New insight into first life
4 October 2010, by Cath Harris

The study, recently published in *Proceedings of the Royal Society B*, also suggests that the metabolism of the earth's first organisms was based on methane production. 'That's a really important discovery because it gives us a real insight into how life got started, which is one of the biggest questions in evolutionary biology,' Steven said. 'This is a step change in the way people think about how life on earth developed.'

The ability to link advances in our knowledge of evolution to changes in past atmospheric and environmental conditions will enhance our knowledge of how life is adapting to the changing environmental conditions we see today, Steven believes.

This new research suggests that Archaea are as ancient as their name suggests. Evidence from geology and genetics, coupled with the findings, suggests that Eukaryotes evolved between 2 and 2.5 billion years after Archaea, which emerged around 3.5 billion years ago.

Provided by Oxford University