

Chapter 17

The Y-DNA of the “Quincy Oakley” Males

[Updated 28 February 2019]

Introduction

Human cells normally have 23 pairs of chromosomes; 22 of these pairs are called autosomal chromosomes (autosomes) and are numbered 1-22, while the 23rd pair constitutes the sex chromosomes.¹ One of the popular DNA testing companies is called 23andme.com; this company’s name emphasizes the fact that humans normally have 23 pairs of chromosomes.

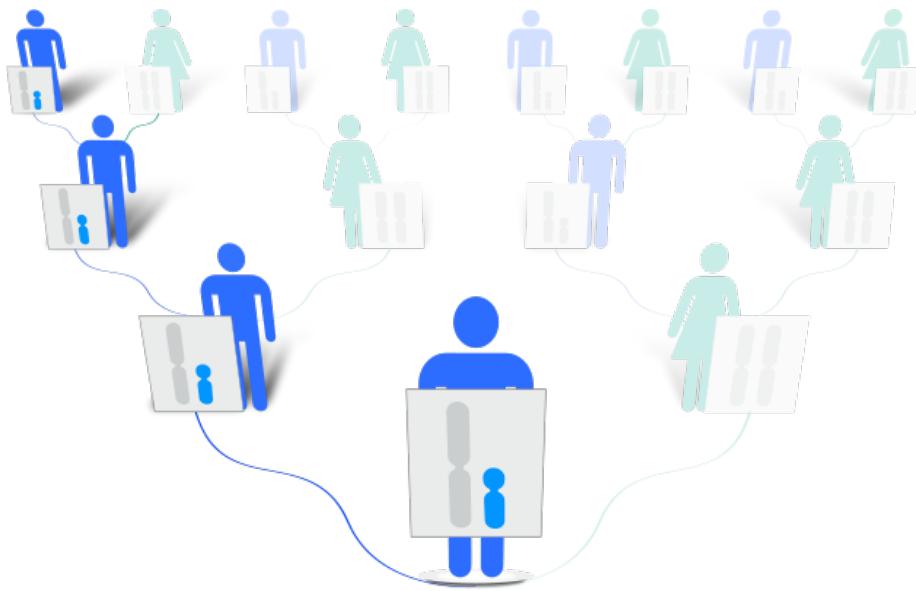


In other chapters, I have discussed many of my *autosomal* DNA matches with living descendants of our “Quincy Oakley” ancestors. For example, I share a segment of DNA on Chromosome 8 with several living descendants of our ***Case-Spencer*** family ancestors who lived in the mid-1600’s. However, since a person inherits half of her autosomal DNA from her father and half from her mother (or alternatively, half of *his* autosomal DNA from *his* father and half from *his* mother), the DNA is “diluted” over time, so that after a large number of generations, autosomal DNA matches between distant relatives are lost.

The 23rd pair of chromosomes constitutes the sex chromosomes. These chromosomes are termed X and Y, and a person’s pair of sex chromosomes can be XX or XY. If a person has a Y-chromosome, then he develops as a male. Only males have a Y-chromosome, and the only way that a particular male could have gotten that Y-chromosome was from his father. Thus, the Y-chromosome is

¹ Down syndrome occurs when an individual has a full or partial extra copy of chromosome 21.

passed from father to son basically unchanged over many, many generations. Of course, there are random mutations, but they occur very infrequently. The following diagram shows the Y-chromosome being passed down a male line:



In an unbroken line of males in a given family, each male will have the same Y-chromosome; this means that I should have the same exact Y-chromosome as my 5th-great grandfather, Miles Oakley, who was born in 1696. Moreover, all other **Oakley** male descendants of Miles Oakley (in an unbroken line of **Oakley** males) should have this same exact Y-chromosome. As a corollary, all of the living **Oakley** male descendants of my paternal grandfather, Ray Miller Oakley, should have this same exact Y-chromosome: Burks II, T.A., Ralph, Peter, Hal, Ben, Allen, Dave Sr., Dave Jr., Mike, Josh, Jake, Tim, and Clayton.

The Y-DNA Test at FamilyTreeDNA.com

A Y-chromosome DNA test (Y-DNA test) is a genealogical DNA test that is used to explore a man's direct patrilineal ancestry (his paternal line). As described above, the Y-chromosome passes down virtually unchanged from father to son, along with the patrilineal surname. Every now and then, occasional mistakes in the DNA copying process occur, and these mutations can be used to estimate the time frame in which two men share a "Most Recent Common Ancestor", or MRCA. If their test results are a perfect or nearly perfect match, then they are related within a genealogical time frame. Each person can then look at the other's family tree to identify the MRCA, as well as whatever information the other already has

about their shared family tree prior to the MRCA. Y-DNA tests are typically coordinated in a surname DNA project [more about this to follow].

What gets tested in a Y-DNA test?

[Feel free to skip over this section – it probably is a little too technical.] A chromosome contains sequences of repeating nucleotides known as **Short Tandem Repeats** (STRs). Y-DNA testing involves looking at STR segments of DNA on the Y-chromosome. The STR segments that are examined are referred to as genetic markers and occur in what is considered non-coding DNA or “junk” DNA.

The number of repetitions of repeating nucleotides in a **Short Tandem Repeat** (STR) varies from one person to another and the particular number of repetitions is known as the **allele** of the marker. An STR on the Y-chromosome is designated by a DYS number (**DNA Y-chromosome Segment number**). For example, if the DYS393 marker value is 13, then the particular sequence of nucleotides at that location on the Y-chromosome is repeated 13 times. A man having a DYS393 value of 13 means that his son, father, paternal grandfather, great-grandfather, etc., all will have a DYS393 value of 13. Of course, an occasional mutation occurs and this value can change – slightly.

The Y-STR markers are located on the Y-chromosome, and geneticists know exactly where these markers are located, as well as the DNA sequence repeat motif, the allele value (the number of times that the DNA sequence repeats), and the mutation rate. For example, DYS449 is located at Yp11.2 – meaning the Y-chromosome, petit arm, band 1, sub-band 1, sub-sub-band 2. The DNA repeat sequence for DYS449 is TTTC,² it can repeat anywhere from 26 to 36 times, and it has a mutation rate of 0.00838 (per generation).³ A mutation rate of 0.00838 means that it would take on average 119 generations for a mutation to occur at this marker site.

The more matching marker values two men have, the closer their relationship and the more recently they will have shared a common male ancestor.

The FamilyTreeDNA website offers Y-DNA tests that examine 25, 37, 67, or 111 markers – and the more markers tested, the more expensive the test (but the more precise a Y-DNA match can be shown to be).

² The building blocks of DNA are the nucleobases cytosine (C), guanine (G), adenine (A), and thymine (T).

³ https://en.wikipedia.org/wiki/List_of_Y-STR_markers



My Results from FamilyTreeDNA

I purchased the 37 marker Y-DNA test from FamilyTreeDNA.com. As part of the “test”, I scraped the inside of my cheeks to collect cells containing my DNA and submitted the sample to the FamilyTreeDNA folks. I received my test results in late 2015, and it took me a while to make sense of it all. I finally connected my results with the Oakley DNA Project on the WorldFamilies.net website.⁴ On this site, numerous **Oakley** males have shared the results of their Y-DNA tests, as well as their genealogical pedigrees – actually, just their patrilineal lines. These results have been grouped into clusters of similar matches.

Here are my 37-marker results:

Y-DNA - Standard Y-STR Values

PANEL 1 (1-12)											
Marker	DYS393	DYS390	DYS19**	DYS391	DYS385	DYS426	DYS388	DYS439	DYS389I	DYS392	DYS389II***
Value	13	23	14	11	11-14	12	12	11	13	13	29

PANEL 2 (13-25)										
Marker	DYS458	DYS459	DYS455	DYS454	DYS447	DYS437	DYS448	DYS449	DYS446	
Value	17	9-10	11	11	24	15	19	28	15-16-16-18	

PANEL 3 (26-37)										
Marker	DYS460	Y-GATA-H4	YCAII	DYS456	DYS607	DYS576	DYS570	CDY	DYS442	DYS438
Value	10	10	19-23	16	15	17	17	37-37	13	12

Remember that most of these markers are identified by a DYS number (**DNA Y-chromosome Segment number**), so you can see that my test results begin with the repeat values (the alleles) for DYS393, DYS390, DYS19, ...

⁴ <http://www.worldfamilies.net/surnames/oakley>

Note that several of these markers consist of two separate markers (DYS385, DYS459, YCAII, and CDY), and one consists of four individual markers (DYS464). For example, DYS385 is a multi-copy marker, and includes DYS385a and DYS385b. And DYS464 is a multi-copy palindromic marker. Men typically have four copies of DYS464, known in such cases as DYS464a, DYS464b, DYS464c, and DYS464d.

You can see that I have 37 different Y-STR values listed in the results chart above. This pattern of values should be shared by all the ***Oakley*** males who belong to the “Quincy Oakley” patrilineal line. And it should closely match the Y-DNA test results of any ***Oakley*** male who is descended from one of our ***Oakley*** ancestors within a genealogical timeframe.

So the big question is – do I have a close match with any other ***Oakley*** male(s) in the Oakley DNA Project? Drum roll, please....

[Keep scrolling down....]

[Go on to the next page....]

And the answer is YES. I have several very close matches! Here is a chart comparing my Y-DNA test results with those of my closest Y-DNA match – a person named John Phillip [Philip?] Oakley (identification number 88287):

Burks vs. John Phillip Oakley (88287)											
	DYS393	DYS390	DYS19	DYS391	DYS385	DYS426	DYS388	DYS439	DYS389I	DYS392	DYS389II
Burks	13	23	14	11	11-14	12	12	11	13	13	29
88287	13	23	14	11	11-14	12	12	11	13	13	29
	DYS458	DYS459	DYS455	DYS454	DYS447	DYS437	DYS448	DYS449	DYS464		
Burks	17	9-10	11	11	24	15	19	28	15-16-16-18		
88287	17	9-11	11	11	24	15	19	28	15-16-16-18		
	DYS460	Y-GATA-H4	YCAII	DYS456	DYS607	DYS576	DYS570	CDY	DYS442	DYS438	
Burks	10	10	19-23	16	15	17	17	37-37	13	12	
88287	10	10	19-23	16	15	17	17	37-37	13	12	

With John Phillip Oakley (88287), I match on 36 of the 37 Y-DNA markers. Our only difference is on DYS459, where my allele value is 10 and his value is 11 (shown in red in the chart above). Other than this one small difference, we are an exact Y-DNA match, indicating that we are both descended from the same ***Oakley*** male within a genealogical time period.

John Phillip Oakley has his ***Oakley*** patrilineal line on the Oakley DNA Project website – and it shows that he goes back to Miles Oakley (1574-1636):

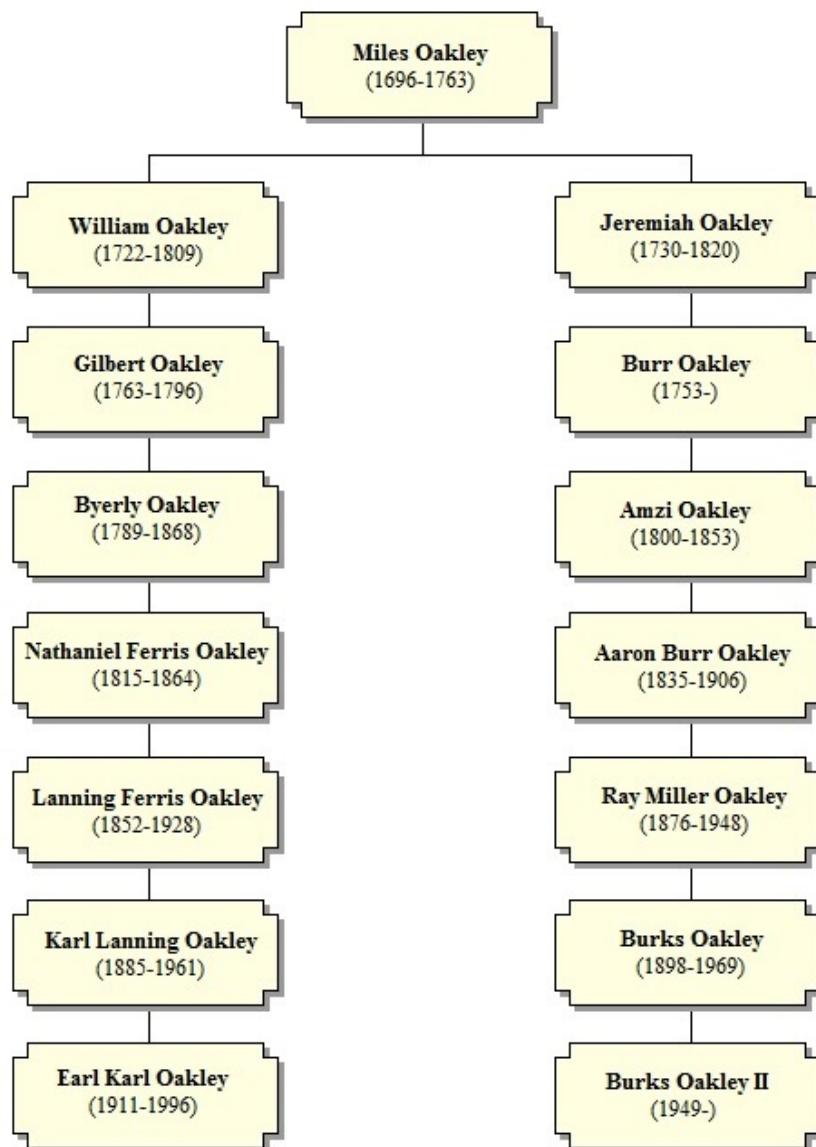
KIT NO. 88287

1. **Miles** Oakley b. 1574; m. Susan May 25 April 1599, ;d. 5 July 1636
2. **John** Oakley b. 1612; m. Mary Browne; d. aft 1686
3. **Miles** Oakley b. 15 June 1645; m. Mary Wilmot in 1669 ; d. 16 May 1682
4. **Miles** Oakley b. 24 Dec 1671; m. Mercy Gardner in 1694; d. 1743
5. **Miles** Oakley b. 1696; m. Sara Tippetts in 1715;d. 1763
6. **William** Oakley b. 1722; m. Eunice Hunt abt 1744;d. 1809
7. **Gilbert** Oakley b. 11 Oct 1763; m. Martha Bashford 13 April 1786 ; d. 6 Aug 1796
8. **Byaley** Oakley b. 4 Jul 1789 ; m. Euphemia Ferris; d.28 Nov 1868
9. **Nathaniel** F Oakley b. 12 Sept 1815; m. Nancy McGriff on 9 Jan 1842; d. 2 April 1864
10. **Lanning** F. Oakley b. 1 Jan 1852; m. Nonie Beall; d. 17 May 1928
11. **Karl** Lanning Oakley b. 24 Sept 1885;m. Janie Campbell; d. 12 Dec 1961
12. **Earl** Karl Oakley b. 1 Dec 1911;m. Helen Pate ;d. 22 Jan 1996

Of course, the “Quincy Oakleys” also go back to this same Miles Oakley. John Phillip Oakley and I share the same ***Oakley*** line through Miles Oakley (1696-1763), who was married to Sara (Sarah) Tippetts. Then our two ***Oakley*** lines

diverge: the “Quincy Oakleys” are descended from Miles’ son Jeremiah Oakley (1730-1820), while John Phillip Oakley is descended from Miles’ son William Oakley (1722-1809). As I have described in other chapters, this branch of the ***Oakley*** family, which goes back to Miles Oakley (1645-1682), is termed the Westchester Branch of the ***Oakley*** family, since the family lived in Westchester County, New York, for multiple generations.

The relationship between our two ***Oakley*** lines can be seen more clearly in the following diagram:



Presumably John Phillip Oakley is the son or the grandson of Earl Karl Oakley (1911-1996); however, his ***Oakley*** line published on the Oakley DNA Project site ends with Earl Karl (presumably for privacy reasons).

The fact that our Y-DNA test matches at 36 out of 37 markers certainly helps to confirm this genealogical record.

As an aside, here is a photo of Earl Karl Oakley's gravestone:



Earl Karl Oakley is buried in Roselawn Cemetery in Tallahassee, Florida. I visited this cemetery on 27 December 2015, while driving to Naples for the winter. More photos may be viewed in the appendix at the end of this chapter.

John Philip Oakley has his entire family tree on the Ancestry.com website.⁵ His **Oakley** patrilineal line goes back to Philip Oakley, who was born in 1203 in Shropshire, England. This is the exact line that I now have for the “Quincy Oakleys” – and it is nice to see that another **Oakley** genealogist in our family line has reached this same conclusion.

As I continued to compare my Y-DNA results with other **Oakley** males in the Oakley DNA Project database, I found that I have close matches with several other people. Here is a comparison of my 37-marker Y-DNA test with that of Jonathan David Oakley (kit #93244):

⁵ <http://trees.ancestry.com/tree/53665146/family>

Burks vs. Jonathan David Oakley (93244)

	DYS393	DYS390	DYS19	DYS391	DYS385	DYS426	DYS388	DYS439	DYS389I	DYS392	DYS389II
Burks	13	23	14	11	11-14	12	12	11	13	13	29
93244	13	23	14	11	11-14	12	12	11	13	13	29
	DYS458	DYS459	DYS455	DYS454	DYS447	DYS437	DYS448	DYS449	DYS464		
Burks	17	9-10	11	11	24	15	19	28	15-16-16-18		
93244	17	9-10	11	11	24	15	19	28	15-16-17-18		
	DYS460	Y-GATA-H4	YCAII	DYS456	DYS607	DYS576	DYS570	CDY	DYS442	DYS438	
Burks	10	10	19-23	16	15	17	17	37-37	13	12	
93244	10	10	19-23	16	15	17	17	36-37	13	12	

Jonathan and I match on 35 of 37 markers. We differ by one on DYS464c and by one on CDYa; this still is a very close match.

Jonathan has his paternal ***Oakley*** line on the Oakley DNA Project website. I was really surprised to see that his line of the ***Oakley*** family remained in the United Kingdom:

KIT NO. 93244

- | | |
|---|--|
| 1. Oakley, <i>William</i> | b. 1778 Alveley, Shropshire, England |
| 2. Oakley, <i>William</i> | b. 1812 Leominster, Herefordshire, England |
| 3. Oakley, <i>David Edward</i> | b. abt 1854 Llandyfaelog, Carmarthenshire, Wales |
| 4. Oakley, <i>John Richard</i> | b. 1880 Llandyfaelog, Carmarthenshire , Wales |
| 5. Oakley, <i>Benjamin Cyril</i> | b. 1906 Llanelli, Carmarthenshire, Wales |
| 6. Oakley, <i>David Alan William</i> | b. date private Llanelli, Carmarthenshire, Wales |
| 7. Oakley, <i>Jonathan David</i> | b. date private Kingston-Upon-Thames, England |

Jonathan currently lives in the London area, in Kingston-Upon-Thames. Based on our Y-DNA test results, it is clear to me that we share a common ***Oakley*** ancestor. Since Miles Oakley (1645-1682) left England and immigrated to America, our connection has to be at least one generation before Miles (and possibly many more generations). I hope to contact Jonathan David Oakley and learn if he knows more about his ***Oakley*** family line. But this still is awesome to find such a close Y-DNA match with an ***Oakley*** whose ***Oakley*** ancestors remained living in England, unlike ours who immigrated to America in the 1600's.

There are a number of other ***Oakley*** males who have the results of their Y-DNA tests on the Oakley DNA Project website. However, I do not have anywhere near

as close a match with these other people. As an example, here is my Y-DNA comparison with Thomas C. Oakley (kit #32503):

Burks vs. Thomas C. Oakley (32503)											
	DYS393	DYS390	DYS19	DYS391	DYS385	DYS426	DYS388	DYS439	DYS389I	DYS392	DYS389II
Burks	13	23	14	11	11-14	12	12	11	13	13	29
32503	13	24	14	11	11-14	12	12	12	13	13	30
	DYS458	DYS459	DYS455	DYS454	DYS447	DYS437	DYS448	DYS449	DYS464		
Burks	17	9-10	11	11	24	15	19	28	15-16-16-18		
32503	17	9-10	11	11	25	15	19	29	15-15-16-17		
	DYS460	Y-GATA-H4	YCAII	DYS456	DYS607	DYS576	DYS570	CDY	DYS442	DYS438	
Burks	10	10	19-23	16	15	17	17	37-37	13	12	
32503	11	11	19-23	16	15	19	17	35-41	12	12	

I only match 25 of the 37 markers with Thomas C. Oakley, so it appears that our **Oakley** lines diverged a long time in the past. His **Oakley** ancestry on the Oakley DNA Project website only goes back four generations:

Kit No.32503

1. G.Grandfather - **William OAKLEY** - b. 25 Jan 1781 in Loudon County, VA.
 - ■ First wife was Sarah GOODMAN of VA.
 - Second wife was Catherine WATERS.
 - Third wife was Elizabeth WHEELER of VA.
2. G.Grandfather - **William Robert OAKLEY** - b. 26 Jun 1827 in Wilson County, TN and d. 19 Jan 1914 in Bailey, Fannin, TX.
3. Grandfather - **James William OAKLEY** - b. 08 Jan 1858 and d. 29 Mar 1934 in Bailey, Fannin, TX.
 - ■ Married to Mary Elizabeth HUNT on 23 Aug 1877 in Marion, Crittenden, KY.
 - Second marriage to Amelia Jane BIEBER (BEAVER) on 17 Jul 1900.
4. Father - **Thomas Buress OAKLEY** - b. 20 Jan 1911 in Bailey, Fannin, TX and d. 02 Feb 1964 in Bailey, Fannin, TX.
 - ■ Married Ida Rose HARRIS on 24 Dec in 1929 in Hickory Creek, Hunt, TX.
5. Son - **Thomas C. OAKLEY**

So this branch of the **Oakley** family, which can trace its roots through Texas, Tennessee, and Virginia, is clearly very different than that of the "Quincy Oakleys".

In order to see how different the results of Y-DNA tests can be, I decided to select a surname at random and see what the comparison would look like. I tried this with the **Lyon** surname, since there also is a Lyon DNA Project on the WorldFamilies.net website. I selected a typical **Lyon** representative, and compared my Y-DNA test results with his. The results are shown in this chart:

Burks vs. Typical Lyon Surname												
	DYS393	DYS390	DYS19	DYS391	DYS385	DYS426	DYS388	DYS439	DYS389I	DYS392	DYS389II	
Burks	13	23	14	11	11-14	12	12	11	13	13	29	
Lyon	13	23	15	10	14-14	11	14	11	12	11	28	
	DYS458	DYS459	DYS455	DYS454	DYS447	DYS437	DYS448	DYS449	DYS464			
Burks	17	9-10	11	11	24	15	19	28	15-16-16-18			
Lyon	15	8-9	8	11	23	16	20	28	12-14-15-15			
	DYS460	Y-GATA-H4	YCAII	DYS456	DYS607	DYS576	DYS570	CDY	DYS442	DYS438		
Burks	10	10	19-23	16	15	17	17	37-37	13	12		
Lyon	10	10	19-21	14	14	18	20	37-39	13	10		

I found that I only match this generic **Lyon** male on 11 of the 37 markers, meaning that our two family lines diverged a huge number of generations ago – certainly NOT with a genealogical timeframe. This puts my 36/37 match with John Phillip Oakley into perspective.

Concluding Remarks

I continue to be overwhelmed by all this “genetic genealogy”. When I first embarked on my journey of using DNA with genealogy, I had no idea what knowledge I could gain from this approach. And now, several years later, I have learned about Y-DNA testing, and I have used this genetic approach to confirm and support the patrilineal line of the “Quincy Oakley” family. This approach provides one more piece of evidence that the “Quincy Oakley” family goes back to the Westchester Branch of the **Oakley** family. And before that, our **Oakley** line goes back many generations in England – as far back as the early 1200’s. This really is priceless! And my Y-DNA test results also remind us that, unlike our direct **Oakley** ancestors who immigrated to America in the 1600’s, other of our **Oakley** relatives remained in England, and their descendants continue to live in England to this day.

Appendix

Earl Karl Oakley (1911-1996) is buried in Roselawn Cemetery in Tallahassee, Florida. Here are some photos that I took while visiting there on 27 December 2015:



