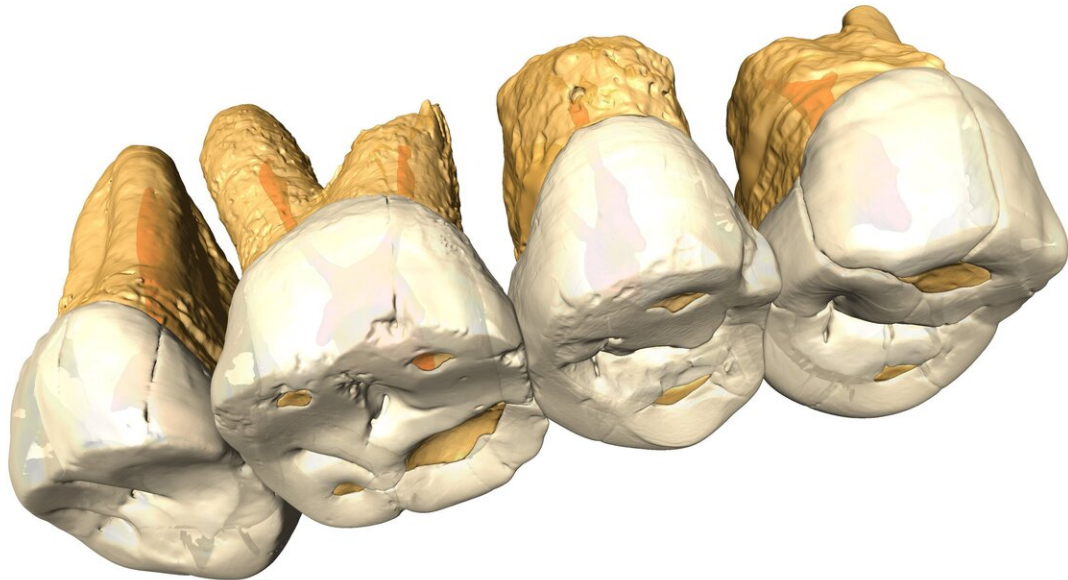


New species of early human found in the Philippines

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CT scan and the structure of the right maxillary P3 - M2 of Homo luzonensis from Callao Cave Credit: Callao Cave Research Project

An international team of researchers have uncovered the remains of a new species of human in the Philippines, proving the region played a key

role in hominin evolutionary history.

The new species, *Homo luzonensis* is named after Luzon Island, where the more than 50,000 year old fossils were found during excavations at Callao Cave.

Co-author and a lead member of the team, Professor Philip Piper from The Australian National University (ANU) says the findings represent a major breakthrough in our understanding of human evolution across Southeast Asia.

The researchers uncovered the remains of at least two adults and one juvenile within the same archaeological deposits.

"The fossil remains included adult finger and toe bones, as well as teeth. We also recovered a child's femur. There are some really interesting features – for example, the teeth are really small," Professor Piper said.

"The size of the teeth generally, though not always, reflect the overall body-size of a mammal, so we think *Homo luzonensis* was probably relatively small. Exactly how small we don't know yet. We would need to find some skeletal elements from which we could measure body-size more precisely.

"It's quite incredible, the extremities, that is the hand and feet bones are remarkably Australopithecine-like. The Australopithecines last walked the earth in Africa about 2 million years ago and are considered to be the ancestors of the *Homo* group, which includes [modern humans](#).



Professor Philip Piper from the ANU School of Archaeology and Anthropology with the cast of a hominin third metatarsal discovered in 2007. The bone is from a new species of hominin. Credit: Lannon Harley, ANU

"So, the question is whether some of these features evolved as adaptations to island life, or whether they are anatomical traits passed down to *Homo luzonensis* from their ancestors over the preceding 2 million years."

While there are still plenty of questions around the origins of *Homo luzonensis*, and their longevity on the island of Luzon, recent excavations near Callao Cave produced evidence of a butchered rhinoceros and stone tools dating to around 700,000 years ago.

"No hominin fossils were recovered, but this does provide a timeframe for a hominin presence on Luzon. Whether it was *Homo luzonensis*

butchering and eating the rhinoceros remains to be seen," Professor Piper said.

"It makes the whole region really significant. The Philippines is made up of a group of large islands that have been separated long enough to have potentially facilitated archipelago speciation. There is no reason why archaeological research in the Philippines couldn't discover several species of hominin. It's probably just a matter of time."

Homo luzonensis shares some unique skeletal features with the famous *Homo floresiensis* or 'the hobbit', discovered on the island of Flores to the south east of the Philippine archipelago.

In addition, [stone tools](#) dating to around 200,000 years ago have been found on the island of Sulawesi, meaning that ancient hominins potentially inhabited many of the large [islands](#) of Southeast Asia.



Right Upper teeth of the individual CCH6, the type specimen of the new species *Homo luzonensis*. From left to right: two premolars and 3 molars, in lingual view. Credit: Callao Cave Archaeology Project

The project team was led by Dr. Armand Mijares of the University of the Philippines, and includes Dr. Florent Détroit of the National Museum of Natural History in Paris and researchers from the University of Bordeaux, Paul Sabatier University and the University of Poitiers in France, as well as Griffith University in Australia.

The research has been published in the journal *Nature*.

More information: A new species of Homo from the Late Pleistocene of the Philippines, *Nature* (2019). [DOI: 10.1038/s41586-019-1067-9](https://doi.org/10.1038/s41586-019-1067-9) , www.nature.com/articles/s41586-019-1067-9

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