

Thomas Jefferson and Sally Hemings

Thomas Jefferson, in spite of his eloquent arguments for liberation of the American colonies from England, is known to have been a slave holder. One of Jefferson's slaves was a woman named Sally Hemings. Gossip that Jefferson had fathered at least one of Sally Hemings's children began during Jefferson's first presidential term (1802) and has remained a lively item of historical speculation.

The oldest son, Thomas Woodson (surname from a later owner), was born after Jefferson and Hemings had returned from his posting as minister to France. In addition, two of Sally's children -- Madison and Eston -- claimed that their mother had told them that Thomas Jefferson had been their father. Contemporary accounts also commented on the resemblance of the Hemings children, who were all very light-skinned, to Thomas Jefferson.

Neither Jefferson nor Hemings ever made any recorded comment on the allegation. Jefferson historians have favored another reason for the resemblance of Hemings's children to Jefferson. Descendants of Jefferson's daughter, Martha, claimed that the children's father had been Samuel or Peter Carr, the sons of Jefferson's sister. See the Jefferson Family Pedigree.

In 1998, a team of geneticists led by Dr. Eugene Foster (University of Leicester) decided to try either to verify or to refute the claims of the Hemings children. Foster's team decided to compare genetic markers on the Y chromosomes of selected Jefferson and Hemings male descendants.

Males get their Y chromosomes from their fathers, and Y chromosomes can be inherited only through the male line. Although Jefferson himself left no male descendants, Jefferson's uncle, Field Jefferson, did. Sally Hemings's sons Thomas Woodson and Eston Hemings also left male line descendants.

Thomas Jefferson and his uncle both inherited their Y chromosome from the same man, who was Thomas Jefferson's paternal grandfather and Field Jefferson's father. If Jefferson had passed this Y chromosome to any of Sally Hemings's sons, then similar Y chromosomes should be found in the male descendants of both lineages.

Foster selected a set of 19 Y chromosome gene markers to study and collected samples from 11 different individuals: 5 male descendants of Field Jefferson, 5 male descendants of Thomas Woodson (Hemings's first child), and 1 male descendant of Eston Hemings (Hemings's youngest son). A helpful feature of the Jefferson Y chromosome was that it had an uncommon haplotype (combination of genetic markers) not previously seen outside of the Jefferson family. Foster's study was published in the journal *Nature* in 1998.

Some of the data from Foster’s study are seen in Table 1, which shows one group of genetic markers found in 8 participants of the study: 3 male descendants of Field Jefferson, 1 male descendant of Eston Hemings, 2 male descendants of Thomas Woodson, and 2 male descendants of John Carr, the paternal grandfather of Samuel and Peter Carr.

Table 1 represents only 11 of the 19 genetic markers studied by Foster, et al (1988). For the descendant of Eston Hemings, the other markers were also identical to those seen in the Jefferson descendants, but different from those seen in the Woodson descendants.

Do these data support Thomas Woodson’s claim to be Jefferson’s son? Do they support Eston Hemings’s claim? Do they support the claim made by the family of Martha Jefferson? Jefferson defenders have offered the following argument. During the time that Hemings was in residence at Monticello, there were about 25 male relatives, including Jefferson’s younger brother Randolph and his five sons, that would have shared his Y chromosome. At least some of these are known to have visited Monticello during the critical period. Foster, however, considers Thomas Jefferson to be the most likely candidate.

Table 1. Male-line microsatellite STR haplotypes found in study participants.

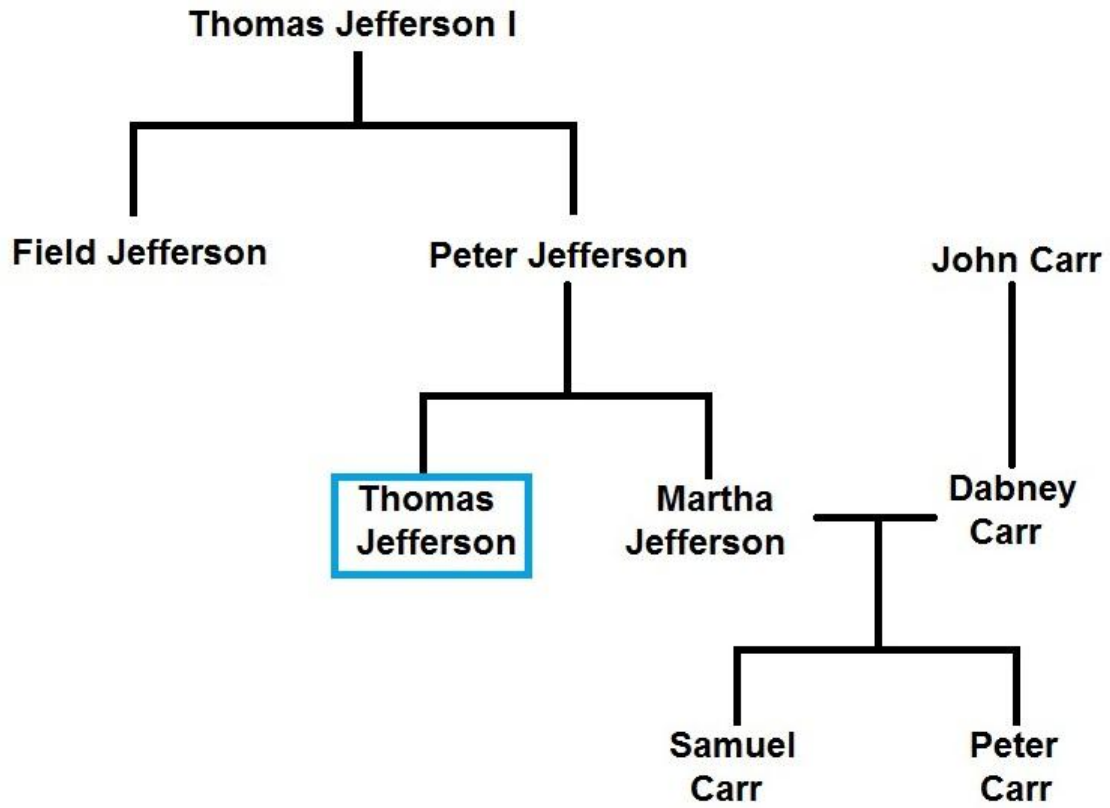
Descendant	A	B	C	D	E	F	G	H	I	J	K
Jefferson - 41	15	12	4	11	3	9	11	10	15	13	7
Jefferson - 47	15	12	4	11	3	9	11	10	15	13	7
Jefferson - 49	15	12	4	11	3	9	11	10	15	13	7
Hemings - 21	15	12	4	11	3	9	11	10	15	13	7
Carr - 27	14	12	5	12	3	10	11	10	13	13	7
Carr - 31	14	12	5	12	3	10	11	10	13	13	7
Woodson - 55	14	12	5	11	3	10	11	13	13	13	7
Woodson - 69	14	12	5	11	3	10	11	13	13	13	7

Haplotypes are DNA variants that tend to be inherited as a set. STRs are Short Tandem Repeats – sequences of 10-50 bases that can be repeated to produce different numbers of copies in different individuals. STR regions A-K represent 11 different Y chromosome STR regions, similar to those used for forensic identification of human DNA. The numbers are the number of copies found at each STR region of the Y chromosome of each participant. The individuals tested are represented by the family name and a number.

Reference:

Foster, E.A., M.A. Jobling, P.G. Taylor, P. Donnelly, P. deKnijffs, R. Mieremet, T. Zerjal, C. Tyler-Smith. 1998. Jefferson fathered slave’s last child. *Nature* 196: 27-28.

Jefferson Family Pedigree



President Thomas Jefferson is boxed in blue