

Lecture series "Current Topics in Heritage Science" of the IPERION HS Academy

Prof. Sahra Talamo

Title

Timing the spread of creative innovations by Homo sapiens and Neanderthals using the radiocarbon dating method.

January 19th, 2023

Publications:

- 1) Talamo, S., W. Nowaczewska, A. Picin, A. Vazzana, M. Binkowski, M. D. Bosch, S. Cercatillo, M. Diakowski, H. Fewlass, A. Marciszak, D. Paleček, M. P. Richards, C. M. Ryder, V. Sinet-Mathiot, G. M. Smith, P. Socha, M. Sponheimer, K. Stefaniak, F. Welker, H. Winter, A. Wiśniewski, M. Żarski, S. Benazzi, A. Nadachowski and J.-J. Hublin (2021). "A 41,500 year-old decorated ivory pendant from Stajnia Cave (Poland)." *Scientific Reports* 11(1): 22078. <https://doi.org/10.1038/s41598-021-01221-6>
- 2) Talamo, S., H. Fewlass, R. Maria and K. Jaouen (2021). "'Here we go again': the inspection of collagen extraction protocols for 14C dating and palaeodietary analysis." *STAR: Science & Technology of Archaeological Research* 7(1): 62-77. <https://doi.org/10.1080/20548923.2021.1944479>
- 3) Bocherens, H., Jaouen, K., Rivals, F., Slon, V., Talamo, S., & Welker, F. (2022). Chapter 16 - Methodological advances in Neanderthal identification, phylogeny, chronology, mobility, climate, and diet. In F. Romagnoli, F. Rivals, & S. Benazzi (Eds.), *Updating Neanderthals* (pp. 303-320): Academic Press.
- 4) Hajdinjak, M., F. Mafessoni, L. Skov, B. Vernot, A. Hübner, Q. Fu, E. Essel, S. Nagel, B. Nickel, J. Richter, O. T. Moldovan, S. Constantin, E. Endarova, N. Zahariev, R. Spasov, F. Welker, G. M. Smith, V. Sinet-Mathiot, L. Paskulin, H. Fewlass, S. Talamo, Z. Rezek, S. Sirakova, N. Sirakov, S. P. McPherron, T. Tsanova, J.-J. Hublin, B. M. Peter, M. Meyer, P. Skoglund, J. Kelso and S. Pääbo (2021). "Initial Upper Palaeolithic humans in Europe had recent Neanderthal ancestry." *Nature* 592(7853): 253-257. <https://doi.org/10.1038/s41586-021-03335-3>
- 5) Lugli, F., G. Sciutto, P. Oliveri, C. Malegori, S. Prati, L. Gatti, S. Silvestrini, M. Romandini, E. Catelli, M. Casale, S. Talamo, P. Iacumin, S. Benazzi and R. Mazzeo (2021). "Near-infrared hyperspectral imaging (NIR-HSI) and normalized difference image (NDI) data processing: An advanced method to map collagen in archaeological bones." *Talanta* 226: 122126. <https://doi.org/10.1016/j.talanta.2021.122126>
- 6) Fewlass, H., S. Talamo, L. Wacker, B. Kromer, T. Tuna, Y. Fagault, E. Bard, S. P. McPherron, V. Aldeias, R. Maria, N. L. Martisius, L. Paskulin, Z. Rezek, V. Sinet-Mathiot, S. Sirakova, G. M.

- Smith, R. Spasov, F. Welker, N. Sirakov, T. Tsanova and J.-J. Hublin (2020). "A 14C chronology for the Middle to Upper Palaeolithic transition at Bacho Kiro Cave, Bulgaria." *Nature Ecology & Evolution* <https://doi.org/10.1038/s41559-020-1136-3>
- 7) Hublin, J.-J., N. Sirakov, V. Aldeias, S. Bailey, E. Bard, V. Delvigne, E. Endarova, Y. Fagault, H. Fewlass, M. Hajdinjak, B. Kromer, I. Krumov, J. Marreiros, N. L. Martisius, L. Paskulin, V. Sinet-Mathiot, M. Meyer, S. Pääbo, V. Popov, Z. Rezek, S. Sirakova, M. M. Skinner, G. M. Smith, R. Spasov, S. Talamo, T. Tuna, L. Wacker, F. Welker, A. Wilcke, N. Zahariev, S. P. McPherron and T. Tsanova (2020). "Initial Upper Palaeolithic Homo sapiens from Bacho Kiro Cave, Bulgaria." *Nature* 581(7808): 299-302. <https://doi.org/10.1038/s41586-020-2259-z>
- 8) Haws, J. A., M. M. Benedetti, S. Talamo, N. Bicho, J. Cascalheira, M. G. Ellis, M. M. Carvalho, L. Friedl, T. Pereira and B. K. Zinsious (2020). "The early Aurignacian dispersal of modern humans into westernmost Eurasia." *Proceedings of the National Academy of Sciences*: 202016062. <https://doi.org/10.1073/pnas.2016062117>
- 9) Balzeau, A., A. Turq, S. Talamo, C. Daujeard, G. Guérin, F. Welker, I. Crevecoeur, H. Fewlass, J.-J. Hublin, C. Lahaye, B. Maureille, M. Meyer, C. Schwab and A. Gómez-Olivencia (2020). "Pluridisciplinary evidence for burial for the La Ferrassie 8 Neandertal child." *Scientific Reports* 10(1): 21230. <https://doi.org/10.1038/s41598-020-77611-z>
- 10) Talamo, S., V. Aldeias, P. Goldberg, L. Chiotti, H. L. Dibble, G. Guérin, J. J. Hublin, S. Madelaine, R. Maria, D. Sandgathe, T. E. Steele, A. Turq and S. J. P. McPherron (2020). "The new 14C chronology for the Palaeolithic site of La Ferrassie, France: the disappearance of Neanderthals and the arrival of Homo sapiens in France." *Journal of Quaternary Science* n/a(n/a). <https://doi.org/10.1002/jqs.3236>