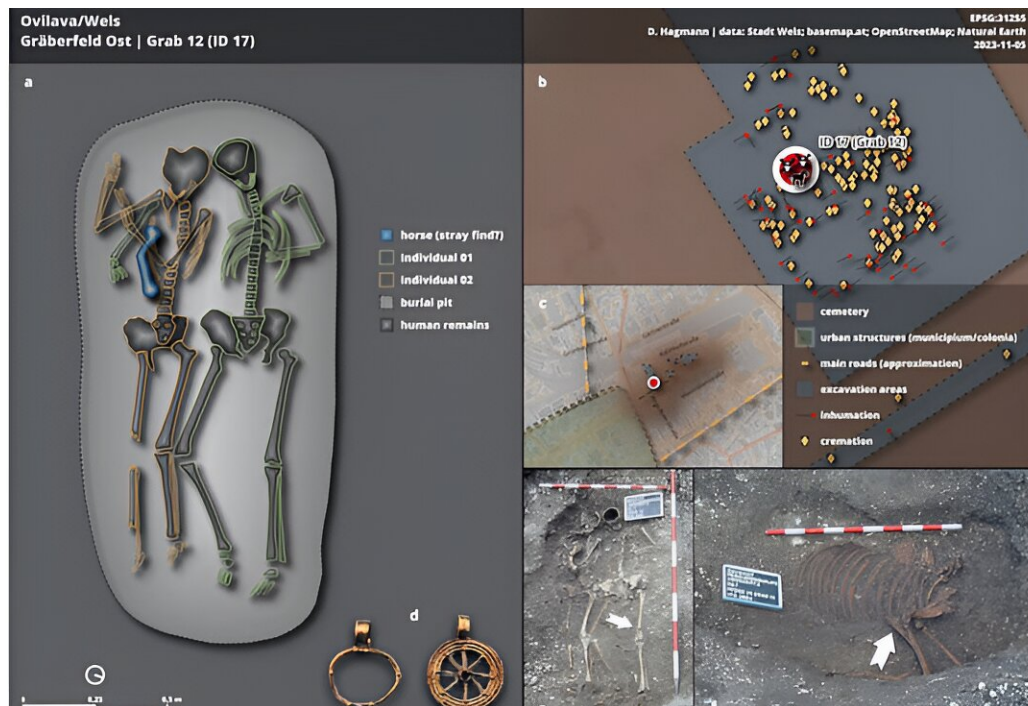


First mother-daughter burial from Roman times in Austria discovered

May 3 2024



Visualization of the findings – a: double burial; b and c: location within the burial ground; d: 2 gold pendants, found as grave goods; e: Documentary photo of the two individuals; f: Documentation photo of the horse (data: City of Wels, basemap.at, OpenStreetMap, Natural Earth). Credit: Dominik Hagmann, 2024

When a grave was discovered in Wels 20 years ago, the find was thought to be an early medieval double burial of a married couple and a horse due to its unusual features. Only now could the biological gender and

family relationships of those buried be clarified using the most modern archaeological technologies.

Under the leadership of anthropologist Sylvia Kirchengast and archaeologist Dominik Haggmann from the University of Vienna, the scientists also managed to date the grave to the 2nd to 3rd century AD. The results are [published](#) in the *Journal of Archaeological Science: Reports*.

In 2004, an extraordinary grave was discovered during construction work in the area of the so-called eastern burial ground of the ancient Roman city of Ovilava—today's Wels in Upper Austria.

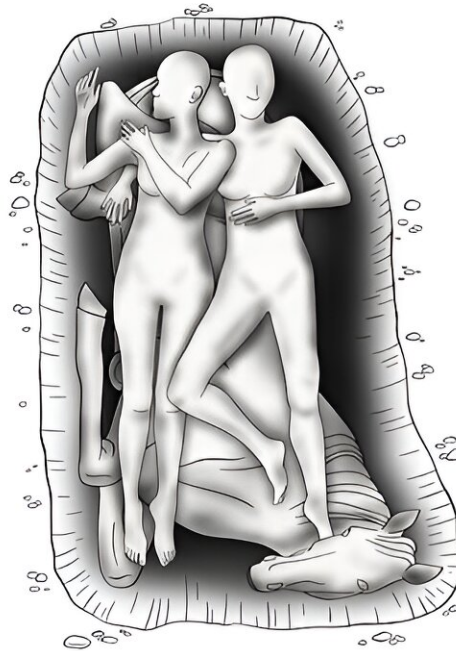
The grave contained the remains of two people embracing and at least one horse. Due to these unusual features, the find was initially thought to be an early medieval double burial.

A comprehensive new investigation, in which the most modern bioarchaeological and archaeogenetic methods were used, revealed surprising findings: the grave is 500 years older than previously thought, it dates from the 2nd to 3rd centuries CE and can therefore be assigned to Roman antiquity in Austria.

"In Roman times, burials in which people were buried next to horses were very rare. But what is even more extraordinary is that this is the first burial from Roman antiquity in Austria in which, through [genetic analysis](#), a biological mother and her biological daughter, who were also buried at the same time, could be clearly identified. This makes our results particularly exciting," explains Dominik Haggmann, lead author of the study.



Documentary photo of the two individuals at the time of their uncovering.
Credit: Wels City Museum



Artistic reconstruction of the combined human-animal burial, illustrating how the bodies may have originally been laid on the carcass before the burial pit was filled. Credit: Jona Schlegel, 2024

Osteological studies and ancient DNA (aDNA) analysis revealed the biological sex and also suggested a familial connection between the two human individuals. Radiocarbon dating ultimately enabled a more precise temporal classification of both the human and horse skeletons.

The detailed examination of the golden grave goods further enriched the understanding of the new dating of the site, just as archaeozoological studies of the buried horse expanded the understanding of the entire burial context.

"In summary, our investigations showed that the burial was of two biological women—probably a mother aged around 40 to 60 and her

daughter aged around 20 to 25—from the second and third centuries. "The [grave](#) is around 500 years older than initially assumed and clearly dates from Roman times," says study director Sylvia Kirchengast.

The exact background of the double burial is not clear, the scientists' theory is that both may have died of an illness at the same time and, according to a tradition from the late Iron Age, were buried together with their horse—the [older person](#) has skeletal features that indicate frequent riding could.

Ultimately, this study shows the enormous potential that the application of modern, scientific methods in combination with traditional research approaches offers for archaeology in Roman Austria.

More information: D. Haggmann et al, Double feature: First genetic evidence of a mother-daughter double burial in Roman period Austria, *Journal of Archaeological Science: Reports* (2024). [DOI: 10.1016/j.jasrep.2024.104479](#)

Provided by University of Vienna

Citation: First mother-daughter burial from Roman times in Austria discovered (2024, May 3) retrieved 18 May 2024 from <https://phys.org/news/2024-05-mother-daughter-burial-roman-austria.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.