

THE PALAEOSCIENCES IN SOUTH AFRICA

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1. South Africa has a rich palaeo-anthropological heritage including fossils of *Australopithecus africanus*, *Australopithecus sediba* and early *Homo* which are distant relatives of humankind, from the Cradle of Humankind which was recognized as a World Heritage Site by UNESCO in 1999.

Australopithecine fossils from South Africa date between 2 and 3 million years. “Anatomically modern” *Homo sapiens* fossils are found in deposits about 100,000 years old.

Efforts are being made to encourage young South Africans to turn to palaeontology as a career. Evolution had been forbidden in schools in the apartheid era. Curricula have changed since 1994.



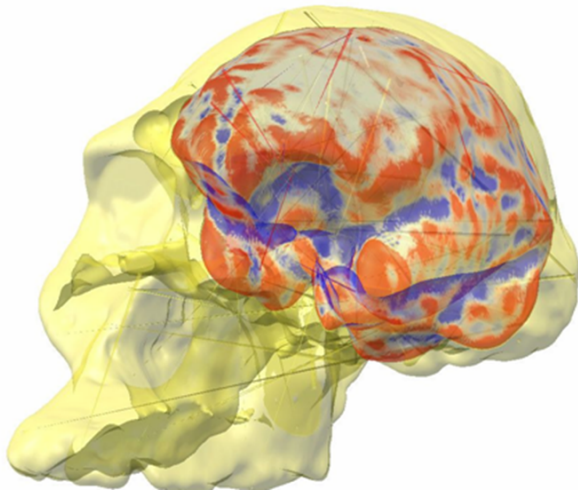
**A STRATEGY FOR THE
PALAEOSCIENCES IN
SOUTH AFRICA HAS
BEEN DEVELOPED BY
THE DEPARTMENT OF
SCIENCE AND
TECHNOLOGY (DST)**

2. With financial support from the South African Ministry of Science and Technology, through the National Research Foundation, a micro-CT scanner has been purchased and is operating at the Evolutionary Studies Institute (ESI) at the University of the Witwatersrand. Additional CT scanners are operating in South Africa for research purposes at NECSA (adjacent the Cradle of Humankind) and in Stellenbosch.

Collaborations have developed between the ESI and, *inter alia*, the Max Planck Institute (MPI), the European Synchrotron Radiation Facility (ESRF), and the Paul Sabatier University, Toulouse, involving scanning of South African fossils.



3. Important scientific results have already been obtained from the new research infrastructure, relating to an understanding of the internal anatomy of fossils such as “Mrs Ples”, *Australopithecus africanus*, representing a distant relative of humankind. Notably, it has been shown that “Mrs Ples”, 2 million years old from the Sterkfontein Caves, had the capacity for speech.



Braga, J. & Thackeray, F. 2007.
Diamond anniversary of Mrs Ples.
Quest 4(1):23.

There continues to be a very dynamic collaboration between the ESI (Wits University) and international partners, especially in the context of new discoveries of hominin fossils in the Cradle of Humankind etc

For example: Lee Berger and international partners
(**open access is encouraged**)

Ron Clarke and France (INRAP)

Christopher Henshilwood – Norway, RSA

Francis Thackeray and France (CNRS, Toulouse)

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