

Abstract

“Hunting the Molecular Past”

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In the past two decades, ancient DNA research has progressed from the retrieval of small fragments of mitochondrial DNA from a few specimens to large-scale studies of ancient populations, reconstructions of past environments, and whole genome sequencing. Increasingly, ancient genetic information is providing a unique means to directly test theories in archaeology, paleontology, ecology, and evolutionary biology. Initial results have changed the way we look at long debated topics such as the massive extinction of ice age mammals, early peopling of the Americas and early spread of modern humans outside Africa.