



Palaeoproteomics And Archaeology, Society for Techniques and Advances

**4/2025**

**Dear PAASTA community,**

Welcome to the fourth newsletter of 2025! Our community is full of new ideas and exciting projects that we discussed at our first in-person conference this August. Thus, there are some new rooms in our [Element space](#). Just click the little “+” button on the right of the “Rooms” header and you will find an option to explore them.

Most importantly though, we are about to have a new steering committee and you can be part of it! The deadline for self nominations has been extended until **October 15<sup>th</sup>**. Read more below.

As always, 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](mailto:paasta.community@gmail.com).

## Upcoming Events

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| October 14 <sup>th</sup> -17 <sup>th</sup>  | ICAZ Archaeozoology, Genetics, Proteomics and Morphometrics ( <a href="#">AGPM</a> ) working group meeting in Copenhagen                |
| December 15 <sup>th</sup> -17 <sup>th</sup> | Theoretical Archaeology Group ( <a href="#">TAG</a> ) meeting in York, Early bird registration is open until October 31 <sup>st</sup> . |

*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](mailto:paasta.community@gmail.com).*

## What's new?

### Creation of our new steering committee

The deadline for self-nominations for the Steering Committee has been extended, and is now **October 15<sup>th</sup>**! As a reminder, you can find the short form for self-nominations [here](#) and a description of most roles [on our website](#). There are a couple of roles that lack a description there, as they have previously not been filled or have been enveloped into other roles, so here is an outline of them instead:

- *Webmaster* - main responsibility is maintenance and updating of our website.
- *Treasurer* - as we may have a small budget available in the upcoming year, this role will keep track of our budget and spending.

Additionally, all members of the Steering Committee take part in making decisions and organizing things for the community. It is a wonderful opportunity to get involved in the future directions of PAASTA, and help make the wishes and ideas from the community become reality!

Please let us know if you have any questions. You can either contact someone on the current Steering Committee or [Ismael Rodríguez Palomo](#), who is overseeing the formation of the new Steering Committee.

### ISBA11 and PAASTA pre-ISBA conference

On the 26<sup>th</sup> of August 2025, right before the beginning of the ISBA11 conference, we held our first in-person PAASTA event. Participants attended, in person and online. In the first part of the meeting early-stage researchers presented their projects. In the second part, we held the Annual General Meeting (the minutes were sent via the PAASTA mailing list). Most importantly, the upcoming election of a new steering committee was announced.

[Poster abstracts](#) of the posters presented at the ISBA11 conference are available online. A considerable number mentions palaeoproteomic methods in their abstracts. You will find 70 matches to “palaeoproteomic” and 22 matches to “paleoproteomic”.

## Updates from community projects

<b>Targeted databases for LC-MS/MS</b>	<b>ZooMS Marker Database</b>	<b>ZooMS blind test</b>
<b>White Paper</b>	<b>Metadata Standards</b>	<b>PAASTA winter school</b>

This quarter the community has started three new community projects, PAASTA online winter school, Metadata Standards, and the ZooMS blind test.

### White paper

The [white paper](#) is now officially published in the Peer Community Journal!

### ZooMS blind test

This project is testing the variability of ZooMS results between labs. As of now, at least 16 labs are taking part in a blind test, in which the same sample will be analyzed in all participating labs. If you are interested in this, please reach out to Sam Brown or join the Element room #ZooMS blind test.

## Metadata

The SDRF (Sample and Data Relationship Format) proteomics metadata file is not suitable for palaeoproteomics samples, thus the Palaeoproteomics community needs something new that is adoptable and usable for everyone. You can join this new project in the element room #Metadata.

## PAASTA winter school

This team plans to organize an online winter school, probably held this winter. Soon there will be first organisational meetings. So if you want to join, go to the element room #PAASTA Winter School.

*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 [email](#)!*

## New Publications

Abrams, G., Auguste, P., Pirson, S., De Groote, I., Halbrucker, É., Di Modica, K., Pironneau, C., Dedrie, T., Meloro, C., Fischer, V. and Bocherens, H., 2025. **Earliest evidence of Neanderthal multifunctional bone tool production from cave lion (*Panthera spelaea*) remains.** *Scientific Reports*, 15(1), p.24010. <https://doi.org/10.1038/s41598-025-08588-w>

Beatrice, J.S., Bonneau, N.E. and Leader, G.M., 2025. **A probable malignant neoplasm in an adolescent male from the historic First Baptist Church of Philadelphia burial ground (1722–1859, USA).** *International Journal of Paleopathology*, 51, pp.25-34. <https://doi.org/10.1016/j.ijpp.2025.09.001>

Bonucci, B., de-Dios, T., Barbieri, R., Thompson, J.E., Panella, S., Radina, F., Sivilli, S., Kabral, H., Solnik, A., Tafuri, M.A. and Robb, J., 2025. **Ancient microbial DNA and proteins preserve in concretions covering human remains.** *iScience*, 28(8). <https://doi.org/10.1016/j.isci.2025.113182>

Bray, F. and Touzet, H., 2025. **PAMPA: a software for peptide markers and taxonomic identification for ZooMS samples in Archaeology and Paleontology.** *Journal of Proteome Research*. <https://doi.org/10.1021/acs.jproteome.5c00389>

Burnett, A., Halbrücker, É., Engels, I., Dennis, R.S., De Groote, I., Deforce, D., Cristiani, E., Crombé, P. and Dhaenens, M., 2025. **Palaeoproteomics reveals bovine carcass processing with 6,000-year-old flint tools.** *bioRxiv*. <https://doi.org/10.1101/2025.09.29.679186> (PREPRINT)

Cleland, T.P., Newsome, G.A., Birdsall, E.R., Lam, T., Nance, J.R. and Hazen, R.M., 2025. **Protein and chitin preservation in polymeric sheets in Miocene *Ecphora gardnerae* shells from Maryland, USA.** *Acta Palaeontologica Polonica*, 70(3), pp.507-516. <https://doi.org/10.4202/app.01201.2024>

Codlin, M.C., Yeomans, L., Stiller, J. and Demarchi, B., 2025. **A library of avian proteins improves palaeoproteomic taxonomic identification and reveals widespread intraspecies variability.** *Nat Commun*, 16, 8820. <https://doi.org/10.1038/s41467-025-63886-1>

de-Dios, T., Bonucci, B., Barbieri, R., Kushniarevich, A., D'Atanasio, E., Dittmar, J.M., Cessford, C., Solnik, A., Robb, J.E., Warinner, C. and Oras, E., 2025. **Bone adhered sediments as a source of target and environmental DNA and proteins.** *Molecular Biology and Evolution*, p.msaf202., <https://doi.org/10.1093/molbev/msaf202>

Dong, J., Zhu, Z., Li, X., Zhou, P., Lan, D. and Huang, J., 2025. **Comparative analysis and optimization of proteomic information mining approaches for proteinaceous binders in painted artifacts.** *npj Heritage Science*, 13(1), p.422. <https://doi.org/10.1038/s40494-025-02002-4>

Duval, M., Martín-Francés, L. and Wood, R., 2025. **On the impact of micro-CT scanning on radiocarbon dating of fossil material: A cautionary note for the palaeoanthropological community and beyond.** *Radiocarbon*, 67(4), pp. 709–718. <https://doi.org/10.1017/RDC.2025.23>

Eerkens, J.W., Panich, L.M., Canzonieri, C. and Zimmer, C. eds., 2025. **Native Persistence at a California Mission Outpost: The Bioarchaeology and History of the Asistencia de San Pedro Y San Pablo.** *University Press of Florida*. ISBN 1683405234, 9781683405238  
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Kasso, T., Mackie, M., Ramsøe, M., Vilhelmsen, L., Gundlach, C., Baier-Stegmaier, S., Taurozzi, A.J. and Collins, M.J., 2025. **A queen's tale: An experimental palaeoproteomic study of a honey bee queen cell specimen from Natural History Museum Denmark.** *Open Research Europe*, 4, p.227.  
[10.12688/openreseurope.18538.2](https://doi.org/10.12688/openreseurope.18538.2)

Keenan Early, E.M., Bell, C.J., Collins, M.J. and Shanahan, T.M., 2025. **Proteomic analysis resulting in species-level identification of recently diverged North American arvicoline rodents.** *Journal of Quaternary Science*. <https://doi.org/10.1002/jqs.70011>

Khan, J., 2025. **FOSSIL RECORD OF ANCIENT FAUNAS: INSIGHTS FROM PALEOZOOLOGY AND GEOLOGY.** *Annual Methodological Archive Research Review*, 3(5), 212-222. <https://doi.org/10.63075/x3xh5z09>

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Schmidt Schultz, T.H. and Schultz, M., 2025. **Identification of typical marker proteins of *Treponema pallidum* in compact human bone using morphological and biochemical techniques.** *Scientific Reports*, 15(1), p.28743. <https://doi.org/10.1038/s41598-025-12970-z>

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Tanasi, D., Micciché, R., Tykot, R.H., Buseti, L., Barbieri, P., Di Maida, G., Ardesia, V., Miani, A., Marin, E. and Greco, E., 2025. **Unearthing prehistoric diets: First evidence of horse meat consumption in Early Bronze Age Sicily.** *PloS one*, 20(8), p.e0330772. <https://doi.org/10.1371/journal.pone.0330772>

Tøttrup, A.P., Lillemark, M.R., Hansen, J., Svendsen, S.H., Hickinbotham, S., Toftdal, M., Juhl, H.A., Ravensborg, T., Jensen, O.N. and Brandt, L.Ø., 2025. **A Concept for Co-Creation in Participatory Science: Insights From Developing the Archaeological Next Generation Lab.** *Citizen Science: Theory and Practice*, 10(1). DOI: 10.5334/cstp.832

Vašicová, S., **Proteomic sex identification of non-adults from the Dětkovice cemetery (11th c. CE, Moravia).** [https://is.muni.cz/th/q1uow/Vasicova\\_Simona\\_Bachelor\\_thesis\\_Archive.pdf](https://is.muni.cz/th/q1uow/Vasicova_Simona_Bachelor_thesis_Archive.pdf) (BACHELOR THESIS)

Vojáčková, K., Zpřesnění odhadu pohlaví pomocí paleoproteomiky: propojení poznatků a přenos praxe. (Translation: **"Refining sex estimation using paleoproteomics: integrating knowledge and transferring practice"**) [https://is.muni.cz/th/n6sl6/bp\\_vojackova\\_FINAL.pdf](https://is.muni.cz/th/n6sl6/bp_vojackova_FINAL.pdf) (BACHELOR THESIS IN ENGLISH LANGUAGE)




Wiltzsch, V., Schmidt, J.R., Adamowicz, K., Lauterbach, T., Lehmann, J., Baumbach, J., Laske, T. and Kalkhof, S., 2025. **Systematic Comparison of Bone Proteome Extraction Methods to Allow for Integrated Proteomics–Metabolomics Correlation.** *Journal of Proteome Research*. <https://doi.org/10.1021/acs.jproteome.4c01060>

Zhai, K., Zhang, B., Zhu, L., Zheng, H., Liu, J., Zhang, D., Sun, X., Dode, Z., Ma, M. and Zhang, Q., 2025. **Rapid detection of aged collagen in archaeological residues using immunosorbent assay.** *Journal of Archaeological Science*, 181, p.106339. <https://doi.org/10.1016/j.jas.2025.106339>

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*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).*

## Stay connected

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

*This newsletter was composed by Johanna Krueger.*

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