. (2014). Understanding objects in motion. An archaeological dialogue on Romanization. *Archaeological Dialogues*, 21(1), 1-20.
- Wright, S. L. (2025). Archaeological dental calculus: A rich bioarchive for exploring Classical Antiquity through ancient DNA methods. *Journal of Archaeological Science: Reports*, 62, 105038.