A selection of highlights from the previous issue

THE BONES PIT, AN INEXHAUSTIBLE SCIENTIFIC QUARRY

H. ANTECESSOR AND HEIDELBERGERS HANDS WERE DIFFERENT

Three PhD theses in Madrid’s Complutense University.

If the scientific importance of a site could be measured by its number of PhD theses, Atapuerca would unquestionably be ranked number one. The exceptional nature of this paleontological discovery is not only due to the extraordinary wealth of the material it has yielded but also to the discovery of new hominid species and the intensification of research resulting from the presence of Atapuerca. At the beginning of the twenty-first century, Atapuerca was the place where many leading scientists from all over the world were working on the paleontological and anatomical aspects of the hominid fossil record, and the number of theses is simply the reflection of this.

Carles Lorenzo Merino defended his PhD thesis on 29 November, also at the Complutense University Prehistory Department. He was brought to Atapuerca in 1989 by his Professor, Eudald Carbonell, and he soon focused on anthropological issues, moving to Madrid to conduct most of his research work. In his thesis entitled “Evolution of the hominid hand. Morphological analysis of Sima de los Huesos fossils”, Carles Lorenzo studied the hands of the Atapuerca-SH 11 individual and compared them with other hominids. He appreciated an evolutionary phase of robustness in the Atapuerca hominids that are related to a larger brain size and the role of bone formation in University Peabody Museum with Dr. Dan Lieberman, who had experimented with animals to detect bone formation patterns using histological techniques. This recent work has focused on the analysis of the large anthropological collection from the El Sidrón site (Piloña, Asturias), under the direction of the renowned paleoanthropologist Dr. Antonio Rosas. His thesis analyses variations in the bone models of the rear part of the head, which depend on factors linked to the body’s growth and the speed of bone formation, as well as the evolutionary trend in the cranial sutures, none of which can be identified in the Atapuerca-SH 11 individual (Hoa). His theses research concerns the Neanderthals but also the hominids of Atapuerca, and the comparison between these two species provides a key to understanding the evolution of our own species.

Homo antecessor

The discoveries earned the Atapuerca Research Group the special mention as a scientific quarry of the year, according to the criteria of the journal New forms of applied research. The project is now entering into the late stages of its development. The group will present its research results in the next issue of Quaternary International in the form of a monograph, coordinated by Dan Cabanes, which will be published in the near future. The findings will demonstrate that Atapuerca Hills is a splendid quarry of scientific importance, and this is why the group is such a source of pride for the international scientific community.

AN EOCORTICAL LESION ON THE MIDDLE PLEISTOCENE HUMAN CRANIA FROM HULU CAVES, NANJING, CHINA


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HONG SHANJING AND ERIK TRENKUS

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The cave system of Hulu Cave has yielded Middle Pleistocene hominin remains with a variety of cranial and dental pathologies. In his PhD thesis, supervised by Dr. Juan Luis Arsuaga, his PhD thesis supervisor, on the excavation, paleoanthropological and anatomical aspects of the hominid hand.

The Atapuerca site is now firmly part of the history of Spanish science and is about to move even further ahead. This time, the three PhDs coincide with a unique, autonómica deposit known as Sima de los Huesos (Bones Pit), part of the Atapuerca Hills. Since 1997, the Alto de los Llanos farmhouse dating deposit known as Sima de los Huesos (Bones Pit), part of the Atapuerca Hills. Since 1997, the Alto de los Llanos farmhouse family has conducted most of the research work. In 1992, the three hominid fossils were freed by bipedalism, they were recognized as being the remains of hominins, and the Atapuerca Hills were recognized as the most valuable legacy of human evolution.

Since 2000, there has been a long path full of conviction and struggle to make the scientific community and the rest of society understand the importance of the ongoing discoveries. The name Atapuerca represents not only some of the most important advances in human evolution, but also a team of scientists who are passionate about their work, alert to the latest research trends and always prepared to explain the scope of their discoveries to society as a whole. That is why Atapuerca has been an inexhaustible source of knowledge of the history of the species and also an important training ground for scientific and cultural research.

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