

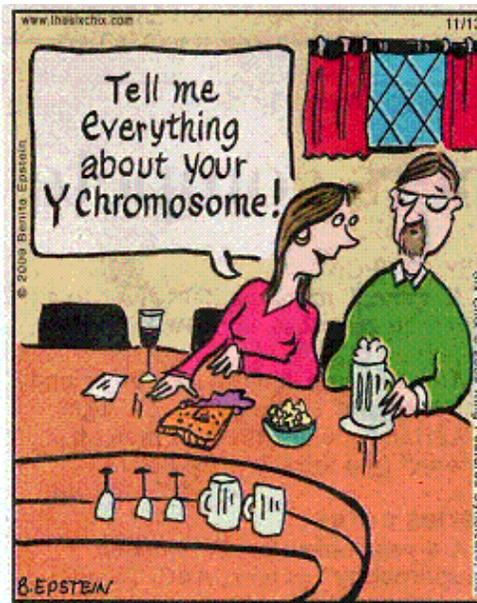
I've Tested my Y-DNA - What can I expect?

Lesson 2. Interpreting your Y-DNA results

Objective: Understand Y-DNA STR results and what they mean

Tools: This lesson will walk you through the steps required to take the Y-DNA STR test and interpret the results.

- Words and phrases in **bold** indicate important terminology. Please consult the glossary included with the course material.
- Click any entry in the Table of Contents to jump to that part of the lesson.
- Class notes are at the end of the lesson.



© 2009 - King Features Syndicate, Inc

Lesson written by Gale French

Version 1.8 (Aug. 2020)

Layout and Design Gale French, Mesa Foard and Karin Corbeil

© 2014-2020 Gale French, DNAAoption.org

Contents

Section 1. Ordering & Taking the Y-DNA Test	3
1.1 Your Test Results	3
1.1.1 FTDNA Dashboard Page.....	3
1.1.2 Matches Page.....	3
1.1.3 Y-DNA STR Values Page	5
1.1.4 Print Certificates Page	5
1.1.5 Haplogroup Origins Page.....	6
1.1.6 Haplotree & SNPs Page.....	7
1.1.6 Phylogenetic Tree.....	8
Section 2. I got my results - What now?	9
2.1 Results	9
2.1.1 Exact Match	9
2.1.2 Close Match	9
2.1.3 Distant Match	10
2.1.4 No Match	10
2.2 Surprises?	11
2.2.1 N.P.E.	11
2.2.2 Different Surname(s)	11
Section 3. Projects	12
3.1 FT-DNA Projects	12
3.1.1 Surname Projects.....	12
3.1.2 Geographic Projects.....	14
3.1.3 Haplogroup Projects.....	14
3.1.4 Private Projects	14
3.2 World Families Projects	14
Section 4. Glossary	16
Section 5. Resources.....	19
5.1 Internet.....	19
5.2 Videos.....	19
5.3 Books.....	19
Section 6. Pop Quiz Answers.....	20
Section 7. Epilogue.....	21
Class Notes	21

Section 1. Ordering & Taking the Y-DNA Test

This section is covered in a separate document that was provided in Lesson #1. Refer back if you have not taken the test. The following sections cover your results from a Y-DNA test.

1.1 Your Test Results

1.1.1 FTDNA Dashboard Page

Once your results are in, you can logon and see your '**Dashboard**' page. For a Y-DNA test you will see your predicted (or confirmed) **Haplogroup** (in this example, **R-YP276** in the lower left) and various buttons to see other information.

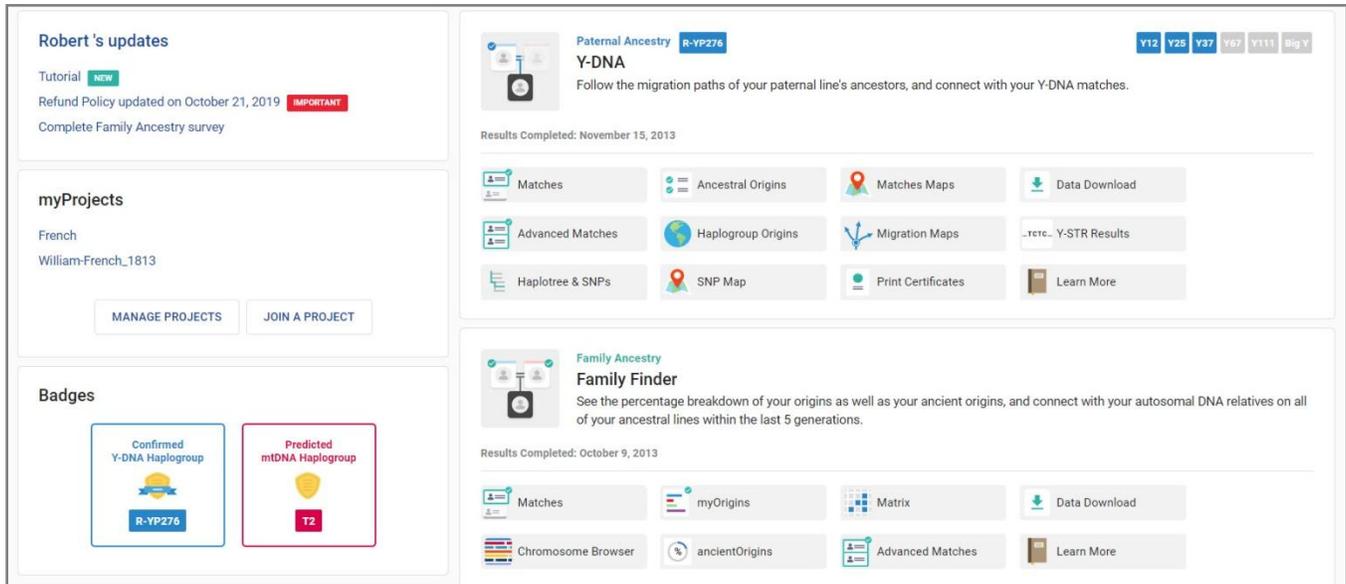


Figure 1 - FTDNA Dashboard page

1.1.2 Matches Page

Probably of most interest is the Matches page (see Figure 2). It gives you the name of the match, the number of markers they tested, their Genetic Distance, their **Most Distant Ancestor** known, their Haplogroup and the match date. The columns and their meanings are:

37 MARKERS - 9 MATCHES					
Genetic Distance	Name	Most Distant Ancestor	Y-DNA Haplogroup	Terminal SNP	Match Date

- Genetic distance - GD of this person to you
- Name - name of your match
- Icons & Test Levels - Icons (see next page) and the Y test level (37,67, 111) of this person and other tests (FF, BigY) they have taken
- Most Distant Ancestor - name of their "known" most distant ancestor (based on paper genealogy)
- Haplogroup - Haplogroup for this person
- Terminal SNP - SNP tested farthest down the phylogenetic tree (so far)
- Match Date - date this person was matched to you



Default Number of Markers

The default number of markers shown will be the max number of markers that **YOU** tested (e.g., 37 in this case)

Genetic Distance	Name	Most Distant Ancestor	Y-DNA Haplogroup	Terminal SNP	Match Date
0	Ernest French	William French was born ~1813 in Tennessee	R-M512		11/15/2013
0	Johnny French	William French b. ~1813 TN	R-M512		11/15/2013
0	Mr. Daryl David French	William French b. ~1813 TN	R-M512		11/15/2013
0	Mr. Michael Roy French	William French b. ~1813 TN	R-M512		11/15/2013
0	Mr. Brian David French	William French b. 1814 d. 1860	R-M512		11/15/2013
3	David E. French	William French b. ~1778 SC	R-M512		7/15/2014
3	Samuel Robert French	William French, 1813 - 1860	R-M512		5/15/2014
3	David W. French		R-M17	M17	11/15/2013
4	Edward George MacDonald	Donald MacDonald b. 1784-85 d. 1830-35 NY State	R-M512		11/15/2013

Figure 2 - Matches page

Matches Icons

- Send this person an e-Mail
- View the TIP Report
- Add a note about this person
- This person has a Family Tree that you can view



Caution!!

- Is David W. French NOT a match because his Haplogroup is M17? He is a match; Subclades are listed and M17 is a subclade of R-M512
- What about Edward MacDonald? He is probably NPE or adopted.

BigY

If you have tested up to BigY, your Matches page will look a little different. The 2nd column is BigY STR Differences. In this case, no one in the matches has taken a BigY test (no differences). Big Y is covered in the Advanced Y-DNA class.

Genetic Distance	Big Y-500 STR Differences	Name	Earliest Known Ancestor	Y-DNA Haplogroup	Terminal SNP	Match Date
0		Mr. Warren Ray French	Hubert R. French was born 1927 in Texas	R-M269		8/11/2010
0		Hubert Richard French	*[NPE]* - John Alexander Anders III born ~1780	R-CTS11567	CTS11567	6/28/2010
3				R-M269		4/29/2015
4			John Andrews b. abt 1748	R-M269		12/22/2016
4				R-M269		3/4/2015
5				R-M269		7/22/2018

1.1.3 Y-DNA STR Values Page

This page (see Figure 3) shows the allele values for each of the DYS markers on your test. This page also allows you to download these values to an Excel or .CSV file (useful if you are keeping your own record of family matches separate from a Surname project).

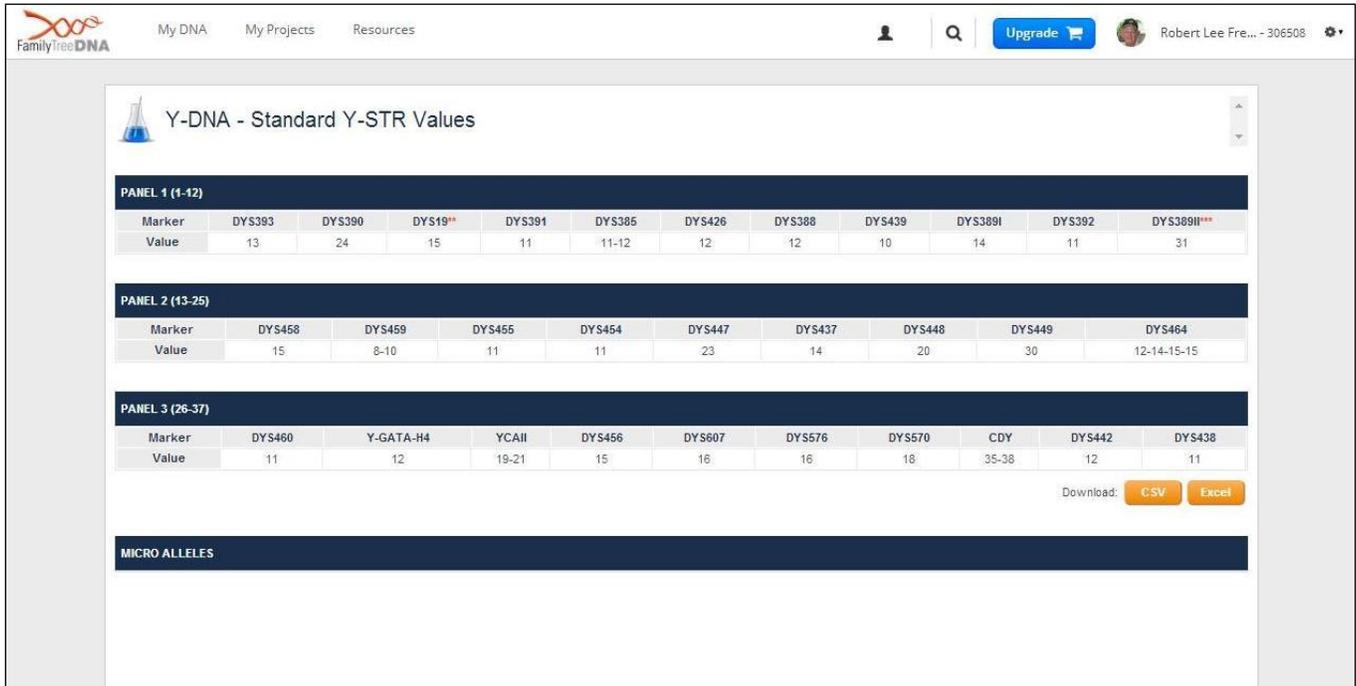


Figure 3 - STR Values page



Pop Quiz #1

What is the minimum number of markers that I should test for examining paternal lineage?

1.1.4 Print Certificates Page

There are three certificates (PDF files) that you can review/print if you like; the most important (see Figure 4) is the #3 STR results:

1. Understanding Your Results - a document on how to read and comprehend your results
2. Y-DNA STR Certificate - a "pretty" listing of your Y-DNA results
3. Y-DNA Migration Map - a generic map of Haplogroup migration paths

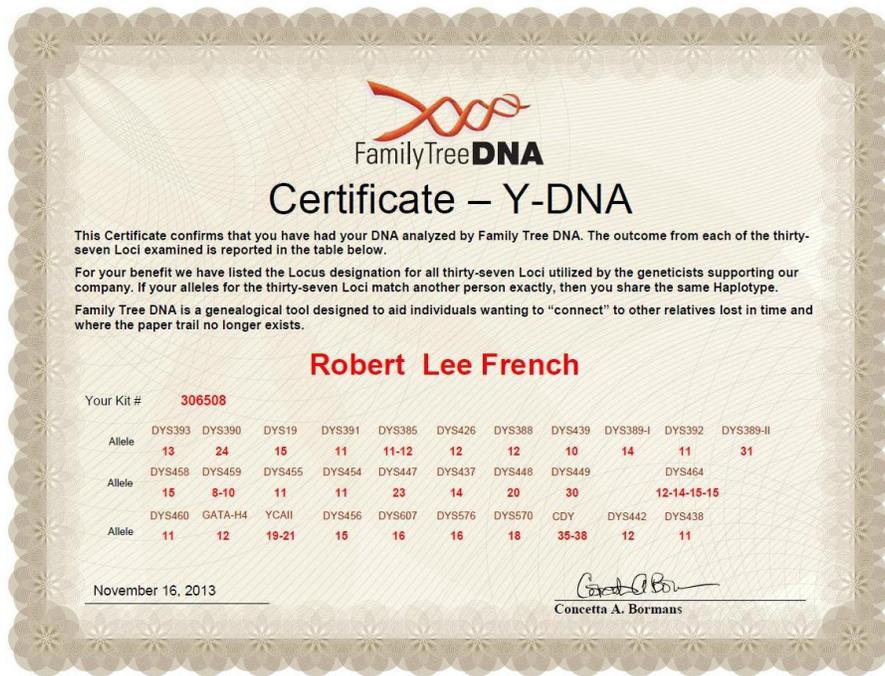


Figure 4 - Print Certificate page



Pop Quiz #1

What is the minimum number of markers that I should test for examining paternal lineage?

1.1.5 Haplogroup Origins Page

Depending on your Haplogroup, this page tries to narrow down the "country of origin" of the Haplogroup. It shows how many of your matches (exact and different Genetic Distances) are from what countries. Buying additional **SNPs** (Single Nucleotide Polymorphism) will allow you to identify "**sub-clades**" of your Haplogroup (e.g., **R-CTS4179** that means from 'Scotland').

 **Y-DNA - Haplogroup Origins**

R-YP276 is a subgroup of R-M198

Parent haplogroup: R-M198
Age: 10,000
Region: Central Asia, the Indian Subcontinent, Eastern and Northern Europe.

12 Marker

25 Marker

37 Marker

No Matches Found

67 Marker

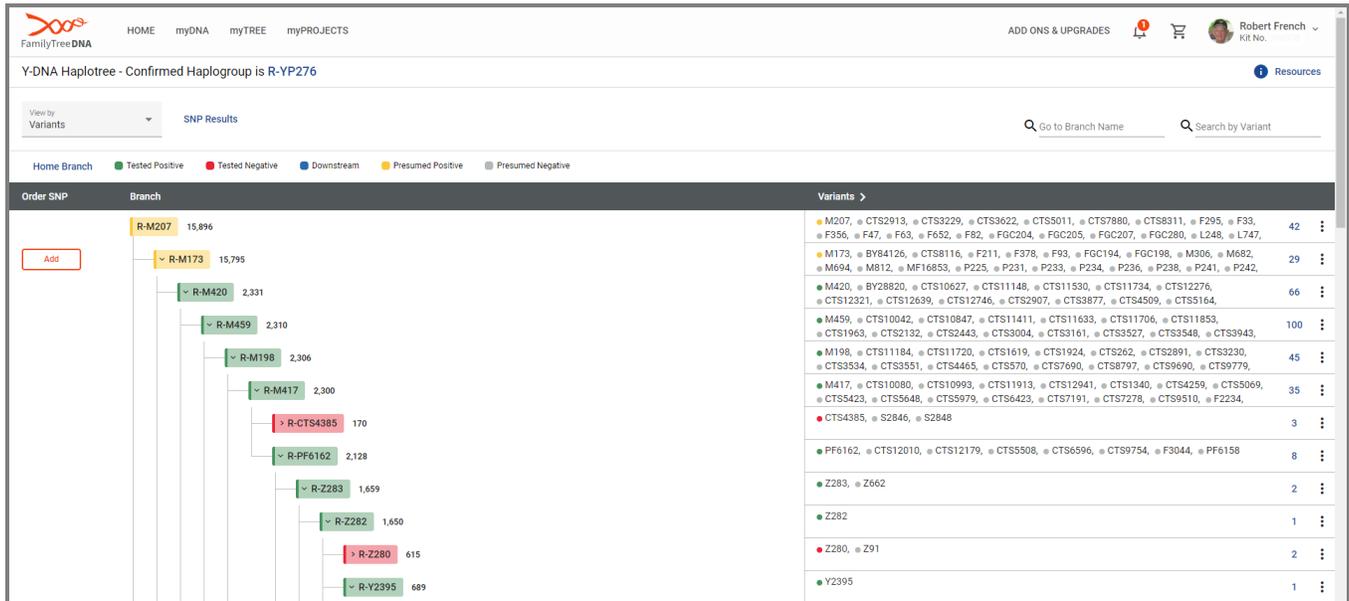
You have not purchased the upgrade to this level of testing. Purchase An Upgrade

111 Marker

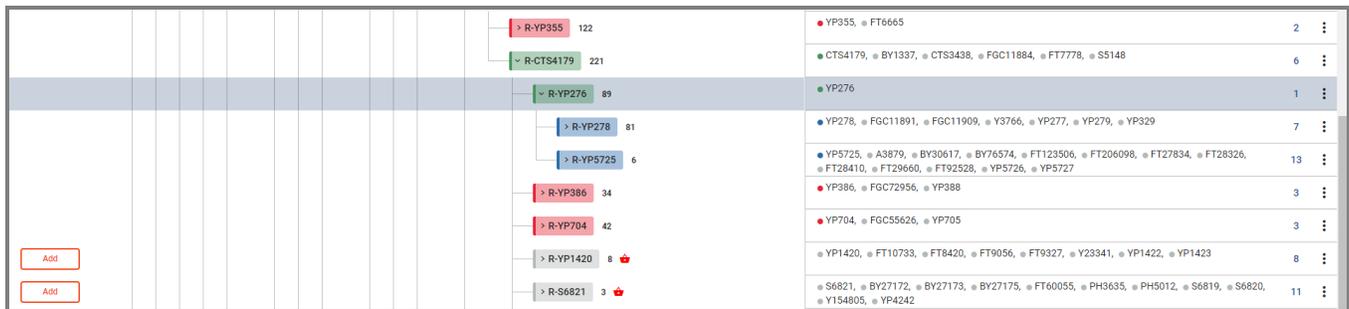
You have not purchased the upgrade to this level of testing. Purchase An Upgrade

1.1.6 Haplotype & SNPs Page

This page allows you to view your Y-DNA SNP results and your Haplogroup information. It tells whether this Haplogroup is 'Confirmed' or 'Predicted'. This is a graphic tree that shows your placement on the current Y-Chromosome **phylogenetic** tree. In this example, the *confirmed* Haplogroup is R-YP276 (because additional SNP testing has been done). The chart is too big to see it all, so there are two pieces below (top & bottom) to get it all. In this view, if you click on 'R-YP276' at the top you get a Resources menu with more information, like the Public Haplotype which shows you the country origins for each Haplogroup.



⋮



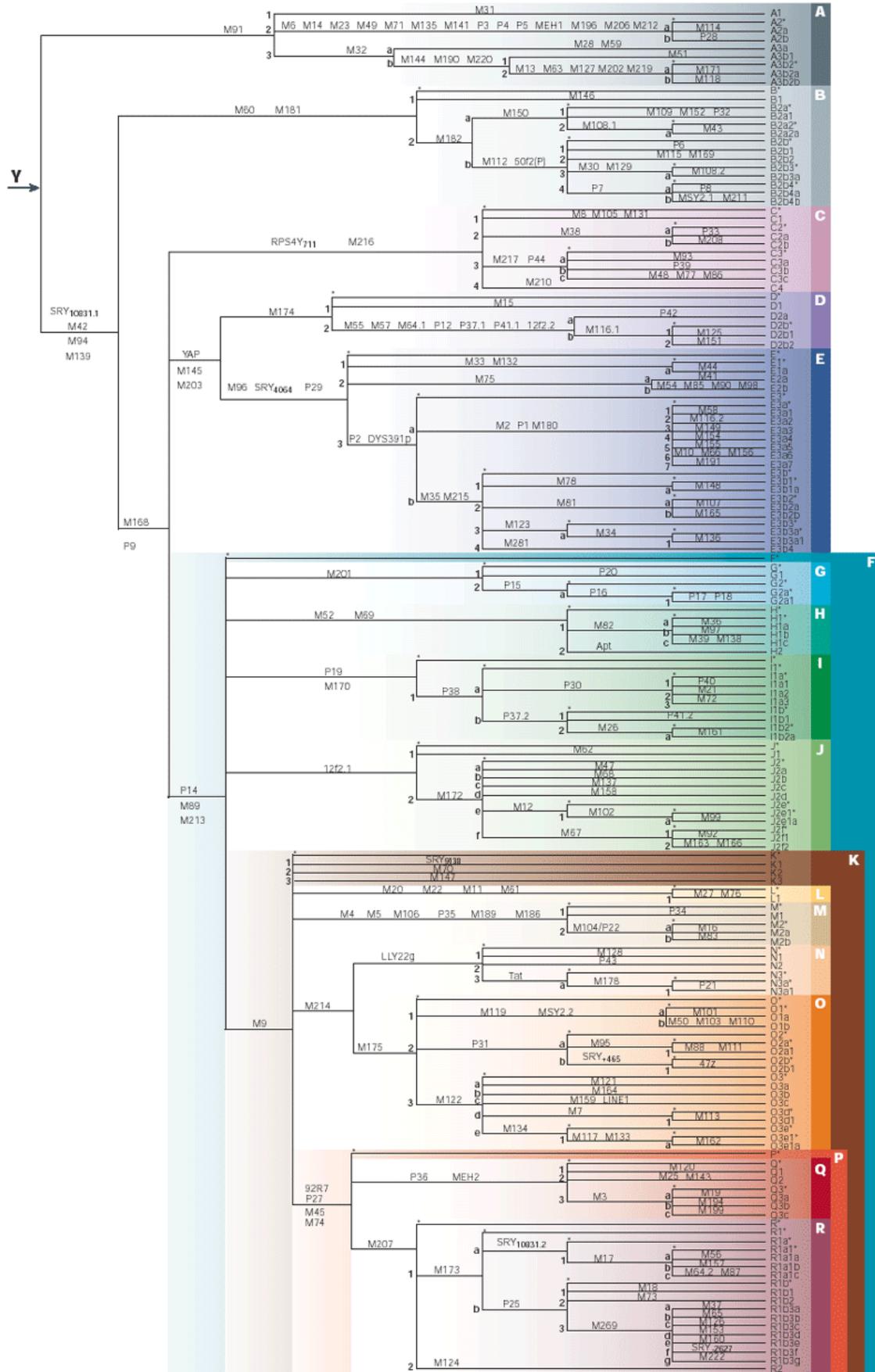
You may order individual SNPs that are part of the official Y-Chromosome Consortium tree for your Haplogroup (red "baskets" next to the SNP indicate that it's part of a SNP Pack). You may also order (if your Haplogroup is 'Predicted') by clicking on the suggested 'Add' buttons for each of the SNPs you wish to test. There are some **SNP Packs** which offer many tested SNPs for a discount. If they apply to your Haplogroup, you should see them advertised on this page. SNP testing will be covered in Lesson #3. Your **Project Administrator** (or Haplogroup Project Admin) can usually recommend which SNPs you should test.



Project Administrators

FT-DNA Project Administrators are unpaid volunteers that donate their time and experience to help users understand their results and where they "fit" in the paternal DNA picture puzzle.

1.1.6 Phylogenetic Tree



Section 2. I got my results - What now?

What can I tell by looking at my matches?

2.1 Results

When you get your results, you will be in one (or more) of the following categories:

1. Exact match with one or more persons (Genetic distance = 0)
2. Close match with one or more persons (Genetic distance = 1-3)
3. Distant match with one or more persons (Genetic distance = 4-?)
4. No matches at 37 (or more) markers

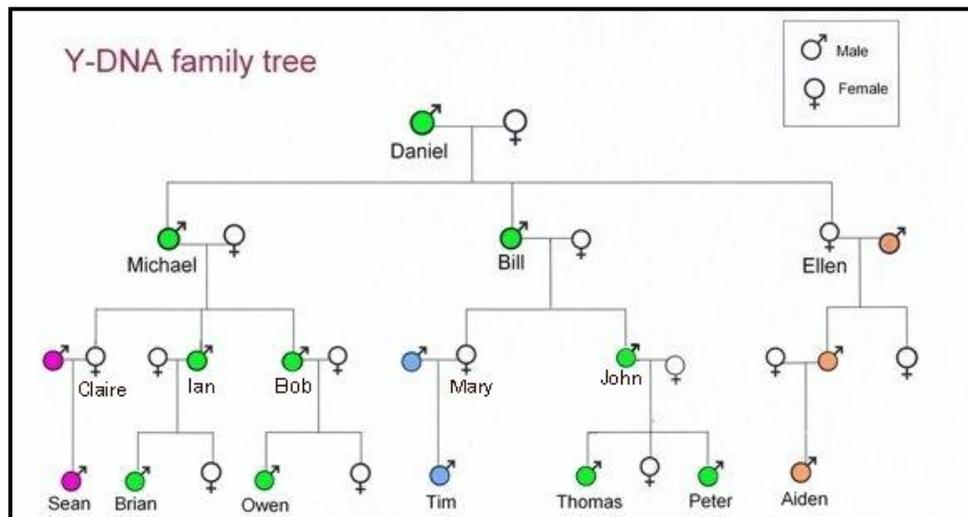
We will cover what each category means and what to do in each one.

2.1.1 Exact Match

This is good! An exact match **verifies** your paternal relationship with that person. The only thing to do here is be happy! You hopefully have met your objective.

2.1.2 Close Match

A close match means you are most likely cousins or that you may have had mutations¹ in your family on the fast changing STR markers.



c/o - <http://www.irish-genealogy-toolkit.com>

Every man has one father, two grandfathers, four great-grandfathers, eight great-great-grandfathers, and so on. His Y-DNA comes only from his direct male line. So, while Daniel (at the top) in the diagram above is a perfectly valid great-grandfather (and MRCA) to each of his ten great-grandchildren (and seven great-grandsons), his Y-DNA can be detected in only **four** of them. However, Y-DNA can change (mutate) between generations, either up or down 1 GD so you may have a 0 and your brother or uncle could have a GD=1. Or it may go unchanged for many generations!

So if you have a close match, contact that person to see who the common ancestor may be (if you don't already know). Ask them for surnames (or a **GEDCOM**) and add them to your tree and find the relationship yourself!



Pop Quiz #2

In the 'Y-DNA family tree' chart above, if Owen and Aiden (2nd cousins) carried out Y-DNA tests, would they be a match?

¹ Bennett Greenspan, CEO of FT-DNA has a GD=1 with his father!!

2.1.3 Distant Match

A distance match may mean that you are related farther up the tree than you have researched or discovered. You may have luck at MitoYDNA (covered in Lesson#3 - Tools) extending your tree with a match there. If not, then you will have to work with your distant match contact to find the relationship together (triangulate). See: <http://www.DNAAdoption.org>

2.1.4 No Match

If you have absolutely no matches for your surname, it could be the result of one of the following:

1. No one from your surname has tested at FT-DNA. Or they only tested at 25-markers (or less). Wait for (or FIND!) someone else with your surname to also test. Try looking at MitoYDNA for matches.
2. An unusual last name that few/none have tested. Use Y-Search.
3. There was a surname change in your family in the past. Look for variations in spelling. Again, use mitoYDNA.
4. **N.P.E.** - see Section 2.2.1 on page 11.
5. You didn't meet the threshold to have the match listed. FT-DNA has established match thresholds. For someone to match, they have to meet the criteria² for Genetic Distance in the following table:

# Markers Tested	Maximum # Mutations Allowed
12	0 ³
25	2
37	4
67	7
111	10

One of the things you might try if you tested at 37-markers (or lower) is to upgrade your test to 67-markers. That might show some matches at a greater distance (5-6) which didn't show up at 37-markers.

In **all** of the 'No Match' cases, you may also want to do an autosomal test and then concentrate on the matches that you know are on your paternal side (by genealogy or Not **In Common With (ICW)** maternal matches). You may find "cousin" matches that help you go 'up' the tree and back down to your paternal match.

It may take a combination of bouncing back and forth between Y-DNA searching and Autosomal searching to find your paternal ancestor(s). See videos in the **RESOURCES** section (page 19).



² FamilyTree DNA

³ If while in the FT-DNA match list, you go from higher markers (37 or 67) down to 12 markers, you may see it show a GD=1. This is a remnant of showing the higher markers. It won't initially show a 12 marker match >0.



2.2 Surprises?

Oops! I didn't get the results I thought I would?!? Now what do I do?

2.2.1 N.P.E.

Non-Paternal Event (N.P.E.) , non-paternity event, false paternal event, false paternity, misattributed paternity; all these terms refer to a break in the Y chromosome line due to a formal or informal adoption, name change, "extramarital event" (infidelity), a child known by other surname (mother's maiden name or stepfather's name). This means a male tested may be carrying the surname but his Y chromosome does not appear to be associated with that surname.

Bennett Greenspan, of Family Tree DNA, states that:

"any (DNA) project that has more than 20 or 30 people in it is likely to have an 'oops' in it. This aligns well with the traditional belief that anywhere from 5 to 15% of men are not the actual biological fathers of their children. Following this out 10 generations, there is a 40% chance of a non-paternal event!"

It should be stressed that adoptions were quite common in every age; parents died by disease or war and a relative took in the children and raised them with their name. Daughters had children out of wedlock and the grandparents (or other relatives) raised the children as their own. A teen-age girl who gets pregnant by one boy and marries another, for whatever reason, might be a more frequent occurrence than maternal infidelity in earlier generations. Taking into consideration the strong pressure against "unwed mothers" until the last generation or so, one might expect such cases to account for some of the paternal irregularity indicated by Y-chromosome testing.

In this case, you need to be looking at the surnames which you **DO** match to determine the actual surname of your ancestor. You can follow the same methodologies as an adoptee might to determine the "truth". See:

<http://www.DNAAdoption.org>



Pop Quiz #3

I have a match with Genetic Distance = 3. How can I tell which markers are different (and if they are "fast changing" markers)?

2.2.2 Different Surname(s)

You may have surnames that appear on your match list that aren't your last name. Either you (or they) were involved in one of the following

1. Adoption
2. N.P.E. - see above

Additional tests from other family members may be required to see which one (you or them) might have the "wrong" surname.

Section 3. Projects

3.1 FT-DNA Projects

FT-DNA projects are an opportunity to work with others with similar DNA results to explore your paternal genetic heritage. Membership is **FREE** and voluntary. You may join or leave a project at any time. You may join as many projects as you wish:

1. Surname
2. Geographic
3. Haplogroup
4. Private

If you ordered your test through a surname project, you are already a member of that project.

3.1.1. Surname Projects

Your results will automatically be reported to the Project Administrator for your surname. They may do some analysis and processing to determine if your results match a particular "Group" of results with similar Haplogroups and/or Common Ancestor names. Reach the group by clicking on one of your Projects from your 'My DNA' page (see Figure 1 - FTDNA Dashboard page on page 3) or by searching through the surname projects page (from Lesson #1). You'll see a page describing the project with links to results of various kinds.

FAMILY TREE DNA HOME | PROJECT SEARCH | LOGIN



About This Group ▾	Y-DNA Results	Join Request	DNA FAQ
--------------------	---------------	--------------	---------

French Surname	Classic	ground
	Colorized	
Administrators	Map	tor
• Julia Wood Julia	SNP	

Surnames

Ffrench, French, Frensh

Background

The FRENCH Surname DNA Project was officially begun in 2003 when David French registered with FamilyTreeDNA.com for our Group and was given the discounted rate for each individual test. Having read many success stories in matches with DNA for genealogical purposes, we decided that it is time to try to advance our research in the many cases where there are no written documents to help to prove our ancestry. Because of other commitments, David has passed the Project to me, Julia French Wood. The FRENCH DNA Project has done well and the future success of our Project will depend on the number of participants who join our testing group, as well as the validity of the research connected with each line regarding dates and locations of birth, death, marriage, etc.

Please, contact as many FRENCH researchers as you can to encourage their participation in our Project to help to ensure its success.

The testing will be for the Male Y-chromosome that is passed, only, from father to son. Therefore, the testing requires a Male with the surname of FRENCH. You can enlist the help for a DNA sample from any male relative who is a direct descendant of one of your male FRENCH ancestors, if your name is not FRENCH or if you are a female researcher.

We have chosen Family Tree DNA of Houston, TX as our testing company. They are leaders in their field and are associated with Dr. Michael Hammer, Ph.D., Geneticist, associate research scientist in the Division of Biotechnology at the University of Arizona.

The testing laboratory will be analyzing either the 25 , 37 or 67 markers on the Y-chromosome. If the markers of two or more male individuals match, it will indicate they descend from a common male FRENCH ancestor. It will not identify the specific ancestor. A match with the highest number of markers is most significant, however, which test to order, is a personal decision. You can upgrade from the 25 or 37 marker to the 37 or 67 marker test at a later date if desired, although, the cost is a bit more and causes several weeks delay in obtaining the final results.

To join our French DNA Project, go to our other website and click on <http://www.familytreedna.com/group-join.aspx?Group=French>

After your results are in, please, go to the personal webpage that the company provides for you, following the instructions in the email that you receive from the company and list your "Most Distant Ancestor" and the dates and places of birth and death.

Thanks and we hope you find many DNA matches:

Julia French Wood

Project Adm.

Surname Project Results

The most exciting data in the surname project lies in the Y-DNA Results page. Here you see the entire list of people that have tested for this surname. They have usually been grouped with members with similar characteristics. Some also color code the differences in allele values by highlighting them.

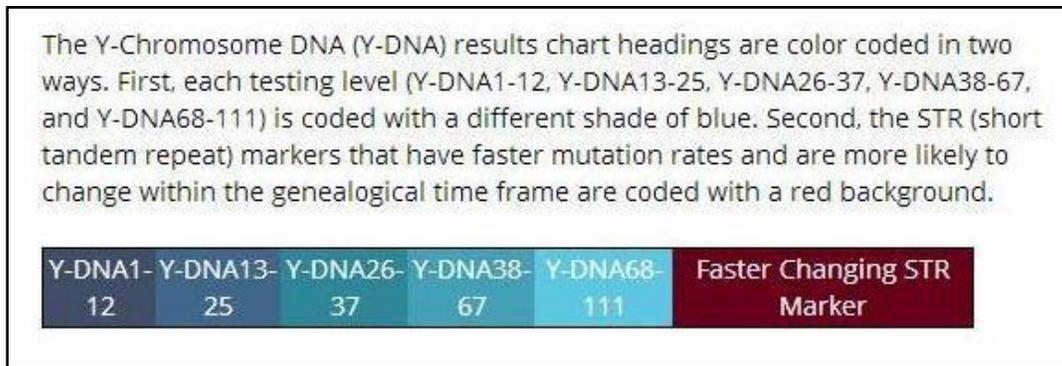
About This Group		Y-DNA Results		Join Request		DNA FAQ																						
French Surname Y-DNA Project - Y-DNA Classic Chart																												
<p>For genealogy within the most recent fifteen generations, STR markers help define paternal lineages. Y-DNA STR markers change (mutate) often enough that most men who share the same STR results are will also share a recent paternal lineage. This page displays Y-Chromosome DNA (Y-DNA) STR results for the project. It uses the classic format. The columns display each project member's kit number, paternal ancestry information according to project settings, the paternal tree branch (haplogroup), and actual STR marker results. The color coding of STR marker names is explained here. In the haplogroups column, haplogroups in green are confirmed by SNP testing. Haplogroups in red are predicted. You may learn more about Y-DNA STRs on the Understanding Y-DNA STRs learning page.</p>																												
Markers: Y-DNA12		Page Size: 500		<input checked="" type="checkbox"/> Show All Columns																								
Kit Number	Paternal Ancestor Name	Country	Haplogroup	DYS393	DYS390	DYS19	DYS391	DYS385	DYS426	DYS388	DYS439	DYS389I	DYS392	DYS399II	DYS456	DYS459	DYS455	DYS454	DYS447	DYS437	DYS448	DYS449	DYS464	DYS460	Y-GATA-H4	Y-CAII	DYS456	Y-STR
GROUP 01																												
9810	David French Sr. 1747-1838 N. Plainfield, Union NJ	United Kingdom	R-U106	13	23	14	10	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	30	16-16-17-18	10	10	19-19	14	1
24611	Samuel C. French b.1792-GA d.Stewart Co.,TN	Unknown Origin	R-M269	13	23	14	10	11-14	12	12	13	13	29	18	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1	
8905	Lafford French's son-William b.1783-SC m.Basna	Unknown Origin	R-M269	13	23	14	11	11-14	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1	
125003	Aaron French b.1739,Monmouth,NJ, d.1805-Wash,PA	England	R-M269	13	23	14	11	11-14	12	12	12	13	28	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1	
43292	Aaron's son Ezekiel b.1775-Essex,NJ d.1861-OH	United Kingdom	R-M269	13	23	14	11	11-14	12	12	12	12	13	28	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
10100	Aaron's son,John b.1795,Amity,PA d.1874-Onslow,IA	England	R-CTS7080	13	23	14	11	11-14	12	12	12	12	13	28	17	9-9	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
N68990		United Kingdom	R-M269	13	23	14	11	11-14	12	12	12	13	13	29														
7173	Samuel French,b.c1726 - Res.Anson,NC-d.Rutherford	England	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
8839	Moses French-b. Sussex Co., NJ d.1797,PA	Unknown Origin	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
126225	Joseph P.French-b.1812,Edgefield,SC d.1879,Pike,AL	Unknown Origin	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
175971		England	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
205634	NoahFrench,1754-1843,Essex&MorrisCty,NJ; Essex,NY	Unknown Origin	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
89069	Samuel French, TaxList 1748, Anson Co.,NC	Unknown Origin	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
80627	Lafford's Son-William b.1783,SC d.1845,Clinton,IL	Unknown Origin	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
7131	Richard French b.-1775 Sussex? NJ	England	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
32087		Unknown Origin	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
87794	John French,1812,OH d.1864,Hendricks,Shelby Co.,IN	Unknown Origin	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
272448	Lafford French, b. 1753 and d. 1834	Unknown Origin	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
35336	John Morgan French, b.c. 1811, SC	Unknown Origin	R-M269	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	16-16-17-18	11	10	19-19	14	1
75063	William M.French, b.1806,Baltimore,MD d.Powell,KY	Unknown Origin	R-U106	13	23	14	11	11-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	30	15-16-17-18					
87562		Unknown Origin	R-M269	13	23	14	11	11-15	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18					
153524		Unknown Origin	R-M269	13	23	14	11	11-15	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	11	10	19-19	14	1
12240	John (French) Flanagan, b. 1811 and d. 1869	United Kingdom	R-M269	13	23	14	11	11-15	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	11	10	19-19	14	1
171764		Unknown Origin	R-M269	13	23	14	11	11-15	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	11	10	19-19	14	1
145735	Hugh French,Imm.1660,MD d.Bef.1701,Richmond,VA	Unknown Origin	R-M269	13	23	14	11	11-15	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	11	10	19-19	14	1
N11844	Hugh French,Imm.1660,MD d.Bef.1701,Richmond,VA	United Kingdom	R-M269	13	23	14	11	11-15	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-19	13	10	19-19	14	1
38806	Benjamin Clayborne, b.c. 1725, Accomac, Virginia	England	R-M269	13	23	14	11	8-14	12	12	12	13	13	29	17	9-10	11	11	24	15	19	29	15-16-17-18	10	10	19-19	14	1
GROUP 02																												
7330	Gideon French,b1760,Fairfield,CT-d1836,Bradford,PA	England	R-M269	12	24	14	11	11-15	12	12	12	14	13	30	17	9-10	11	11	25	14	19	29	15-15-16-16	11	11	19-22	16	1
165261		England	R-M269	13	24	14	11	11-15	12	12	12	14	13	30	17	9-10	11	11	25	14	0	29	15-15-15-15	11	12	19-22	16	1
67003	Samuel French The Joinr b 1687 Btadfor Abbas	England	R-M269	13	24	14	11	11-15	12	12	12	14	13	30	17	9-10	11	11	25	14	19	29	15-15-15-15	11	11	19-22	16	1
12925	Charles French,b1790,ENG d1846,York,Ontario,CAN	Unknown Origin	R-P311	13	24	14	11	11-15	12	12	14	13	30	17	9-10	11	11	25	14	19	29	15-15-17-18	11	11	19-22	16	1	
7339	William French (1450)	England	R-M269	13	24	14	11	11-15	12	12	13	13	13	29	17	9-10	11	11	25	14	19	29	15-15-15-15	11	11	19-22	17	1
GROUP 03																												



Pop Quiz #4

If I have a highlighted allele value on one or more of my markers, can my Genetic Distance be zero?

The color codes for the DYS headers at the top of the page are explained in the following chart:



If you look at the color coding across the top of a FT-DNA Surname Project sheet, you will see the maroon colored markers are the 'fast' mutating ones. They are in the following groups:

- 1-12: 3 (DYS385 (2x) & DYS439)
- 13-25: 6 (DYS458, DYS449 & DYS464 (4x))
- 26-37: 5 (DYS456, DYS576, DYS570 & CDY (2x))
- 38-67: 5 (DYS413 (2x), DYS557, DYS481 & DYS446)
- 68-111: 0

So you can see that a 37 marker test will show you most of the mutations (thus Genetic Distance) and 67 markers will show you ALL of the fast changing markers (not to say you won't have "regular" mutations in the 68-111 range).

3.1.2. Geographic Projects

These projects look at specific regions of the world to see how the residents in that area, or those who trace their ancestry to specific regions, relate genetically.

3.1.3. Haplogroup Projects

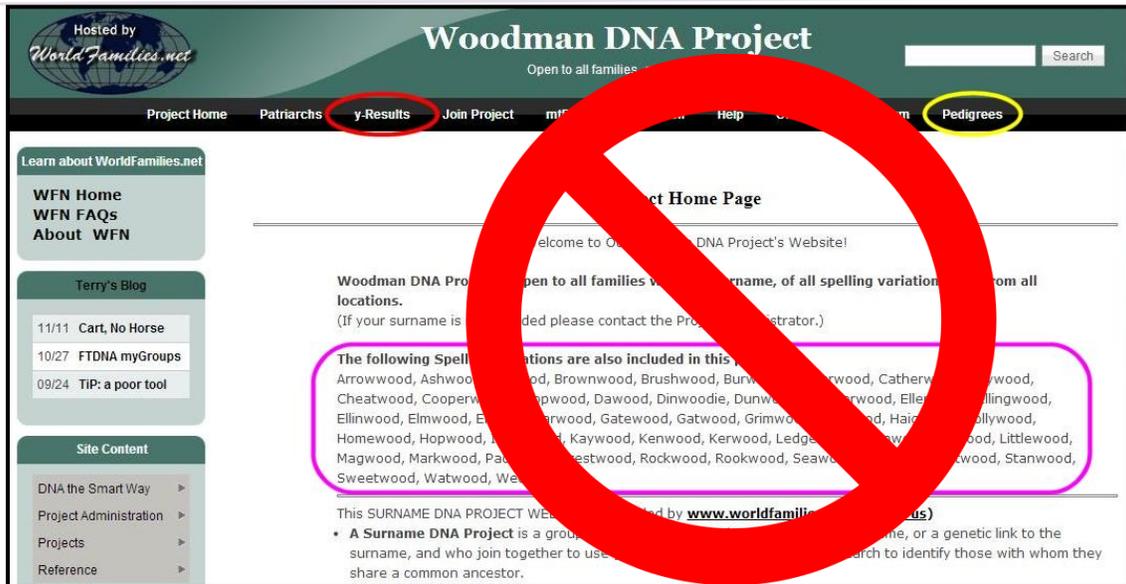
These study a particular Haplogroup, and they are the best resource for determining what type of SNP test to get and what those results mean.

3.1.4. Private Projects

Private Projects are for people who manage multiple kits or are interested in a specific family lineage. Private projects require approval from FT-DNA.

3.2 World Families Projects

Some Surname Projects at FT-DNA were hosted at WorldFamilies.net. The E.U. GDPR regulations in 2018 caused the shutdown of this site. Many of these have gone back to FT-DNA hosting.



Hosted by WorldFamilies.net

Woodman DNA Project

Open to all families with the surname, of all spelling variations from all locations.

Project Home Patriarchs **y-Results** Join Project mft Help Pedigrees

Learn about WorldFamilies.net

WFN Home
WFN FAQs
About WFN

Terry's Blog

11/11 Cart, No Horse
10/27 FTDNA myGroups
09/24 TIP: a poor tool

Site Content

- DNA the Smart Way
- Project Administration
- Projects
- Reference

Project Home Page

Welcome to Our Woodman DNA Project's Website!

Woodman DNA Project is open to all families with the surname, of all spelling variations from all locations. (If your surname is not included please contact the Project Administrator.)

The following Spelling variations are also included in this project:

Arrowwood, Ashwood, Brownwood, Brushwood, Burwood, Catherwood, Cheatwood, Cooperwood, Dawood, Dinwoodie, Dunwood, Ellinwood, Elmwood, Gatewood, Gatwood, Grimwood, Homewood, Hopwood, Kaywood, Kenwood, Kerwood, Ledgewood, Littlewood, Magwood, Markwood, Sweetwood, Rockwood, Rookwood, Seawood, Stanwood, Watwood, We

This SURNAME DNA PROJECT WEBSITE is hosted by www.worldfamilies.net

- A Surname DNA Project is a group of people who share a common surname, or a genetic link to the surname, and who join together to use DNA testing to identify those with whom they share a common ancestor.

Section 4. Glossary ⁴

- **Allele** - One of the possible values for a marker. For example, with Y chromosome DNA, the values of "13" or "14" would be different alleles for DYS393.
- **Base** - A base is a unit or building block of DNA. Adenine (A), cytosine (C), guanine (G), and thymine (T) are the four primary bases in DNA. The order of bases is the sequence of DNA.
- **EKA** - Earliest Known Ancessor
- **Genetic Distance** - Genetic Distance is the number of differences, or mutations, between two sets of results. A genetic distance of zero means there are no differences in the results being compared against one another. See following pages for 11 markers.

# of Markers	Genetic (Allelic) Distance										
	0	1	2	3	4	5	6	7	8	9	10
12	Related	Possibly Related	Probably Not Related	Not Related							
25	Related	Related	Probably Related	Probably Not Related	Not Related						
37	Very Tightly Related	Tightly Related	Related		Probably Related	Possibly Related	Not Related				
67	Very Tightly Related	Tightly Related		Related		Related		Probably Related	Possibly Related		Not Related

- **Haplogroup** - A Haplogroup is a major branch on either the maternal or paternal tree of humankind. Haplogroups are associated with early human migrations. Today these can associated with a geographic region or regions.
- **Haplotype** - A haplotype is the set of DNA values. For example, the results of the Y-DNA12 test for one person are their haplotype.
- **Marker** - A marker is a physical location (locus) on the chromosome. The term is often used colloquially in genetic genealogy to refer to a short tandem repeat (STR).
- **Most Distant Ancestor** - the person along your paternal line that your paper research shows as the "oldest" male ancestor you have found
- **Most Recent Common Ancestor (MRCA)** - the most recent ancestor from which the two individuals descended
- **Non-Paternal Event (N.P.E.)** - a break in the Y chromosome line due to adoption (legal or 'common'), infidelity or numerous other causes.
- **Project Administrator** - a volunteer genetic genealogist who can help users understand their DNA results
- **Short Tandem Repeat (STR)** - A short DNA motif (pattern) repeated in tandem. ATGC repeated eleven times would give the marker a value or allele of 11.
- **Sub-clade** - term used to describe a subgroup of a subgenus of a Haplogroup.

⁴ **NOTE:** the Glossary "grows" with each lesson (and includes definitions from previous lessons) so that you don't have to go back to other Lessons to get definitions.

- **Y-Chromosome** - One of the two sex chromosomes, X and Y. The Y-Chromosome passes down from father to son. Females do not receive it. As the Y-Chromosome is passed on through the paternal line, it is valuable for surname based genealogy studies.
- **Y-DNA Backbone test** - If a person's Y-DNA Haplogroup cannot be predicted with 100% confidence, the SNP Assurance Program at FTDNA will test your sample with our Backbone SNP test for FREE. This test is a "deep" multiple SNP test. Specifically, if we cannot predict a person's Y-DNA Haplogroup with sufficient confidence that they can join the National Geographic's Genographic Project, we will automatically perform a Backbone SNP test in order to identify the Haplogroup assignment. Backbone tests take about 6-8 weeks from the time they are ordered.
- <https://dnaadoption.org/acronyms/>
<https://dnaadoption.org/glossary/>

Genetic Distance Table for 111 markers

Genetic Distance	Relationship	Interpretation	Related in This Number of Generations or LESS			
			Confidence			
			50%	90%	95%	99%
0	Very Tightly Related	A 111/111 match indicates a very close or immediate relationship. Most exact matches are 3rd cousins or closer, and over half are related within two generations (1st cousins).	2	4	5	6
1	Tightly Related	A 110/111 match indicates a close relationship. Most one-off matches are 5th or more recent cousins, and over half are 2nd cousins or closer.	3	6	7	9
2	Tightly Related	A 109/111 match indicates a close relationship. Most matches are 7th cousins or closer, and over half are 4th or more recent cousins.	5	8	9	11
3	Related	A 108/111 match indicates a genealogical relationship. Most matches at this level are related as 9th cousins or closer, and over half will be 5th or more recent cousins. This is well within the range of traditional genealogy.	6	10	11	14
4	Related	A 107/111 match indicates a genealogical relationship. Most matches at this level are related as 10th or more recent cousins, and over half will be 6th or more recent cousins. This is well within the range of traditional genealogy.	7	11	13	16
5	Related	A 106/111 match indicates a genealogical relationship. Most matches at this level are related as 12th cousins or more recently, and over half will be 7th cousins or closer. This is well within the range of traditional genealogy.	8	13	15	18
6	Probably Related	A 105/111 match indicates a more distant genealogical relationship. Over half of matches will be 9th cousins or closer, and most matches at this level are related as or more recently than 14th cousins. If there is a tradition of a recent genealogical relationship, the best way to confirm it is to test additional family lines. By testing additional family lines, you can find the person in between who is a closer match to each of the others tested. This 'in between' is essential for you to find as their match proves the connection between the more distant matches.	10	15	17	20
7	Probably Related	A 104/111 match indicates a more distant genealogical relationship. Over half of matches at this level are related as 10th cousins or closer. Most matches at this level are related as 16th cousins or more recently. If there is a tradition of a recent genealogical relationship, the best way to confirm it is to test additional family lines. By testing additional family lines, you can find the person in between who is a closer match to each of the others tested. This 'in between' is essential for you to find as their match proves the connection between the more distant matches.	11	17	19	22
8	Only Possibly Related	A 103/111 match indicates a distant cousinship with only a chance of a genealogical relationship. Over half of matches at this level are related as 12th cousins or more recently. Most matches at this level are related as 18th cousins or more recently. The connections here can be highly informative for relationships with historic groups and events. If there is a tradition of a recent genealogical relationship, the best way to confirm it is to test additional family lines. By testing additional family lines, you can find the person in between who is a closer match to each of the others tested. This 'in between' is essential for you to find as their match proves the connection between the more distant matches.	13	19	21	24
9	Only Possibly Related	A 102/111 match indicates a distant cousinship with a chance of a genealogical relationship. Over half of matches at this level are related as or more recently than 20th cousins. The connections here can be highly informative for relationships with historic groups and events. If there is a tradition of a recent genealogical relationship, the best way to confirm it is to test additional family lines. By testing additional family lines, you can find the person in between who is a closer match to each of the others tested. This 'in between' is essential for you to find as their match proves the connection between the more distant matches.	14	21	23	27
10	Only Possibly Related	A 101/111 match indicates a distant cousinship with some chance of a genealogical relationship. Over half of matches at this level are related as 15th cousins or closer. Most matches at this level are related as 22nd cousins or more recently. The connections here can be highly informative for relationships with historic groups and events. If there is a tradition of a recent genealogical relationship, the best way to confirm it is to test additional family lines. By testing additional family lines, you can find the person in between who is a closer match to each of the others tested. This 'in between' is essential for you to find as their match proves the connection between the more distant matches.	16	23	25	29
>10	Not Related	The two men are totally unrelated within the genealogical time-frame on their direct paternal line. Their shared ancestry is historical or anthropological.	-	-	-	-

Section 5. Resources

Once you have clues to people who might match your DNA, there are gold mines of resources just waiting to help you move farther along in your search.

5.1 Internet

- The resources we've used in class, of course: FamilyTreeDNA.com.
 - <https://www.familytreedna.com/learn/using-the-kit/family-tree-dna-test-kit/>
 - <https://www.familytreedna.com/learn/dna-test-kit-instructions/>
 - <https://www.familytreedna.com/learn/using-the-kit/use-swabs/>
- ISOGG: <http://www.isogg.org>
- BLOGS: <http://dna-explained.com/2014/09/04/what-does-and-doesnt-a-y-dna-match-mean/>
- There are many surname project websites, often associated with Y-DNA tests. Here's one example: <https://www.familytreedna.com/public/French?iframe=yresults>
- If you haven't found what you want yet, visit Cindy's List <http://www.cyndislist.com/> for an incredible list of genealogy resources organized by category.

5.2 Videos

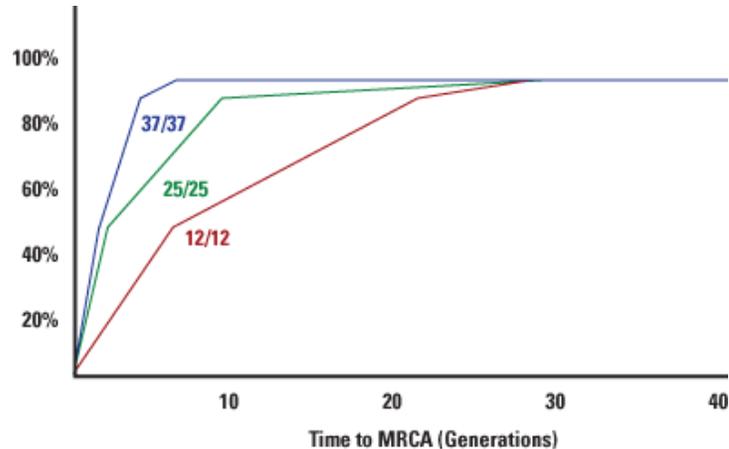
- <https://www.youtube.com/watch?v=AN07Adu7Bs> How to Take a Family Tree DNA Test (4:10)
- https://www.youtube.com/watch?v=ekB9LY_aL04 Family Tree DNA Results Explained: Y-DNA Markers, Matching & Genealogy (FT-DNA Webinar 1:55:40)
- <https://www.youtube.com/watch?v=zy0QnSLnFtw> How to enhance your Y-DNA results through Surname and Haplogroup projects (1:11:42)
- <https://www.youtube.com/watch?v=qiv0Ny6nvAY> Help, My Y-DNA Matches Have a Different Surname! (FT-DNA 1:29:56)
- https://www.youtube.com/watch?v=Wicb2_bEIYo Adoptions & illegitimacies - using DNA to solve adoption mysteries (Dr. Maurice Gleeson 1:03:40)

5.3 Books

- Bettinger, Blaine T. - "***Guide to DNA Testing and Genetic Genealogy***" ©2016, Family Tree Books, Cincinnati, OH [ISBN-13: 9781440343326 9781440345395] << available as book or e-Book>>
- Aulicino, Emily - "***Genetic Genealogy: The Basics and Beyond***", ©2014, AuthorHouse LLC, Bloomington, IN [ISBN13: 9781491840900]
- Smolenyak, Megan & Turner, Ann - "***Trace Your Roots With DNA: Use Your DNA to Complete Your Family Tree***", ©2004, Rodel Books, New York [ISBN 1594860068 (ISBN13: 9781594860065)]
- Pomery, Chris - "***DNA and family history : how genetic testing can advance your genealogical research***", ©2004, Dundurn Group, Toronto, Ontario
- Dowell, David R. (Ph.D.) - "***NextGen Genealogy: The DNA Connection***", ©2015, Santa Barbara, California : LIBRARIES UNLIMITED, an imprint of ABC-CLIO, LLC
- Hill, Richard - "***Finding family : my search for roots and the secrets in my DNA***", ©2012, Richard Hill (self published), Grand Rapids, Michigan. << available as book or e-Book>>
- Griffeth, Bill- "***The Stranger in My Genes***", ©2016, UPNE Book Partners, Lebanon, NH [ISBN-13: 978-0-88082-344-9]

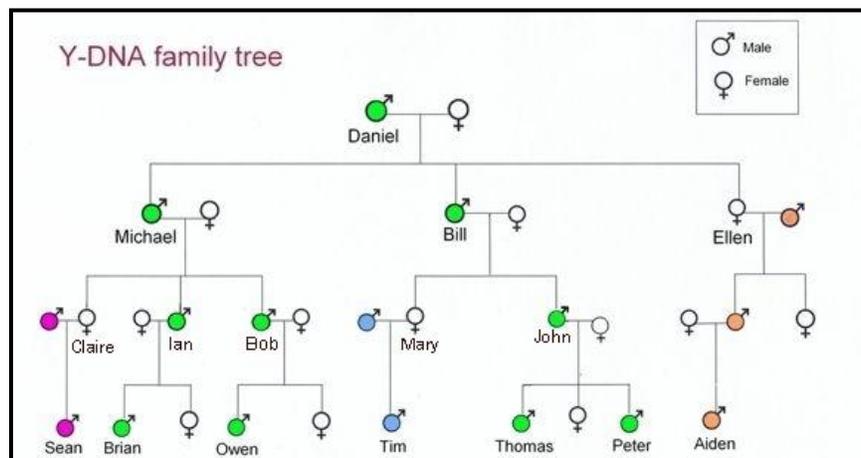
Section 6. Pop Quiz Answers

- 37 - Test only what you need (or can afford) and upgrade when necessary. The following chart shows the times back to the **Most Recent Common Ancestor (MRCA)** when **ALL** the markers match. So you get more "bang for the buck" by testing 37 markers in order to identify (or verify) most recent ancestors. I get a 90% chance of MRCA in **6-7** generations with Y-37 where a Y-12 test takes **30** generations for the same result!!



Remember from Lesson #1, with 37/37 (all 37 markers match), there is a 50% probability that the MRCA was no longer than 2 generations past, and a 90% probability that the MRCA was within the last 5 generations.

- No. Aiden got his Y-DNA from Ellen's husband (in orange). If you choose a different pair of cousins – (Brian and Owen) or (Brian and Thomas) it would show them related on the same paternal line.



- The only way to see the STR markers of your matches is in the Surname Project (if they have joined). Use the browser 'Search' to find his kit number or **EKA** name. There, he has been grouped with "like" markers/Haplogroups and you can see the values for each marker. If you look at the 'colorized' version it will highlight the differences in markers in the group. Then you can see if the differences were on fast changing markers.
- No. With each highlighted difference, that increases your Genetic Distance (by one or more!). See definition of Genetic Distance in the Glossary.

Section 7. Epilogue

Class Notes

Summary

Y-DNA can trace the origins of a surname and can be used to find other people who shared an ancestor on this paternal line. Y-DNA Testing is the process of getting your Y-Chromosome results for comparing with other testers.

Access to Materials

Your Moodle login will continue to be available to you. If you'd like to retake the class, you are welcome to sign up as space is available. No additional donation will be requested (although they are certainly welcome!). Email DNAAdoptionHelp@gmail.com if you wish to re-take this class.

Class Forum

The class forum will be available for follow-up questions for an additional 4 weeks subsequent to the posting of Lesson 3. Participants will also have the option of re-taking this class for free within the next year. Contact DNAAdoptionHelp@gmail.com if you wish to re-take this class.

Stay in Touch! Let us know how your journey is going.

DNAAdoptionHelp@gmail.com