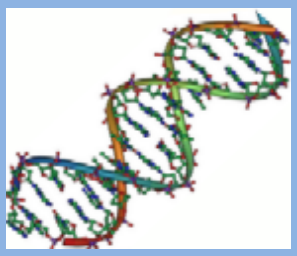

Phillips DNA News

www.phillipsdnaproject.com
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Editor: Nancy Kiser

Please submit news articles or ideas for articles to the editor. Questions about Genetic Genealogy can always be sent to the editor.

Project News

Happy Halloween, everybody! I hope you collect more treats than tricks this Halloween! And speaking of tricks…

There have been big changes going on at Family Tree DNA. On September 16th, FTDNA introduced the launch of a new system called Project Administrator Dashboard. The new system was described as a powerful interface available for DNA project administrators utilizing the latest in web technologies. FTDNA also said they had produced a platform with many features administrators had been requesting, as well as other features FTDNA thought would be of great benefit. I think it was very generous of FTDNA to spend their time and money developing a fancy new system for us!

Unfortunately, there were a few bugs in the new system and many project administrators freaked out. Sometimes it is hard to teach old dogs new tricks. Also, the new system turned out to be a computer memory hog and required high speed internet connections to work properly. The project administrators who still use dial-up or who have older computers found that their computers froze up when they tried to access the new system. After much outcry, FTDNA reactivated the old system so that project administrators could choose whether to continue with the old system or start using the new system.

At the Phillips DNA project, we are using a combination of both: the old system for speed and the new system for its fancy new features and reports. We decided to leave our public website on the old system, because the new system might have caused problems and delays for those of you who use dial-up to access the internet. One new feature we have embraced at the Phillips DNA project involves our mtDNA chart for members who have gotten their mtDNA tested. In the past, we were not able to group the mtDNA results into haplogroups on the mtDNA chart, but now we can. Here is a link to the mtDNA results chart on our public website at FTDNA:

http://www.familytreedna.com/public/phillips/default.aspx?section=mtresults

Our co-administrator, Tom Hutchison, took it upon himself to organize our mtDNA chart. In so doing, he noticed some participants have posted the name of a man as their earliest known maternal ancestor. It is impossible for a man to be a maternal ancestor. Your earliest known maternal ancestor is your mother's mother's mother's (etc) mother back in time. Tom created an

FAQ page on our website that attempts to graphically depict which one of your maternal ancestors is your earliest known mtDNA maternal ancestor. Here is a link to it:

http://www.phillipsdnaproject.com/faq-sections/27-dna-questions-faqs/304-ancestor-dna-charts

Remember that your earliest known maternal ancestor was a woman and she was not the wife of your earliest known male Phillips ancestor. She is your mother's mother's mother's (etc) mother. If you have had your mtDNA tested by FTDNA and you entered the wrong person as your earliest known mtDNA maternal ancestor, we will help you correct your information. You can either send us the name and date and place of birth of your earliest known maternal ancestor, or you can update the information yourself on your personal page. If you cannot remember how to update the information on your personal page, contact us and we will help you with that. We are even available by telephone if you need someone to walk you through the process.

Questions and Answers

Question: We are having a family reunion for Group 26 in October. My relatives don't understand how their DNA can be linked to someone who is deceased if you do not have DNA from the deceased person for comparison purposes.

Answer: Well, of course, there is always the direct way, which is to test DNA from the skeleton of the presumed common ancestor. However, it is difficult to find old graves and to get permission to dig up skeletons for testing. The very idea is often offensive to many family members. It is also quite expensive and yDNA tends to deteriorate rather rapidly so it is difficult to extract from old bones.

The indirect method is sometimes called triangulation. It works like this. You identify and test two living men who each claim descent from a certain paternal ancestor through two different sons of that paternal ancestor and compare their yDNA. If it matches and you have a good paper trail, you can be fairly certain they both descend from that paternal ancestor. The more men you can find and test who descend from different sons of that ancestor, the better.

In the case of Group 26, three different men who all claim descent from John Phillips Jr, the son of John (Henderson?) Phillips have been tested. They all three descend from a different son of John Phillips Jr, and all three of them have matching yDNA. If you could dig up the skeletons of John (Henderson) Phillips or John Phillips Jr and test their yDNA, it would almost certainly match the yDNA of these three men.

Question (POSTED ON A DNA MESSAGE BOARD): Is it true that MIA/POW identifications use mtDNA because it is more long lasting and abundant than yDNA?

Answer (POSTED ON A DNA MESSAGE BOARD): Yes. In each cell, there are up to 1000 mitochondria, and each one carries 5 to 10 copies of its own genome, which is 16,568 bp long. There is only one Y chromosome, and it is 50,000 bp long.

Question (POSTED ON A DNA MESSAGE BOARD): I mentioned the mtDNA preference to a PhD genetics person. Specifically that mtDNA was more long lasting and more abundant than Y-DNA, and thus more preferable when studying bones. He said recent advances in DNA technology has eliminated much of the old advantage mtDNA had because it was more abundant. I'm not sure I fully understood what he was telling me and I certainly didn't have enough expertise to probe further. So to the experts here...is Y-DNA slowly becoming more valuable relative to mtDNA in forensic anthropology?

Answer (POSTED ON A DNA MESSAGE BOARD): One of the issues with sequencing DNA from remains is contamination. When remains are collected, they are not always collected carefully, so that by the time the sample gets to the lab, it has been handled by any number of persons. The DNA that could identify someone or something is often a small fraction of the total DNA in the sample, even if there is a lot of mtDNA and Y-DNA.

This happened on the Amelia Earhart project. The crew that went to Gardener Island and retrieved samples of biological material that could possibly have been used to identify whose they were, was contaminated when one of the expedition members touched the samples. The lab extracted great mtDNA from the remains, and there was hope that the mystery would be solved. Unfortunately, the DNA matched that expedition member .... and ... oh well .... back to the island.

Ancient DNA can be preserved for a long time depending on the conditions. If the remains have been located in a cool dry place, the DNA is more likely to be preserved. It has been possible to sequence DNA from 50,000 year old cave bear bones. I am not familiar with the dinosaur DNA, but it was probably preserved under similar DNA-benign conditions.

Sometimes you get lucky, too. The Unknown Child on the Titanic (since identified as Sidney Leslie Goodwin) was buried in the Fairview Lawn Cemetery in Halifax in 1912. The climate in that area is very rainy and damp - the soil is acidic. Yet three small baby teeth and a small fragment of wrist bone survived for 90 years and were used for the identification. MT-DNA was used here before Y-DNA could come into the picture. Tooth enamel is the hardest substance in the body, so that teeth are the most rugged part of the human body. This means that not only do they survive better under adverse environmental conditions, but also that DNA in the dentin is protected from the elements. DNA can often be extracted from tooth pulp even if the rest of the body is gone. The second place we usually look for DNA is in bone, since bone is also very hard (although porous), and can protect DNA in the marrow. Besides, DNA is in the interior of the bone, and has not been exposed to possible contamination from handling the specimen.

There is a new technology that works like a centrifuge, so that small scraps of DNA that might be the very degraded mtDNA/yDNA that you are looking for, can be separated from the larger fragments of contamination by the centrifuge, but it is still experimental.

Featured Phillips Family Story

My Phillips Brick Wall:
Jonathan Phillips 1794-1868 of Hastings County, Ontario, Canada
By Bob Phillips of Columbus, Ohio
Phillips DNA Project Group 11

The following is an account of my great-great-grandfather, Jonathan Phillips, found in a book by William Canniff, History of the Settlement of Upper Canada (Ontario), with special reference to the Bay of Quinte (p.559-560). I have made notations correcting known facts found in the course of my research. Following the account and notations are an outline of his family.

We will here give an extract from an obituary notice taken from the *Hastings Chronicle*.

"A Veteran Of 1812.— Of the Provincial troops, the Glengary regiment of Infantry[1] took perhaps the most active part. At the age of fifteen, Jonathan Phillips enlisted in this corps, then being raised throughout Canada. The urgent necessity for recruits inducing the authorities to accept youths even of that tender age. The story will best be told, as nearly as may be, in the veteran's own words:—'I was born in Duchess County, State of New York, in the year 1796[2]; my father came from Devonshire, England, and my mother from Edinburgh, Scotland. In 1809, my parents removed to Canada and settled in Fredericksburgh, County of Lennox and Addington.[3] In January, 1812, I was working for Mr. Chapman, in Fredericksburgh, getting out square pine, oak, and staves; whilst thus employed, Captain Judkins, formerly of the 104th Regiment of the Line, asked me to enlist, and I joined the Glengary's, and in a few days after was sent to Kingston with about twenty other recruits from Fredericksburgh, Richmond, and Ernesttown. We remained in Kingston till navigation opened, when the recruits assembled at that place, about 200 in all, descended the St. Lawrence in batteaux to Three Rivers, where we received uniforms, arms, and accoutrements, and commenced to learn our drill. The corps now numbered about 800.

Towards autumn we were ordered to Quebec, in charge of about 1000 prisoners from General Hull's army, captured in the west. We remained at Quebec a month or six weeks. In October, 1812, we were ordered to the west, (the season is recalled from the recollection that as they marched from Quebec the farmers were busy cutting wheat on the hillsides, and the snow was falling at the time). The march was by the North Shore road to Montreal. Here we remained all winter, expecting the Americans to attack that city. In the month of March, before the sleighing was gone, the regiment was ordered to Kingston, taking with them several pieces of cannon, which were drawn by oxen. The men marched. The cattle that drew the cannon and baggage were slaughtered at Kingston for provisions. We remained a month at Kingston, and then passed up the Bay of Quinte to the Carrying Place in batteaux. The baggage and batteaux were transported across the Isthmus into Lake Ontario, and we re-embarked for York. On our arrival at York we were forwarded with all dispatch to Burlington Bay. We first met the Yankees at Stoney Creek, and then pushed on towards Fort George. We halted at the village of St. Davids, and encamped at the cross-roads. The Yankees held Fort George; when they discovered we were so near them they retreated upon Black Creek. We followed them up, and had a battle with them at Lundy's Lane, on 25th July, 1813. In this affair I was in the advance guard, or reconnoitering

party. The enemy retreated upon Fort Erie, and we pursued them and had several skirmishes with them. They blew up the fort, and evacuated Canada. In the fall of the year we marched back to York; there we embarked in batteaux and came to the Currying Place—thence we crossed into the Bay of Quinte, and thence to Kingston From Kingston we marched to Adolphustown Court House, and were billeted upon the farmers in that vicinity during the ensuing winter. There were from eight to ten men in each house. Whilst here we assembled every day at the Court House, at ten a. m., for drill—we were at least 800 strong.

On the 23rd March, 1814, all the three years' men were paraded at the Court House, paid off, and discharged. Each man so discharged drew 100 acres of land in Upper Canada, farming utensils, and a year's provisions. The provisions were distributed every three months, at Robert Charles Wilkins' store, at the Carrying Place."

From the time of his discharge till his decease, Phillips resided in the County of Hastings, pursuing the usual occupation of the first settlers of this county. For many years he followed "lumbering" in winter and farming[4] in the summer seasons, but being trustworthy, intelligent, and of a kindly disposition, his services were frequently sought after for various purposes. Several years ago, the farm which he drew for his military service, and which, for many years, afforded him a home and a support, he sold for the sum of $1,900[5], thus enjoying in his old age the well earned reward of the loyalty and courage of his youth. He died at his home, in the second concession, Rawdon, on the 15th February, 1868.

Notes:

1. The Glengary Light Infantry Fencibles were considered full regular British Army troops, raised to fight for the duration of the War of 1812 in Canada.
2. Per Jonathan Phillips discharge papers dated 1814, he was aged 21, born “in or near the town of Cloverick, in or near the Parish of Albany.”
3. Thus far, I have found no reference to names of parents or Phillips relatives in the vicinity of Fredericksburgh, Lennox & Addington County. I am inclined to dismiss the reference to Devonshire and Scotland as editorial gloss by the author.
4. Although he almost certainly farmed, per discharge papers and 1851 Census, Jonathan was a “shoemaker by trade.”
5. The property that Jonathan actually sold was his wife, Eleanor’s, grant as a daughter of Duncan Bell, U.E. The property that he was granted for his service was lost to him as it was “unfit for cultivation.”

Family of Jonathan Phillips (1794-1868) and Eleanor Bell (1799-1848).
Annie Phillips (1819-1848) m. Aaron Hoard (1805-1879)
Catharine Phillips (1821-1905) m. Thomas Carlisle
Norris Phillips (1822-1899) m. Diana Rupert
William Phillips (1826-1902) did not marry
Jane Phillips (1825-1893) m. Gilbert Cummings (1824-1876)
Adeline Phillips (1831-) m. Seth Chard (1834-)
John Phillips (1833-) m. Melissa Cummings (1834-1863)
Gilbert Phillips (1838-) m. Melissa Rankin (-)

Family of Jonathan Phillips and Marriah (Heagle) Sharp, widow of James Sharp
Albert Phillips (1849-1923) m. Mahala Mable Brintnell (1853-1930)
Melissa Phillips (1850-1946) m. William Barnett (1840-1915)
Margaret Phillips (1852-) m. John Spry (1846-)
James Wilson Phillips (1855-1882) did not marry

Guest Column

23andMe and FamilyTree DNA Testing:
How are they different and how are they the same?
By Roberta Estes
www.dnaexplain.com

Someone asked if the new autosomal testing offered by 23andMe replaces the traditional Yline and mtdna testing we've been having done within and outside of our projects at Family Tree DNA. The answer is a resounding ABSOLUTELY NOT - THIS DOES NOT REPLACE TRADITIONAL GENEALOGY TESTING!!! Don't think for a minute that it does. Makes my heart skip a beat to even think that anyone might consider this. Let's talk about the two types of ancestry testing and what you get with each company (and each type of testing).

Family Tree DNA specializes in testing for genealogy, meaning Yline, mitochondrial and deep ancestry. They provide great products to do this, some that are not offered by others, but also interpretative tools for each individual. Most importantly, they provide surname, haplogroup and geographic projects (and tools) that allow us to group ourselves together, to study our results and to make sense of our personal and group ancestry. Yes, I know that various other companies provide pieces and parts of this too, but FTDNA provides the largest set of tools and the largest data base and that is where all of my projects reside so that is who I'm discussing. Any other company would represent a subset of what is offered by FTDNA.

At 23andMe, you are provided with your haplogroup assignment. If you are male, you get both yline and mtdna. I don't know how they assign the yline haplogroups, but I do know that they do not test your DNA for insertions and deletions. In some cases, tiny bits of your dna drop out, which is called a deletion, and in other cases, a bit of it "cuts in line" and that is called an insertion. 23andMe tests only specific locations using chip technology, which is how they can test so much of your DNA, but it does not allow them the latitude to "look around" for insertions and deletions. When assigning mitochondrial haplogroups, this is critically important as many haplogroup assignments depend on insertions and deletions, so their mitochondrial haplogroup assignments are sometimes incorrect. Mine is incorrect which frustrates me incredibly.

Family Tree DNA on the other hand does a full sequence analysis when you purchase the Full Sequence product (FGS) and they do "look around" giving you a complete picture of your mito DNA including insertions and deletions. Their product is not only more accurate, you also get to

match to others who have tested at the HVR1, 2 and full sequence levels and receive their e-mail addresses. Family Tree DNA provides us with the matching feature for results plus notification.

23andMe does not test the normal genealogy markers panels (the STRs) for yline. This means that there are no 12, 25, 37 or 67 marker values reported and these are the genealogy values we all need to determine if we are related to the "Smith line from Surry County, Virginia" as opposed to the "Smith line from Tyrrell County, North Carolina." This was and is the most important part of genetic ancestry testing and you don't get it at 23andMe. Their product offerings are different and can be used in conjunction with these tests, but have nothing to offer in this area.

Please be aware that this is not meant to be critical of either company, only to explain their differences and where both of them fit into the scheme for genealogists and when using each company is appropriate genealogically.

Family Tree DNA provides us with organized projects to compare the genealogical data as well, which is the second half of the genealogy equation, having the tools to do something with those raw results. Bless them, over and over, for this. They have also given us Ysearch, another great tool that everyone can use, meaning not just FTDNA clients, to compare your DNA.

FTDNA clients also receive important tools and information tabs including the haplotree which graphically displays info about your haplogroup, your SNPs (which are not separately reported at 23andMe in a usable fashion), migration routes, haplogroup percents, ancestral origins, and the maps. The mapping feature is often overlooked and that's sad because if people entered their oldest ancestor info and their location, it provides a great deal of "patterning" in terms of migration, especially related to haplogroups and families in Europe, but I am digressing again. I just worked on a haplogroup N1c1 project where the maps were critical to determining where the gentleman's ancestor actually came from.

Not to mention that Family Tree DNA offers their new Traits, the boutique SNP selections, the Personal Reports, upgrades, and probably other things I'm not thinking about. They also provide administrators with tools and the conference for education. These things, except for the Traits, are not offered at 23andMe, and even if they were, the sheer number of people in the Family Tree Data Base who are obviously interested in genealogy provides the perfect environment for the genealogist.

Having said that, the importance of the 23andMe testing, aside from the Health Traits which are great (and worth every penny), but not typically the primary interest of genealogists, is their foray into autosomal testing and making it relevant for genealogists. Because they are using the chip technology that allows them to test half a million locations and store those results, it also makes it doable to measure inheritance segments and translate that into degrees of relationship. Family Tree DNA does not do this today. How well 23andMe can do this remains to be seen, but that is the focus of the Relative Finder project.

Again, because of the sheer number of locations tested, it allows research to correlate the values at certain DNA locations with geographic ancestral locations. This has manifested itself in the

percentages of Ethnicity reported by 23andMe. 23andMe and DeCodeMe both report this percentage today for European, African and Asian, but while 23andMe has aggressively priced their products and pursued the genealogy community, DeCodeMe has not and the result is that few use their service and most use 23andMe for wide spectrum (chip) testing. Many in the US are interested in their minority ancestry, whatever that happens to be. For me, minority means Native and African. 23andMe (and DeCodeMe) both tell me IF I carry that ancestry, by percent, but not where. Based on comparisons with some of the early testing companies (DNAPrint) they are much, much more accurate in their assessment than the earlier tests that measured only a few locations. However, in order to find that elusive minority ancestor, I need to return to traditional genealogy testing, yline and mtdna, with the features of matching to people, within and outside of projects, with e-mail addresses to contact. To do this, I encourage people to construct their own DNA Personal Pedigree Chart. You can see an article about how to do this at this link or I can send it to you as a pdf file: http://www.rootsweb.ancestry.com/~molcgdrg/pubs/p3.htm. Be sure to check existing surname projects to see if someone from your distant lines has already tested. To do this, go to www.familytreedna.com and enter the surname in the search box in the upper right hand corner.

So when do you use which company?

For genealogy, always test your yline and mtdna using the traditional tools, join the projects at FTDNA, compare your genealogical results to others, and learn as much as you can using these tools. They are very specific and can tell you whether you are related to a particular family or person via a particular line, meaning the paternal or maternal. You also receive your deep ancestry results which are just genealogy back further in time and without last names. Deep Clade testing allows you to become very granular in terms of the timeframe of when your ancestors were where. With the advances we've made with SNP information in the past few months and years, it won't be long before the SNP timeframe meets the genealogy timeframe and in some cases, we're connecting the dots very successfully today.

The 23andMe tests are more of the "graduate class" for genealogists, aside from their Health Traits, of course. I can't imagine a genealogist ever testing at 23andMe and NOT testing their yline, mtdna and comparing them to others at Family Tree DNA in their projects. Many of us want to answer questions that yline and mtdna just haven't been able to answer for us, and that's why we've turned to autosomal testing. Of course, there is also a curiosity factor, pure and simple, in terms of ethnicity and also in terms of the Health Traits that may attract some folks. Many will purchase the test for the Health Traits alone, whether they are interested in genealogy or not. But if they are serious genealogists, they will use the two types of testing together to achieve our ultimate goals of unraveling our ancestors.

Genetics for genealogy is truly the best tool we've ever had as genealogists, and it gets better every day!