THE PEYTON SOCIETY OF VIRGINIA

2019 ANNUAL MEETING REDACTED PRESENTATION

DNA: Where do we go from here?

 **FINDING OUR PEYTON-PAYTON FAMILY TREES USING DNA**

As many of you know, the advent of widespread DNA testing is helping families connect in ways never imagined, even a decade ago. Without getting technical (one can find technical discussion on Ancestry.com, FamilyTreeDNA.com [FTDNA], and other vendor sites), in countries where the children traditionally take the surname of their father, YDNA accurately tests for the male surname line. There are different levels of YDNA testing, but currently the standard used is the YDNA-67 marker test. The **markers** are the genes or DNA sequences with known locations within a chromosome that make them useful for comparing one person’s DNA with another. The more markers that match, the greater chance of a closer relationship of the ancestors of the matched individuals. A YDNA test provides a haplogroup for each individual tested. For example, A-Line Peyton descendants are haplogroup I-M253, while C-Line Peyton descendants are haplogroup R-M269.

Autosomal DNA testing looks at ancestry of both the male and female lines, so matches can be parents, grandparents, g-grandparents, cousins, and so on. This is the test that is valuable to non-Peyton/Payton surnamed individuals to show matches to others in their PSV Line.

The YDNA test is totally different from the Autosomal test, that is why both results are important to have for each individual tested.  If we use both tests for the same Peyton/Payton surnamed individual, we can see much more than using only one test. We see more by comparing the individual’s genealogy charts in Ancestry.com, FamilyTreeDNA.com, and GEDMATCH.com, who have DNA that matches ours. If we find more individuals who share matches to us and have the same chart, the more certain that we are related. All posted [or unposted genealogy charts by contacting the individual privately] should be reviewed to see if a previously unknown common ancestor can be determined. Armed with this knowledge, traditional genealogy research may now focus and point to people and areas not previously explored. A YDNA-37 test or a YDNA 67 test can predict, if there is a 37/37 or 67/67 marker match, that there is a 50% chance that the common ancestor is within 2 generations; a 90% chance within 5 generations; a 95% change within 7 generations, and so on, depending upon the number of marker -to-marker matches.

If we know two individuals with closely matching YDNA results are related, comparing the two individual’s autosomal test results to their respective matches has a likelihood of determining if they share the same cousins and to what degree of relationship these cousins are (1st, 2nd, third, etc.). With this knowledge, it becomes possible to learn dates, locations, and other facts and relatives which generates new research which may help determine the common ancestor.

Why are some of us Peytons/Paytons interested in DNA testing, other than curiosity about our ancient origins? Some of us are not so lucky as to have a clear paper trail of our ancestry, (and even so, a clear paper trail may disguise “non-parent events”). Using the Peyton Society of Virginia HG Line; earliest ancestor William Payton m Mary Ribolt (Rybolt) as an example, for over one hundred years, various people in our Line have tried to determine who our ancestors were that came over from England and presumably first settled in Virginia. Many records were lost particularly in Virginia and the area of Virginia that became Kentucky in 1792, due to the burning of Washington by the British in 1812, courthouse and clerk’s office fires, and the burning of Richmond. Many marriages of the time were performed by traveling preachers in the wilderness, and not all of those record books survive.

My mother, Ruth Payton, tried all her life to get past our “road block” of who were the ancestors of Jacob Payton born 1787 in Lexington, KY (then Virginia), his brother William born 1791, and his sister, Susannah born 1795. My mother died before the advent of DNA testing by the general populace. Since then, we have determined from a death record that their parents were William and Mary Ribolt (Rybolt) Payton, but who was William Payton, and who were his parents?

The search was on for a live surnamed Payton of our HG Line who could take a YDNA test! Finally, after scouring genealogy charts, Ancestry.com, and the internet, in 2009, some of my other non-Payton surnamed cousin researchers and I found a professor living in Canada, who was a total stranger! He agreed to the FTDNA YDNA- 37 marker test (which was the then standard), even though he was not interested in genealogy at the time, …solely in the interest of Science. The PSV and we private individuals funded his test, and consequently, both my email address and Joan Allen’s were added to his FTDNA account profile so we could manage, access, study, and compare his DNA matches on an ongoing basis. In addition, we joined his account to the Peyton/Payton surname project. When his YDNA results came back, we found my cousin was a 36/37 marker match to a descendant of Jesse Enlows Peyton of the A-Line. Finally, a real break-through!

HG Line researchers now could focus on individuals in the genealogy of the A-Line, knowing it was also the HG-Line’s ancestry. In addition, due to the YDNA test matches, we found other DNA-related researchers, who we would never have discovered without DNA. Upon contact, we found that these matches had un-posted genealogy charts that contained more clues to the A Line. After refocusing our combined research, luckily, some marriage bonds were discovered, but still not conclusive.

We are also tracking autosomal DNA matches and those related charts to determine if charts contain descendants of A-Line Peytons [YDNA haplogroup I-M253]. For example, there are autosomal matches to descendants of Major Robert Peyton, William Peyton b 1718 and other A-Line ancestors; too many we believe to not be evidence of familial descent.

We continue to look for expanded YDNA and autosomal matches to fill in the documentation and generational gaps. We are now in the process of retesting current YDNA surname project participants at higher YDNA-67 marker levels to give a higher percentage of probability of predicted distance in generations between the matched relationships. So long as the DNA samples are still viable, the test can be done from previously collected DNA samples on file at FTDNA.

We do receive 50% of our DNA from each parent, but which 50%?  From there, it can vary, meaning that we don’t necessarily get 25% of each grandparent’s DNA.  So, while we receive 50% in total from each parent, we don’t necessarily receive the same mix of DNA as a sibling does. The more autosomal test result matches of A-Line Peyton/Paytons that we can study, the better chance of capturing all matches to potential ancestors. That is, one sibling may have a DNA autosomal match to someone in the A-Line genealogy chart that the next sibling doesn’t, and visa-versa.

The more test result matches, also means that we see what relationships (cousins, 1st, 2nd, 3rd, etc.) the testers are to their matches and therefore possibly to each other, as we fill in relationships. This may help us “triangulate” the relationships of several matches to determine the common ancestor.

Richard M. Peyton has recently provided us with the contact data of purported A Line English and Belgium Peytons that he has gathered. The PSV will be making contact soon with these families, in hopes that they will take YDNA and Autosomal DNA tests to see if matches to the PSV A Line can be ascertained. Matches will be helpful in definitely linking back to our origins in the United Kingdom and Ireland.

**Motion:** **Reference should be made in future PSV publications that the Peyton surname project A Line and the HG Line YDNA haplogroups are the same, and that implies the two Lines share common ancestors with some yet unknown or unidentified individual. The same reference in future PSV publications should be made for similar haplogroups in all Lines, until a common individual is identified linking the Lines so the Lines may be combined.** Two Lines should not be merged unless a named and verified individual, who is the identified common ancestor, is found.

***Motion was proposed and accepted by the Executive Committee***

**Motion: A record of DNA autosomal matches and the related verified and/or documented if not totally verifiable, lineage should be submitted to PSV archives, to assist in confirming Payton ancestry of both Peyton/Payton and non-Peyton/Payton surnamed individuals. [YDNA matches are resident on FTDNA.]**

***Motion was proposed and accepted by the Executive Committee***

**(1) A concentrated effort be made to induce all present and future members of the FTDNA YDNA Peyton/Payton surname project and all present and future valid Peyton/Payton Autosomal matches, to add their family chart information to the DNA sites, and to become members of the PSV.** My HG Line’s closest YDNA matches, for example, are non- PSV members. Not all individuals who take the YDNA test currently join the surname project nor are they required to join. **(2)** **We need to induce all present and future YDNA Peyton/Payton surname testers to join the Peyton/Payton surname project.**

When I emphasize “valid” matches, this means that where all autosomal shared matches indicate a common ancestor, on-line tester charts may have included incorrect data that makes it seem the common ancestor is a particular Peyton/Payton, but in fact the haplogroup of the Peytons/Paytons posted on their chart is not the same haplogroup as the individual’s relative who has taken a YDNA test, and the common ancestor of the shared match is therefore not a Peyton/Payton, but some other Line. Your haplogroup can be determined by studying the YDNA haplogroups of male relatives who have taken the YDNA test, as indicated on the FTDNA Peyton/Payton surname project posted charts. The Peyton/Payton on the surname chart can be looked up in the PSV 2004 book index to determine the Line. It is possible to have a relative who is a Peyton/Payton in one’s chart that has a different Peyton/Payton Line/haplogroup than you, but that Peyton/Payton cannot share a common ancestor with you because YDNA results don’t lie.

We, as a Society, are not using DNA as an important tool- that in the pure sense is more accurate than census, birth certificates, and other documentation which the PSV has traditionally relied upon for membership and research.  It is our duty and responsibility, as members of the Peyton Society, to do as much as possible to advance our genealogies when there is opportunity to do so. To be trite, just like “Data Processing”, and the “Internet”, “DNA” is the way of the future.

There are people working on Wikitree (some from PSV) and other sites, and sometimes comparing DNA results, but the DNA source in many cases is FTDNA. The family chart data posted on those sites are inherently no more correct than that posted on Ancestry--subject to enthusiastic individuals, but not necessarily looking at the background research for accuracy. The PSV needs to focus its scarce resources on the Payton/Peyton surname project YDNA and also autosomal results, backed up by confirmed data in the 2004 book, and any updates/corrections to it.

The HG Line is not the only line that has shared haplogroups with other PSV Lines. The surname project is finding that the B Line, G Line, H Line, N Line, P Line, and Z Line share the same I-M223 haplogroup. The C Line, J Line, L Line, and FH Line share the same R-M269 haplogroup. [See the Peyton/Payton Line Haplogroup Chart-an in-progress working chart.] Sharing the same haplogroup, indicates that there is a relationship and common ancestry between those line that might have been only guessed at before YDNA testing. As with the HG Line, if you are a researcher for any of those Lines, YDNA tests and matching become very important if there are traditional documentation gaps in one’s genealogy. Not all PSV Line haplogroups are known, as the Peyton Payton Surname Project does not have representative testers from all Lines.

**None of us will ever be as young or as alive as we are at this very moment.**  Every generation farther from the genealogical truth that we seek, will be harder to detect to future generations without us acting NOW. Now is the moment to capture each PSV Member’s DNA for posterity.

In general, you share an average of 50% less DNA with an ancestor with each additional generation. To find how much DNA you likely share with a cousin, consider that they have also inherited 50% less DNA with each generation. Your 8th cousin could share as little as .001% of DNA with you. This is an average. As alluded to above, the amount of each grandparent’s DNA passed on to you is random. Thus, the amount of DNA that you share with a particular cousin may be much more or much less than with another cousin.

So long as the DNA sample remains viable, even though the tester may become deceased, further advanced YDNA tests or Autosomal tests can be processed against the DNA sample on file, as technology advances.

FTDNA's storage policy: "DNA samples taken by the FamilyFinder test are stored at the Genomics Research Center in Houston, Texas, under close supervision of the staff from Family Tree DNA. They store customer samples for a **minimum of 25 years**. FTDNA’s parent company, Gene by Gene, places a huge emphasis on security, and they’ve invested millions of dollars in offline and online security of your information. All financial information is encrypted using the latest technology, and the lab is supervised 24/7."

If the PSV documents/archives our present DNA test matches, and future Members take the tests and those are documented, we will have a trail of matches for future generations to use and to match- if they want to confirm, or if they have gaps, in their ancestry.

Some people may express privacy concerns in taking DNA tests. Privacy was then; this is now. With the advent of social media -facial and eye recognition, voice recognition by our banks and other institutions, finger print recognition by our cell phones, blood tests stored electronically, electric cars, moneyless commerce, and so on, does anyone really think there is much privacy in the world? Institutions are even working to scan our brains to know what we are thinking. I have a distant non-Payton cousin who attended the Army War College at Leavenworth, and when I asked him to take a YDNA test, he immediately agreed…he KNOWS privacy just isn’t in the scheme of the world! “1984” arrived before we were really aware of it coming.

Our DNA goal is to accurately trace the PSV Lines. When asking people to do YDNA and Autosomal testing, they or a close family member could also have a Non-Paternity Event (NPE). If the results contradict what they've been told or believed their whole lives, people often don't initially believe the test results, or become angry. In other instances that I’ve known, the test results confirm their suspicions and result in finally putting their minds at rest, or lead to resolving unexplained family disputes going back several generations because the truth is “out in the open”. That is a good thing.

YDNA tests that come back with differing surnames can be due to many types of events, especially before legalized adoptions: apprenticeships, death or illness of parents, too many children to take care of for the family, etc. If every male takes a YDNA test, you're likely to find a couple that aren't Peyton/ Payton's. Unexpected DNA results are no different than adoptees finding they are adopted or have fudged birth certificates...in many cases traditionally, there is no one left to answer “the why”. Our ancestors were just as humanly frail as we are.

**Motion: ALL PSV members in all Lines be asked to (1) take a YDNA-67 test if their surname is Payton/Peyton and join the surname project, and add their Peyton/Payton genealogy to FTDNA, and (2) All members take an Autosomal DNA test through Ancestry, transfer the results to FTDNA and GEDMATCH, and add their Peyton/Payton genealogy charts.** **If they have previously tested, to let us know where they tested (Ancestry, FTDNA, etc.), what type of test they took, date, and name they used for their test.**  This is much less than the cost of individual tests on each vendor site. It is desirable to have results shown on all three major sites, since not all individuals, who may be potential matches, use all three sites. Three tests for the price of one, so to speak. There should ideally be people from each line who are interested in DNA and that will monitor their respective line’s results, and attempt to find missing links in the Lines’ genealogy chart, as needed.

**Additional Criteria- Individuals taking the DNA tests must be:**

**(1) be willing to order the test**

**(2) be willing to sign the disclosure agreement that their results can be posted to the site and surname project (not necessarily their actual name published if they don't want it) Our DNA administrator can speak to this more.**

**(3) be willing to participate fully in genealogical matching activity resulting from their tests, and/or**

**(4) be willing to add a PSV researcher’s email address to their test account so the researcher can participate fully in their genealogical matching, without the tester needing to participate if the tester isn't interested.**

**(5) be willing to add, as beneficiary, the name of a family member, or designated member of the PSV if the PSV paid for the test, so control over earlier generation’s DNA test results are not lost for future research upon death of the tester. If a family member, to notify the PSV of contact data for that individual.**

**(6) be willing to add their Peyton Payton family chart to each site.**

***Motion was proposed and accepted by the Executive Committee***

Dee Bekman is the Administrator of the FTDNA Peyton/Payton Surname Project.  She is monitoring our surname project, fielding DNA questions of the testers, and has provided valuable DNA consulting related to the HG Line’s testing.

She can match haplogroups from the test results and maintain the Peyton/Payton haplogroup surname groupings.  I have been working with Dee to compile a composite grid worksheet of the former World Families YDNA matches, the current FamilyTreeDNA YDNA matches who have joined the Peyton/Payton surname project and provided family trees, and the PSV 2004 book Lines. This grid would be posted to the surname project to clarify the matches, and how they relate.

 Thank you for your attention to this matter.

 Respectfully submitted,

 Sheila Anastas

 5/18/2019