38 . Jucu De Sus | Județ: Cluj | Punct: Parcul industrial TETAROM III | Anul: 2018

Anul: 2018

Cod RAN: 58268.05 Perioade: Evul Mediu

Epoci: Epoca medievală timpurie **Tipuri sit:** descoperire izolată **Categorii sit:** Domestic

Autori: Ioan Stanciu, Katie Tucker, Jordan Snyder, Megan Oliverson, Kori-Lea Filipek, Liam Lanigan,

Matthew Crowther, Brianna Gardner, Kathleen Rice

Instituții: Institutul de Arheologie și Istoria Artei, Cluj-Napoca, University of Winchester, University of Durham, UK, University of Durham, UK, Center for Geogenetics, Copenhaga,

University of Durham, UK, University of Durham, UK, University of Durham, UK

Rezumat

În cadrul "Jucu Project" ("Jucu – cercetări arheologice și bioarheologice"), colaborare între Institutul de Arheologie și Istoria Artei Cluj-Napoca (Academia Română) și "Transylvania Bioarchaeology", a fost continuată în Campania 2018 investigarea celor două necropole medieval timpurii (sec. VIII-IX și XI-XII). Au fost identificate și integral cercetate alte șase morminte de inhumație din cimitirul mai recent (cu numerele 36-41), alături de alte trei complexe, mai probabil databile în epoca romană. Dintre acestea, mai interesant este cel cu numărul 252, o structură ușor adâncită în raport cu vechiul nivel de călcare, în legătură fost descoperite câteva stâlpi. cu care au şi gropi de

Raport

Project Background

The site of Jucu de Sus is located 21 km north east of Cluj-Napoca and is situated on the floodplain, 500 m north west, of the Someşul Mic River. The site was identified and partially excavated in 2007 prior to the construction of the Nokia industrial park (the site is now occupied by a solar farm). The excavation identified a Roman period villa rustica, an 8 th century settlement, limited evidence for the location of an 11th-12th century settlement, and a cemetery that partially overlay and cut through the walls of the Roman buildings. Fifty-seven inhumation burials were excavated from the cemetery that are thought, on the basis of the associated artefacts (copper alloy and iron earrings), to be associated with the 11th-12th century settlement, although human remains associated with the 8th century settlement were also identified, in the form of thirteen cremation burials, both urned and un-urned, which appeared to be located around the periphery of the inhumation cemetery. It is estimated that around 1000 burials remain to be excavated from the site and it is possible that some of the burials are associated with the 8th - 9th century settlement, as well as the Roman villa (Diana and Mester 2013; Illsley 2013, Stanciu 2014 a,b). A preliminary analysis was undertaken of the inhumation burials, which identified individuals belonging to all age groups from infant to mature adult, and both males and females. A number of pathological conditions were also identified, including dental disease, degenerative joint disease, metabolic disease, infectious disease and trauma (Diana and Meşter 2013).

The 2014-17 seasons of excavation have recovered the remains of thirty-one inhumed individuals and three cremations (Tucker 2014, 2015, 2016, 2017). The skeletal analysis of these has been underway since the 2014 season. The re-analysis of the remains from the 2007 excavation has also been in progress since the 2015 season, although a large number of the individuals known to have been excavated and included in the preliminary skeletal analysis (Diana and Meşter 2013) are currently missing.

The Site

The aims of the 2018 season, revised since writing of the 2017 site report, were to excavate square A-1, which was completely unexcavated and complete the excavation of squares B-1 and C-1, in which a small extension had been excavated in 2015. The turf had been removed from these squares in 2017 but time constraints meant that no further excavation was carried out. Time permitting, it was also intended to excavate square C-2 to determine if the southern boundary of the cemetery could be located (there were no burials found during the groundworks for the building that is located approximately 10 m to the south of square C-2). As was the case in 2017, on arriving at site, the limits of excavation of squares Z2 to Z0 (excavated in 2017) and squares A1, A0, B1 and B0 (excavated in 2015) were clearly visible and these were used to mark out the new excavation area.

By the end of the 2018 excavation season, the three grid squares A-1, B-1 and C-1, plus a 0.5 m (N-S0 by 2m (E-W) extension into square C-2, a 0.5m (N-S) and 2.5 m (E-W) extension into square C0, and a 0.6 m (N-S) by 0.3m (E-W) extension into square D-1, undertaken to fully expose features, had been completely excavated. The turf was also removed from square C-2, although no further excavation was undertaken. It has not been possible to excavate in square Z-1 for the last two seasons because of a large pile of metal scrap.

The temporary bench mark established in 2016 on the north-east corner of the large storage building to the south of the excavation area, with an arbitrary height of 285m above sea-level, was reused again this season. During the final week of the season, it was established by GPS that the TBM is 284.97 m, so it is again possible to include heights above sea-level in the report. The arbitrary heights recorded in 2016 and 2017 have also been corrected and these will be included in any future publication of the excavation. The corners of the 2018 excavation area were also recorded by GPS, meaning that it will be finally possible to correctly align the plans from the current excavation with those from 2007.

Site Narrative

The whole area of the excavation was covered in a turf of no more than 2 cm thickness with the ground surface varying from 284.23m above sea-level at the north side of square A- 1,284.34 m at the south side of square A-1, 284.42 m at the south side of square C-1 and 284.55 m at the east side of square C-1. This covered a thin (approx. 0.05 m), dark brownish grey clayey silt topsoil (250). Under the topsoil was a mid brownish grey clayey silt layer (260), with moderate inclusions of gravel, sandstone and tile fragments and flecks, and finds of pottery, animal bone and brick/tile and iron nails. This layer was identified in 2014 as a Roman occupation layer associated with the villa rustica, although as this layer filled the Roman building excavated this season (see below), it is more likely to be associated with the abandonment phase of the villa. All of the features, with the exception of this building, cut through this layer, which was 0.15 m - 0.20 m thick. It was very difficult to see cut-features in this layer and therefore all identified features were horizontally truncated to some degree in the course of excavation. This layer overlay a mid brownish grey sandy silt, completely devoid of archaeological material, that probably represents an alluvial deposit. Although no top and base levels for this deposit were recorded, it was noted as being much thicker towards the east side of the excavation, with the base of features in square C-1 cutting into but not through it. In square A-1, the base of features cut into the deposit below, which was composed of loose sand, gravel and pebbles.

Ten features were excavated during this season, comprising six single inhumation graves, a possible grave that extended into the unexcavated square D-1, a possible inhumation grave excavated in 2007, a pit building with five post-holes, and the extension into squares B-1 and C-1 of the 2015 excavation trench. These features are described below:

Inhumation Graves

Burial 36 (in the north-east corner of square A-1)

The grave cut [257] was a sub-rectangular feature with rounded corners, with the east end being disturbed by animal burrowing. The sides were steep to near vertical and the base was irregular and sloping towards the north, with a height of 283.98 m to the south and 283.91 m in the middle of the base. It was

orientated slightly southwest to northeast, with a length of 1.20 m, a width of 0.60m and a surviving depth of 0.25 m. The grave fill (258) was a mid brownish grey clayey silt with patches of mid yellowish brown silty clay, with inclusions of tile and sandstone fragments and flecks, and river gravel, and finds of pottery (including fragments of cremation urns), burnt human bone, and brick/tile. The non-adult skeleton (SK259) was orientated with their head at the west end of the grave and was supine and extended with the arms by the sides of the body. The skeleton was relatively well preserved although there was animal disturbance of the torso and right arm. The cranium was at a height of 284.09 m, with the feet at 283.98 m.

Burial 37 (in the west of square C-1)

The grave cut [261] was a sub-rectangular feature with rounded corners. The sides were vertical apart from the west end, which was moderately sloped, and the base was flat but disturbed by animal burrows, with a height of 284.04 m. It was orientated west-east with a length of 1.88 m, a width of 0.70 m and a surviving depth of 0.20 m. The grave fill (262) was a mid brownish grey clayey silt with inclusions of tile and sandstone fragments and flecks and river pebbles, and finds of rodent bones. The adult skeleton (SK263) was orientated with their head at the west end of the grave and was supine and extended with the arms by the side of the body. The cranium, pelvis, arms and legs were relatively well preserved although the torso was poorly preserved and had been disturbed by rodent burrowing. The cranium was at a height of 284.18 m, with the feet at 284.10 m. There was a copper alloy earring (SF16) found on the left side of the cranium (Figure 3), with a second (SF17) found on the right side. The very poorly preserved remains of a third copper alloy earring (SF18) were found to the right of the mandible.

Burial 38 (in the east of square C-1)

The grave cut [264] was a sub-rectangular feature with rounded corners to the west. The east end of the cut extended under the eastern limit of excavation and was not excavated. The north and south sides were partly vertical and partly moderately sloped with the west end also being moderately sloped to the south and with a moderately sloped to vertical step to the north. The base was flat and slightly sloped towards the west, with heights of 284.11 m at the east and 284.04 m at the west. It was orientated slightly south-west to north-east with a length of 1.78 m, a width of 0.66 m and a surviving depth of 0.11 cm. The grave fill

(265) was a mid greyish brown clayey silt with patches of mid yellowish brown silty clay with inclusions of sandstone and tile fragments and flecks. The adult skeleton (SK266) was supine and extended with their head at the west end of the grave and the arms by the sides of the body. The preservation of the torso was poorer than the rest of the skeleton, although a number of vertebrae and ribs did survive. The cranium was at a height of 284.22 m, with the feet at 284.19 m. During post- excavation cleaning of the skeleton, a copper alloy earring (SF19) was found on the left side of the cranium.

Burial 39 (in the north of square C-1)

The grave cut [267] was an oval feature, with disturbance of parts of the north and south sides by animal burrowing. The sides were near vertical and the base was flat and slightly sloping to the north- east, with a height of 284.02 m. It was orientated west-east with a length of 1.15 m, a width of 0.54 m and a surviving depth of 0.10 m. The grave fill (268) was a mid brownish grey clayey silt with inclusions of tile and sandstone fragments and flecks and river gravel. The very poorly preserved non-adult skeleton (SK269), with only parts of the cranium and lower limbs present, was supine and extended with their head at the west end of the grave and had possibly been disturbed by animal burrowing. The cranium was at a height of 284.18 m, with the femur at 284.10 m.

Burial 40 (in the south of square C-1)

The grave cut [271] was a sub-rectangular feature with rounded corners, with part of the north edge being disturbed by animal burrowing. The sides are vertical with steeply sloping to vertical steps at the west end, north-west side, east end (the upper edge of the outer step is outside the eastern limit of excavation and was not excavated) and south-east side. The base is flat and slightly sloping to the west, with heights of 283.95 m at the east end and 283.92 m at the west end. It was orientated slightly south-west to north-east with a length of 1.80 m, a width of 0.55 m and a surviving depth of 0.20 m. The grave fill (272) was a mid brownish grey clayey silt with patches of mid yellowish brown silty clay, and with inclusions of tile and

sandstone fragments and flecks and river gravel. The adult skeleton (SK273) was supine and extended with the head at the west end of the grave and the arms by the sides of the body. Although there had been some animal disturbance of the grave, there had been no movement of skeletal elements, with the possible exception of the left hand, and the individual was relatively well preserved. The cranium was at a height of 284.07 m, with the feet at 284.01 m.

Burial 41 (in the north of square C-1, extending into the south of square C0)

The grave cut [274] was a sub-rectangular feature with rounded corners and steeply sloping sides. The base was flat and sloped towards the north-west corner, with heights of 283.98 m at the east end and 283.90 m in the centre. It was orientated west-east with a length of 2.00 m, a width of 0.75 m and a surviving depth of 0.20 m. The grave fill (275) was a mid brownish grey clayey silt with inclusions of tile and sandstone fragments and flecks and river gravel. The relatively well preserved adult skeleton (SK276) had its head at the west end of the grave and had been supine and extended (the cranium, right arm, os coxa and right leg were in near correct anatomical position), although it had suffered severe disarticulation, presumably as a result of animal burrowing. The cranium was at a height of 284.07 m, with the right tibia at 284.01 m. During post-excavation cleaning of the skeleton, a copper alloy earring (SF21) was found on the right side of the cranium.

Other features

Feature 288 (in the north-east of square C-1) The west end of the cut [288] was within square C-1, although the majority of the feature extended under the eastern limit of excavation and was not excavated. The west end was rounded with an outer moderately sloping step and a steeply sloping inner step and a flat base, sloping to the east, with a height of 283.98 m. It appeared to be orientated west-east, with an excavated length of 0.46m, a width of 0.90 m and a surviving depth of 0.34 m. The fill (289) was a mid brownish grey clayey silt with patches of mid yellowish brown silty clay with inclusions of tile flecks and rounded pebbles.

Feature 253 (in the south-west of square A- 1, cuts through the upper fill of the pit building). The cut [253] was a sub-rectangular feature with rounded corners and steeply sloping sides. The base was flat with a height of 283.83 m. It was orientated south-west to north-east, with a length of 1.4 m, a width of 0.62 m and a surviving depth of 0.28 m. The lower fill (270) was a dark brownish grey clayey silt, 0.16 m thick, with inclusions of tile and sandstone fragments and flecks and rounded pebbles. The upper fill (254) was a mid brownish grey with patches of mid yellowish brown sandy silt, 0.10 m thick, with inclusions of rounded pebbles. Fragments of wood and plastic in the fill indicate that this feature was backfilled recently and it is possible that it is a grave excavated in 2007. The other possibility is that it represents a sondage excavated in 2007 to investigate a feature, thought to be a possible cremation grave, on its southern edge. The relatively straight southern part of the cut would suggest that this interpretation is more likely, although it will not be possible to confirm until the plans of the 2007 and 2014-2018 excavations can be correctly overlain.

Pit building 252 (in the south-west of square A-1)

The main building cut [252] was a sub- circular feature, measuring 3.00 m north-south and 2.28 m west-east (as excavated), with the west side extending under the limit of excavation, and with a depth of 0.30 m. The sides were gently sloping and concave and the base was concave, with a height of 283.83 m. The lower fill (277), which was only recorded in section, was a mid yellowish brown sandy silt, 1.35 m north-south, and 0.70 m east-west (as recorded in section), and 0.06m thick, with inclusions of sandstone fragments and tile flecks. This layer probably represents build-up through trampling and refuse accumulation on the base of the building during its period of use. It is unlikely to be a deliberately built- up floor layer as it is irregular and does not cover the whole base of the building. The upper fill (251) was a dark brownish grey clayey silt with mixing at the base with a mid yellowish brown sandy silt,

3.00 m north-south, 2.28 m east-west (as excavated), and 0.26 m thick, and with inclusions of sandstone and tile fragments and flecks, and rounded pebbles, and finds of pottery, animal bone and brick/tile. This context is indistinguishable from the layer (260) which overlays it, although the presence of a discrete area in the centre of the context with a deposit of worked sandstone and large tile fragments, including part of a carved sandstone relief (SF20), presumably from demolition of the villa buildings, indicates that it is a

distinct deposit. The presence of these building materials would suggest the infilling of the building occurred during the demolition and abandonment phase of the villa (?), and that layer (260) must also relate to this abandonment phase rather than any earlier. Around the northern margin of the cut were four post-holes, apparently contemporary with the construction of the main building cut and probably designed to hold posts for a sloping roof structure (Figure 9). From west to east, these were: 1. The cut [286] was a sub-circular feature, 0.25 m in diameter, with a depth of 0.06m. The sides were vertical and the base was flat, with a height of 284.00 m. The fill (287) was a mid brownish grey clayey silt with inclusions of rounded pebbles and tile fragments and flecks. As this feature is shallower than the other three post-holes, it may also be an animal burrow; 2. The cut [278] was a sub-circular feature, 0.30 m in diameter, with a depth of 0.12 m. The sides were vertical and the base was concave with a height of 283.94m. The fill (279) was a mid brownish grey clayey silt with inclusions of rounded pebbles and tile fragments and flecks; 3. The cut [280] was a subcircular feature, 0.35m in diameter, with a depth of 0.33 m. The sides were vertical and the base was concave with a height of 283.77 m. The fill (281) was a mid brownish grey clayey silt with inclusions of rounded pebbles and tile fragments and flecks; 4. The cut [282] was a sub-circular feature with a west-east measurement of 0.30 m, a north-south measurement of 0.28 m, and a depth of 0.25 m. The sides were vertical and the base was concave with a height of 283.68 m. The fill (283) was a mid brownish grey clayey silt with inclusions of rounded pebbles and tile fragments and flecks. A fifth post-hole was located to the south of post-hole [280] in the base of the building cut. The cut [284] was an sub-circular feature with an east-west measurement of 0.50m, a north-south measurement of 0.30 m and a depth of 0.10 m. The sides were vertical and the base was flat with a height of 283.80 m. The fill (285) was a mid brownish grey clayey silt with inclusions of rounded pebbles and tile fragments and flecks. This feature is shallower and less well defined than the post-holes around the margin of the building cut, so may also be an animal burrow. The fills of all these features are indistinguishable from layer (260), so they may not have become filled in until this layer formed during the abandonment phase of the villa.

2015 trench extension (in the north-east of square B-1 and north-west of square C-1)

The cut [255] was rectangular with a smaller rectangular extension on the south-east corner, and with a maximum length of 2.50 m, a maximum width of 2.00 m and a depth of 0.30 m. The corners were square, the sides were vertical and the base was flat with a height of 284.01 m. The fill (256) was a mid greyish brown sandy silt with inclusions of rounded pebbles, and finds of pottery, animal and human bone, and brick/tile.

Site Summary and Discussion

The revised adjectives for the 2018 excavation season, namely to excavate square A-1 and complete the excavation of squares B-1 and C-1, were fulfilled. Time constraints meant it was not possible to undertake any excavation in square C-2, although the turf was removed.

The six inhumation graves encountered in this season's excavation, three of which (B.36, B.38, B.40) were orientated slightly south-west to north-east, and three of which (B.37, B.39, B.41) were orientated westeast, form part of the previously excavated 11th - 12th century cemetery. The copper alloy earrings found with Burial 37 (SF16, 17, 18), Burial 38 (SF19) and Burial 41 (SF21) are very similar in type to those found in previous excavation seasons. The excavation of the Roman period pit building [252] demonstrated that the layer into which these burials are dug must be related to the abandonment phase of the villa rustica, rather than an occupation layer contemporary with the villa, as previously thought. The Roman pit building, which would probably have had a wooden sloping roof, was more likely to have been for storage rather than domestic or industrial activity, as there was no evidence for any detritus associated with such activities in the material that built up on the base of the building, although this may have been the result of regular cleaning. The paucity of burials in the area around this building may suggest that the south-west boundary of the cemetery has been located, although this may also be because the burials were excavated in 2007. The presence of modern iron nails, context labels and the sondage/excavated grave in this area would support this interpretation, and it is hoped that the overlaying of the 2007 and 2014-2018 excavation plans will soon be possible to confirm this. However, the presence of fragments of cremation urns and burnt human bone in the fill of Burial 36, suggesting a cremation burial was destroyed by the digging of this grave, might also indicate that this burial was on the boundary, as the previously excavated cremations have almost always been located on the margin of the inhumation cemetery.

The reestablishment of the TBM by GPS at the end of this season also made it possible to investigate accurate heights above sea level of the site. The heights of the current ground surface indicates that it rises towards the east and south of the site, although the disturbance of the site by heavy machinery during the construction of the solar park means that this almost certainly does not reflect the original site topography. The very similar height above sea level of the crania from the burials excavated this season, assuming that the graves were dug to a standard depth, would, in fact, suggest that the original ground surface was relatively flat.

Potential for 2019 excavation season

Squares C1 and C2 were partially excavated in 2014 with only the burials exposed on the surface being excavated (a small extension into square C2 was also completed in 2016), so the excavation of these squares should be completed. Square C0 only had small extensions into it excavated in 2014 and 2018, so this square should also be fully excavated.

The eastern part of square Z-1 should be excavated to investigate the western extent of the Roman pit building. Time permitting, square C-2 should be excavated to investigate the possibility that the southern boundary of the cemetery has been located

Human Skeletal Analyses Summary

By the end of the 2018 excavation season, 33/38 of the skeletal remains from the Transylvania Bioarchaeology and Institute of Archaeology and Art History (Cluj-Napoca) excavations have been analysed, with several avenues of further investigations underway. To date, of the remains excavated under the current project design, the breakdown of biological sex is 13 males, 7 females, and 7 ambiguous.

AGE?	# of Individuals
Infant	(<1 year)[]4
Child	(<12 years) ? 7
Adolescent	(13-18) [2]
Young-Young Middle Adults (19-35)	? 12
Middle-Middle Older Adults (36-45)[2]	3
Older Adult (46+)	?3
General Adult (Indeterminable)	? 2

The average stature of the individuals excavated remains 165 cm for the males and significantly higher than previous seasons for the females (156.2 cm average). This is primarily due to the inclusion of stature data for Burial 26, who was approximately 10-13 cm taller than the previous female average of 151.4 cm. Given the presence of a very rare pathology (described below), we conclude that the increased height for Burial 26 should be considered an outlier to the average female population of Jucu.

Several types of disease and trauma continue to be recorded in the human skeletal remains, with many skeletons exhibiting numerous concurring conditions at the time of death. In the 27 individuals of mixed age and sex were 11 individuals with joint disease, 15 individuals with dental disease, 18 individuals showing signs of metabolic disease, 12 instances of congenital disease, 16 individuals with signs of active or healing infections, 2 individuals with neoplastic disease (benign), and 11 individuals showing trauma. It is important to note that in children and infants, the differences between metabolic conditions and infections can be difficult to determine given the poor preservation of their remains. As such, both must be considered.

During the 2018 analyses of the individuals excavated by Transylvania Bioarchaeology, 3/4 individuals were non-adults (<19 years) at the age of death. Although non-adult mortality is common under the age of four years, the presence of adolescents with evidence of pathology indicates a level of infection and

metabolic stress in the Jucu de Sus Necropolis populations.

Of particular interest was the adult skeleton of Burial 26. The adult remains of a female who died between the ages of 25-50 years presented a very rare condition known as Protusio Acetabuli. This condition, paired with the hypergracility of the skeletal remains, likely indicates the presence of a rare genetic disorder that affects the connective tissue, known as Marfan's syndrome (Keane and Pyeritz 2008). Marfan's syndrome may cause disproportionality in the skeleton, hypergracility, and serious complications with vision, cardiovascular health, and the nervous system (ibid). The condition also significantly lowers life expectancy (ibid). The presence of this disorder in an adult skeleton in the Jucu de Sus Necropolis suggests, along with previous evidence of advanced medical treatment (Filipek et al. 2017), that the medical knowledge at Jucu during this time period is far advanced beyond any evidence in Europe. Radiocarbon dates to confirm the exact time period for Burial 26 are forthcoming and will be available before the 2019 season.

Other strands of further analyses have commenced from these results. Archaeopara- sitological analyses of the non-adults are currently being undertaken by a researcher at Durham University (UK) to discover the types of parasites, if any, the young people at Jucu would have experienced. The femur of Burial 2 shows an active infection at the time of death and was analysed by researchers from Transylvania Bioarchaeology and Teesside University (UK). Elemental Scanning Electron Microscopy shows a series of incremental cut marks, likely made with an iron instrument, just perpendicular to the infectious lesion (Filipek et al. 2017). This evidence is currently being written up for publication.

Approximately 70% of the male skeletal remains show similar patterns of spinal trauma, indicating the changes are likely mechanical (Tschinkel et al. 2016; Blevins et al. 2016). A further cluster analysis of intracemetery structure was performed and found that males with the injuries were grouped together, apart from females and non-adults (Blevins et al. 2018). Furthermore, the children analysed within the cemetery show various signs of metabolic stress, including scurvy, therefore a project to assess and compare the diets between the children and the adults is currently being developed.

Cremation Analyses

The 4 cremations excavated under the current project, as well as the previous contents of the cremation burials have been analysed for a general age category (non-adult or adult) as well as an estimated burn temperature. Teesside University (UK) has volunteered to analyse these cremated remains for colour, in order to indicate a more accurate indication of the temperatures the remains were burned at; and elemental analyses to discover the contents of the pyre. These analyses are due to commence in 2018 and results will be available for presentation and publication sometime in 2019. Samples from the cremations are also being scheduled for strontium isotope analyses to determine if they match the local biosphere, or if these individuals have travelled from further afield. This is of significant interest given there are archaeological and linguistic parallels with Roman groups located in the Austrian Alps and Slovenia.

As more skeletal analyses are undertaken, a larger view of health and disease in Transylvania will begin to develop. Additionally, skeletons from the previous 2007 excavations are being reanalysed to be incorporated into the larger data set as a number of errors were discovered from the Diana and Mester 2013 publication. Radiocarbon dates from human remains found within the walls of the Roman Villa Rustica are also forthcoming, as they may represent a different population.

Potential for the 2019 analyses:

The aim of the project is to serve as an international teaching excavation with a view to publish multiple articles and a monograph after the end of the excavation and post-excavation analyses. The presence of rare pathological conditions and evidence for the advanced treatment of medical conditions is also worthy of further investigations. Ideally, the project will carry out works indefinitely, or until the research team agrees that no further progress can be made. In 2019, we hope to open an adjacent area of excavation for a more complete understanding of the associated settlement, create 3D scans of the human remains, and complete all extant post- excavation skeletal analyses.

Informații suplimentare online

Raportul 6148 din cronica.cimec.ro
Localizare pe hartă, folosind Mapserver Cimec.ro