

Pressemitteilung

Universitätsklinikum Heidelberg Anja Facius

24.03.2025

http://idw-online.de/de/news849435

Forschungsergebnisse, Wissenschaftliche Publikationen Biologie, Chemie, Geschichte / Archäologie, Medizin überregional



Historical robber 'Schinderhannes' clearly identified: skeletons were mixed up about 220 years ago

The legendary robbers 'Schinderhannes' and 'Schwarzer Jonas' were executed by guillo-tine in Mainz in 1803. In 1805, the first chair holder of anatomy at the University of Hei-delberg, Jacob Fidelis Ackermann, brought the two skeletons to his institute, where they were subsequently mixed up. An international research team has now been able to clear up this error using the latest analytical methods and conclusively identify the skel-eton of 'Schinderhannes'. The scientists have now published their results in the journal Forensic Science International: Genetics.

For 220 years, they have been part of the Anatomical Collection at the University of Heidel-berg: two skeletons labelled with the names of the legendary German robbers Johannes Bückler, better known as 'Schinderhannes', and 'Schwarzer Jonas' (Black Jonas). Both men were guillotined in November 1803 in Mainz along with 18 other convicts. The first incum-bent of the Chair of Anatomy and Physiology in Heidelberg, Jacob Fidelis Ackermann, brought the skeletons to Heidelberg in 1805. However, apparently under Ackermann's suc-cessor Friedrich Tiedemann, the collection numbers were mixed up at the beginning of the 19th century – and that's when the skeletons were misattributed. An international research team led by Dr Sara Doll, Institute of Anatomy and Cell Biology at Medical Faculty of Heidel-berg University and curator of the anatomical collection, and Professor Dr Walther Parson, head of the 'Forensic Molecular Biology' research unit at the Institute of Legal Medicine at the Medical University of Innsbruck, Austria, combined various analytical methods in the study and were able to show that The supposed skeleton of 'Black Jonas' clearly belonged to 'Schinderhannes'. The alleged skeleton of 'Schinderhannes', on the other hand, is not that of 'Schwarzer Jonas'.

Since the numbers of the bone montages were obviously assigned incorrectly at the beginning of the 19th century, the actual skeleton of 'Schwarzer Jonas' was lost over time. 'It is possible that it was stolen or borrowed in the belief that it was the skeleton of 'Schinderhannes' and was never returned? Ironically, this mix-up could ultimately have led to our still being in possession of the real skeleton of 'Schinderhannes' today,' says Dr Sara Doll.

Genetic reconstruction of eye, hair and skin colour

There are only a few, sometimes contradictory, contemporary descriptions of 'Schinderhannes' appearance. The few surviving images – such as engravings or paintings – were mostly created after his death and are based more on artistic licence than on authentic models. In addition to the unequivocal attribution of his skeleton, the genetic analyses have now also allowed the determination of his eye, hair and skin colour, thus clarifying the contradictory literary situation for future scientific and cultural projects. 'The data suggests that 'Schinderhannes' had brown eyes, dark hair and rather pale skin,' explains Professor Dr. Walther Parson, who analysed the data.

Step by step to the solution of the mystery



Thanks to the interdisciplinary work, in which researchers from Germany, Austria, Switzerland, Sweden, Portugal and the USA were involved, the scientists were able to narrow down the identities of the skeletons more and more: Using isotope analysis, in which experts analyse different types of atoms of the same chemical element, e.g. in bones, they were able to determine, among other things, where the two individuals presumably spent their childhood and later years – in the case of 'Schinderhannes', the Hunsrück area is a possibility. Further anthropological examinations, e.g. chemical analyses of the bones, and radiological imaging techniques provided additional information on the presumed age, gender and possible illnesses of the individuals. 'All these results, coupled with a careful analysis of historical documents, pointed to a possible mix-up of the two skeletons,' explains Sara Doll.

Analysis of the so-called mitochondrial DNA confirmed this suspicion. This genetic information is only passed on to descendants via the maternal line and is suitable for determining parentage. Comparison with a living descendant of 'Schinderhannes' in the fifth generation indicated that the skeleton attributed to 'Black Jonas' could have originated from 'Schinderhannes'.

The last step in solving the mystery was to analyse the DNA from the nuclei of the skeletal bones. A new molecular genetic method makes it possible to examine almost 5,000 so-called markers. These unequivocally confirmed the family relationship over five generations.

The researchers have not yet uncovered the whereabouts of the 'Schwarzer Jonas' and who is behind the now 'orphaned skeleton'. 'So it remains exciting,' says Sara Doll. The real skeleton of 'Schinderhannes' has been removed from the exhibition for conservation reasons. However, visitors can see an artist's replica of the skeleton and a model of the brigand himself in the Anatomical Collection.

Anatomical Collection, University of Heidelberg

The permanent exhibition at the Institute for Anatomy and Cell Biology at Medical Faculty of University of Heidelberg provides visitors with an insight into the historical development of the collection and shows the methods used to produce anatomical preparations. In a section organised according to topographical aspects, it also presents selected information on the structure and function of the human body.

Anatomical Collection, Heidelberg

University:https://www.uni-heidelberg.de/de/einrichtungen/museen-und-sammlungen/anatomische-sammlung

Anatomical Collection Medical Faculty of Heidelberg University: https://www.medizinische-fakultaet-hd.uni-heidelberg.de/einrichtungen/institute/anatomie-und-zellbiologie/anatomische-sammlung

Opening hours Monday – Friday, 8 am – 5 pm Address Institute for Anatomy and Cell Biology Im Neuenheimer Feld 307 69120 Heidelberg

wissenschaftliche Ansprechpartner:

Dr. Sara Doll Prosecture & Anatomical Collection, Institute of Anatomy and Cell Biology Heidelberg Medical Faculty at Heidelberg University Im Neuenheimer Feld 307 69120 Heidelberg



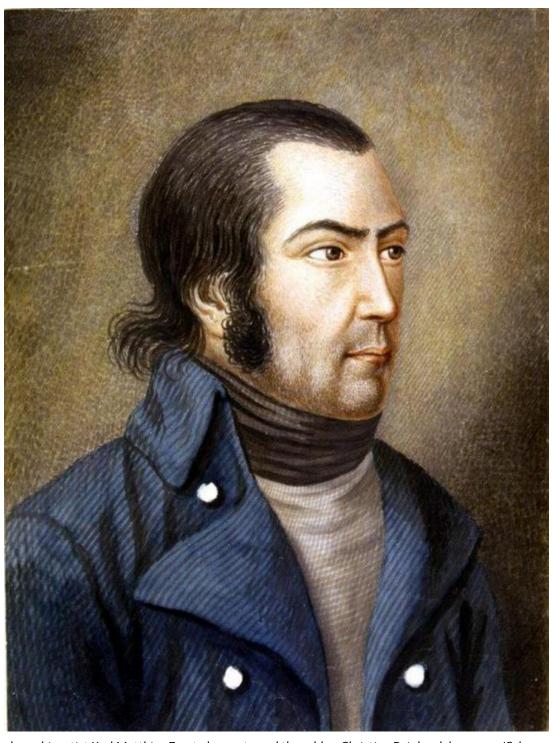
Originalpublikation:

Parson W, Alterauge, A, Amory C, Heinze S, Hölzl S, Jahn RG, Lehn C, Sänger T, Xavier C, Tillmar A, Nolte K, Lutz-Bonengel S, Doll S. Remains of the German outlaw Johannes Bück-ler alias Schinderhannes identified by an interdisciplinary approach. Forensic Sci Int Genet (2025) doi https://doi.org/10.1016/j.fsigen.2025.103276



The portrait shows the 'Schinderhannes'. Genetic analyses have now also made it possible to determine the actual colour of his eyes, hair and skin - as well as to clearly identify his skeleton. left: Mainz City Archives BPSP/3894 C; right: MFHD





Painter and graphic artist Karl Matthias Ernst also portrayed the robber Christian Reinhard, known as 'Schwarzen Jonas' (Black Jonas), in 1803. Stadtarchiv Mainz BPSP/3900 C