Genetic analysis of the Marcham Iron Age population

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Genome-wide analysis was conducted on six Iron Age individuals from the site of Marcham, Oxfordshire. Inner ear ossicles were available for two individuals while the remaining four samples were obtained by drilling the cochlea. All laboratory analyses were conducted at the facilities of Harvard Medical School. This report provides a brief summary of the results in advance of full analysis and publication.

Three of the individuals were found to be genetically female and the remaining three were male (Table 1). None share the same mitochondrial haplogroup, suggesting a lack of close biological relationships through the female line. Most of the mitochondrial haplogroups seen at Marcham are represented at other sites across Iron Age Britain. There is no evidence that any of the individuals are close biological relatives.

The Y chromosome haplogroups are common for the period and not especially informative in this instance. Those for Skeletons 19 and 21 are ultimately steppe-derived and common across Britain from the Beaker period onwards. The 'Noah's Ark' individual has Y chromosome haplogroup G2a2b2a1a1b, which survives from the Neolithic period in Britain; although much less common than R1b, this haplogroup is nonetheless seen in several Iron Age individuals in Britain and is unlikely to be informative about the specific origins of this individual.

COMMIOS code	Individual	Genetic code	Genetic sex	Y-chromosome haplogroup	mt haplogroup	Element
GENLAB1134	SK19	I51708	M	R1b1a1b1a1a2c1a4b2c1a	U5b1b1+@16192	Cochlea
GENLAB1135	SK21	I51666	M	R1b1a1b1a1a2c1a6	V10a	Incus
GENLAB1136	SK24	I51709	F	n/a female	U5a1g	Cochlea
GENLAB1137	SK25	I51667	F	n/a female	U8b1b1	Malleus
GENLAB1138	SK26	I51710	F	n/a female	J1c1	Cochlea
GENLAB1139	Noah's Ark' 1964	I51711	M	G2a2b2a1a1b	J1b1a1	Cochlea

Table 1: Summary genetic data from Marcham.

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