



Palaeoproteomics And Archaeology, Society for Techniques and Advances

2/2025

Dear PAASTA community,

Welcome to the second quarterly newsletter of 2025! This time there are plenty of new publications and preprints to check out. Also, there is a big change for our day-to-day communication platform: We are leaving *Slack* and moving to *Element*. **Make sure to join our *Element* space!** You will find the reasons for this change and detailed instructions on how to join our *Element* space in this newsletter. Happy reading, and remember: The content of this newsletter is up to you! If there is anything you would like to let others know via this newsletter - no matter if it's a big or minor thing - you are very welcome to let us know by sending a message to paasta.community@gmail.com.

Upcoming Events

April 2 nd 16:00 CET	PAASTA Talk: Alex Burnett - A User Guide to ClassiCOL: taxonomic classification of mixed or individual species by collagen peptides
May 7 th	PAASTA Talk: Jakob Hansen - Taxonomic selection strategies in the production of Early Neolithic bone objects, NE Iberian Peninsula
June 4 th	PAASTA talk: Meaghan Mackie - TBA
August 26 th	PAASTA meeting in Turin, Italy (online option will be available), Abstract submission and registration will open soon

August 26 th -29 th	ISBA11 in Turin, Italy. Registration open now (early registration discount until April 30 th)
October 14 th -17 th	ICAZ working group meeting on Archaeozoology, Genetics, Proteomics and Morphometrics (AGPM) in Copenhagen, abstract deadline: April 25 th

Is there some event you are missing in this list? Let the community know in the #events Element channel (info how to join Element in footer). We also have a google [calendar](#). If you have any events that you would like for us to add to this calendar, please send them to paasta.community@gmail.com.

The first quarter of 2025

IMPORTANT: Goodbye Slack, Hello Element!

For better knowledge transfer and longevity, we are now moving to a chat platform where older messages are not deleted. From April 2025 on, all official messages from the Steering Committee and other teams will be only posted on *Element*. Instructions on how to join *Element* (it's easy, even on Linux!) are given in the following message that was posted on *Slack*:

*"As you may be aware, ISBA now has its own chat server on [Element](#) (Matrix), which is open source, free, and will not have messages disappearing after 90 days. Therefore, the time has now come for us, as an ISBA affiliate society, to also start moving over! I have personally been there for a while now, and I would say it's highly similar to Slack, and very easy to understand and use. To make the move smooth, we will be double-posting everything on both platforms until the **end of March**.*

Luckily for us, ISBA has also provided excellent instructions for how to join their Element space, so I would suggest that you follow [these](#) instructions to first join the ISBA space, and thereafter join the PAASTA space [here](#) (paasta:archaeo.social). If you encounter any issues, please let us know and we can try to solve it together!

I know it's a bit annoying to have to move to another platform, but this will give us long-term stability, and a way to smoothly communicate with other parts of ISBA. Thank you all in advance for taking the time, and let's work together to create just as good of a community at Element."

Worldwide list of Palaeoproteomics labs

The idea to make a list of all known labs that work in palaeoproteomics has been floating around for a while. Now it has been realised in a shared [spreadsheet](#). We are at 33 labs and counting... Make sure your lab is there!

New Publications

Blacka, C., Dowle, A., Lisowski, M., Alexander, M., Hendy, J., Penkman, K. and Mosely, J., 2025. Rapid Proteomic Amelogenin Sex Estimation of Human and Cattle Remains Using Untargeted Evosep-timsTOF Mass Spectrometry. *Rapid communications in mass spectrometry*, 39(11), p.e10022. <https://doi.org/10.1002/rcm.10022>

Codlin, M., Yeomans, L., Stiller, J. and Demarchi, B., 2025. New avian protein sequences improve resolution of palaeoproteomic approaches to taxonomic identification & reveal widespread intraspecies variability. *Research Square*. (PREPRINT) <https://doi.org/10.21203/rs.3.rs-5880462/v1>

Dekker, J.A.A., Hagan, R., Collins, M.J. and Hendy, J., 2025. An unclean slate, discrepancies between food input and recovered protein signal from experimental foodcrusts. *bioRxiv*, pp.2025-02. (PREPRINT) <https://doi.org/10.1101/2025.02.03.636240>

Dekker, J. A. A., Peters, C., Winter, R. M., Collins, M., Dickinson, M. R., Harvey, V., Hill, E., Nair, B. A. B., Tsutaya, T., Viñas Caron, L., Warinner, C., Welker, F. and Fagernäs, Z., 2025. Open science, communication, and collaboration for the future of palaeoproteomics. *Zenodo*. (PREPRINT) <https://doi.org/10.5281/zenodo.14900383>

de la Fuente, J., Villar, M., Estrada-Peña, A., Tormo, L., Paradela, C., González-García, A. and Fernández-Castellanos, D., 2025. Paleoproteomics characterization of fossil arthropod parasitiformes amber inclusions. *Research Square*. (PREPRINT) <https://doi.org/10.21203/rs.3.rs-6123337/v1>

Desmond, A., 2025. Strategy and Ideology through ZooMS: Insights from Palaeolithic and prehistoric bone tools. *Journal of Archaeological Science: Reports*, 62, p.105072. <https://doi.org/10.1016/j.jasrep.2025.105072>

Engels, I., Burnett, A., Robert, P., Pironneau, C., Abrams, G., Bouwmeester, R., Van der Plaetsen, P., Di Modica, K., Otte, M., Straus, L.G. and Fischer, V., 2025. Classification of Collagens via Peptide Ambiguation, in a Paleoproteomic LC-MS/MS-Based Taxonomic Pipeline. *Journal of Proteome Research*. <https://doi.org/10.1021/acs.jproteome.4c00962>

Evans, M., 2025. The Demodifier: a tool for screening modification-induced alternate peptide taxonomy in palaeoproteomics. *bioRxiv*. (PREPRINT) <https://doi.org/10.1101/2025.01.09.632126>

Fong-Zazueta, R., Krueger, J., Alba, D.M., Aymerich, X., Beck, R.M., Cappellini, E., Carrillo-Martin, G., Cirilli, O., Clark, N., Cornejo, O.E. and Farh, K.K.H., 2025. Phylogenetic signal in primate tooth enamel proteins and its relevance for paleoproteomics. *Genome Biology and Evolution*, p.evaf007. <https://doi.org/10.1093/gbe/evaf007>

Hama, H.O., Boualam, M., Armengaud, J., Drancourt, M., Aboudharam, G., Bălăşescu, A. and Radu, V., 2025. Diagnosing plague in 17th century camelids from Romania: unmasking role of camelids in plague dissemination along historical Silk Routes. *Journal of Infectious Diseases*. In press. <https://hal.science/hal-04991715/>

Harvey, V.L. and Hendy, J., 2025. SP3 protocol optimised for foodcrust protein extraction from archaeological cooking vessels. *protocols.io* (PROTOCOL) dx.doi.org/10.17504/protocols.io.e6nvwb22wvmk/v1

Kitagawa, K., Burger-Völlmecke, D., Brown, S., Olsen, J. and Riede, F., 2025. Paleolithic occupations in the Lahn Valley of Central Germany: New dating and ZooMS results from Wildscheuer, Wildweiberlei, and Wildhaus. *Journal of Archaeological Science: Reports*, 61, p.104951.

<https://doi.org/10.1016/j.jasrep.2024.104951>

Kotli, P., Morgenstern, D., Nagar, Y., Katina, C., Arbiv, K. and Boaretto, E., 2025. Sexing remains of a Byzantine ascetic burial using enamel proteomics. *Journal of Archaeological Science: Reports*, 62, p.104972. <https://doi.org/10.1016/j.jasrep.2025.104972>

Madupe, P.P., Munir, F., Dickinson, M., Taurozzi, A.J., Mackie, M., Tawane, M., Mollereau, C., Hlazo, N., Penkman, K., Schroeder, L. and Zanolli, C., 2025. Results from an *Australopithecus africanus* dental enamel fragment confirm the potential of palaeoproteomics for South African Plio-Pleistocene fossil sites. *South African Journal of Science*, 121(1/2).

<https://www.ajol.info/index.php/sajsci/article/view/288134>

Miller, B.M., 2024. Investigating Unangax̂ Whaling in the Aleutian Islands Using Stable Isotope, Zooarchaeology by Mass Spectrometry & Ancient DNA Techniques. State University of New York and Binghamton. (MASTER THESIS).
<https://www.proquest.com/openview/5665f09b3f9bef9be04e50c46e291a11/1?pq-origsite=gscholar&cbl=18750&diss=y>

Oliver, K.A., 2025. Exploring Pentlatch Fisheries (ca. 1695–935 cal BP): Insights from Zooarchaeology and Biomolecular Analyses. Simon Fraser University. (MASTER THESIS)
<https://theses.lib.sfu.ca/file/thesis/etd23670-kristinashley-oliver-oliver-exploring-pen.pdf>

Proceedings 2.0 of the "Omics & Heritage: Metagenomes and Microbiomes for the Study of Cultural Heritage Conservation and Archaeology" Workshop, Rome on 14th-15th May 2024, p. xi (WORKSHOP BOOKLET) <https://zenodo.org/records/14852774>

Rangel-Pineros, G., Ramsøe, M., Kasso, T., Rasmussen, J.A., Vilhelmsen, L., Jensen, A.B., Kryger, P., Taurozzi, A.J., Collins, M.J. and Carøe, C., 2025. Honeybee brood metagenomics uncovers genomic diversity of modern and historical *Paenibacillus larvae*. *AUTHOREA*. (PREPRINT)
<https://doi.org/10.22541/au.174019158.88600607/v1>

Raymond, P., Ruebens, K., Bray, F., Castel, J.C., Morin, E., Le Brun-Ricalens, F., Bordes, J.G., Rolando, C. and Hublin, J.J., 2025. Using MALDI-FTICR Mass Spectrometry to Enhance ZooMS Identifications of Pleistocene Bone Fragments Showing Variable Collagen Preservation. *Rapid Communications in Mass Spectrometry*, p.e10019. <https://doi.org/10.1002/rcm.10019>

Samper Carro, S., 2025. Shotgun proteomics for archaeological bone material - in solution protocol for bone samples from tropical sites. *protocols.io* (PROTOCOL)
dx.doi.org/10.17504/protocols.io.81wgbrjn1lpk/v1

Tafani, A., Greco, E., Tykot, R.H., Barbieri, P., Gaspari, M., Gabriele, C., Toma, A., Culea, M., Manea, B., Darie, A. and Opriș, V., 2025. Decoding KGK VI Population Movements: Strontium Isotope and Proteomic Insights from the Gumelnița Site (Romania). *Research Square*. (PREPRINT)
<https://doi.org/10.21203/rs.3.rs-5693728/v1>

Tang, T.T., 2024. Performance of Proteomic Sex Estimation by Amelogenin in the Arid Environments of Mesopotamia and the Nile Valley. University of California, Davis. (MASTER THESIS)
<https://escholarship.org/uc/item/07s3p723>

Viñas-Caron, L.C., Brandt, L.Ø. 2025. Clothomics: a practical guide to understand the opportunities and challenges of omics-based methods in archaeological cloth research. *npj Herit. Sci.* 13, 80.
<https://doi.org/10.1038/s40494-025-01623-z>

Welker, F., Ásmundsdóttir, R.D., Mylopotamitaki, D., Torres-iglesias, L., Villa-islas, V., Le Meillour, L. and Fagernäs, Z., 2025. What's in a Name? Late Middle and Early Late Pleistocene Hominin Systematics Paleoproteomic Contributions, and Current Limitations, to Understanding Middle and Late Pleistocene Human Evolution. *PaleoAnthropology*, p.2.

<https://www.paleoanthropology.org/ojs/index.php/paleo/libraryFiles/downloadPublic/32>

Is there some publication you are missing in this list? Let the community know in the #papers Element channel (info how to join Element in footer).

Job opportunities

4-year postdoctoral position at University of Vienna: Postdoctoral Research at the Department of Evolutionary Anthropology. More details [here](#).

Is there some job advertisement you are missing in this list? Let the community know in the #jobs Element channel (info how to join Element in footer).

Updates from community projects

There are several teams working on different aspects to help improve the study of ancient proteins. Do you work on interesting projects inside or even outside PAASTA and want to let others know or ask for help? Let us know via [E-Mail!](#)

Targeted databases for LC-MS/MS Team

The group will resume their meetings. So if you want to join, have a look at the #Database hosting channel in Element.

ZooMS marker database Team

Here you find the [readme](#) and the [mailing list](#).

White paper Team

The paper has been submitted and a preprint is available [here](#). The white paper is an opinion paper about how open science, communication and collaboration can move our field forward. The team would love opinions and feedback!

Stay connected

- Sign up to our [PAASTA mailing list](#), if you haven't yet!
- Our [website](#)
- Join our [Element space](#) (alternative to Slack)
- E-Mail us: paasta.community@gmail.com
- Speaker [sign-up form](#) for PAASTA talk series
- [YouTube](#) 
- [Twitter \("X"\)](#) 
- [BlueSky](#) 

This newsletter was composed by Johanna Krueger.

The PAASTA Community is an affiliate of The International Society for Biomolecular Archaeology (ISBA), a Charitable Incorporated Organisation registered in England. ISBA provides infrastructural and financial support of the student-led activities of PAASTA.