

**Analysis of the Results of the Big-Y Male DNA Testing Program
For Descendants of Todd Families Sharing the “Group 1” Male DNA Pattern
(Families with DNA Patterns Similar to that of the Mary Todd Lincoln Family)**

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Between early 2020 and late=2021, a prodigious effort was expended to recruit and raise funds for Big Y male DNA tests for 19 Todd families having the same basic male DNA pattern but no known common ancestor. In Jan 2022, a second sample was recruited from a descendant of Robert Todd 1697-1775, the ancestor of Mary Todd Lincoln, but the results from this test are not yet available. The purpose of this testing was to see if the Big Y would reveal relationships between these various branches that was not apparent from the historical record and the traditional DNA results compiled between 2004 and 2020.

These families all had a male DNA pattern using traditional STR analysis similar to the DNA pattern of the Mary Todd Lincoln family, that is, the descendants of Robert Todd 1697-1775 and his half-brother Andrew Todd d 1791. The families that were tested were:

Region	Family	Progenitor	Sample Donor
	Mary Todd Lincoln Family	Robert Todd 1697-1775	Peter G. Todd
		Andrew Todd d 1791 Louisa Co VA	Douglas Todd James C. Todd
	William Todd of PA/NJ/Augusta and Bedford Co VA	William’s son Low Todd 1723-1793 William’s assumed gt-grandson via Low Todd, i.e. Preston Todd b1805 William’s assumed gt grandson Matthew Todd b 1820 William’s son John Todd 1746-1829	James M. Todd Ronald Eddie Todd John D. Todd Damien Todd
	Andrew Todd d 1801 Tazewell Co VA	Andrew Todd b abt 1755-1760 md 1781 d 1801 Tazewell Co VA	Robert Todd Dan J. Todd Gary Todd Sammy Todd
	Todds of Quebec, Vermont, Michigan	James Todd 1774-1838 Quebec md Letitia Steel son James to Vermont	James Edgar Todd
	Hunterdon Co NJ Todds	John Todd 1755-1820	G. Peter Todd
	Antrim to Pendleton Co SC 1802	James Todd md Jane Erskine	Carl E. Todd
	Loch Lomond, Scotland ->Ireland->Todds of Laurens County South Carolina ca 1795	Nathaniel Todd 1751-1820/1830	David L. Todd David L. Baugh
	Mecklenberg Co NC Todds	John Todd d 1799 Mecklenberg Co NC	Joseph Chapman Todd
	Northern Augusta Co Virginia Todds	James Todd d 1799 Augusta Co VA	Aaron Lee Todd
Ireland	Ballyalbanagh Co Antrim Todds	Nathaniel Todd b 1746 and son Nathaniel b 1785=>Dearborn Co IN	Dennis F. Todd & Kirk Dennis Todd

		1829 and son James b 1778=>Dearborn Co IN	
	Coggry, Co Antrim Todds	Robert Todd and son Robert Todd b 1838 md 1858 Agnes Kirk in Kilbride, Co Antrim	Allan Todd
	Ballymena Co Antrim Todds	Samuel Todd (s of Samuel) md Ellen McMeekin 1863 Ballymena	Andrew Todd
	Carnlea-Drummadaragh Co AntrimTodds	William Todd b 1800 Carnlea->Drummadarragh	Hugh Lewis
	Donegore Co Antrim Todds	Robert Todd 1807-1844 md 1825 Donegore to Ann Craig	Steven Todd
	Ballyclare Todds	William John Todd b abt 1839 (s of John) of Trench Hill md 1863 Eliza Todd d of John of Ballyclare md 1870 Elizabeth Todd d of John of Trench Hill, Ballyeaston	Steve Todd
	Rashee, Co Antrim Todds	James Todd b abt 1770s d 1846 Rashee, Co Antrim	Robert McConnell Todd
	Magherabane, Glenwherry, Co Antrim Todds	Nathaniel Todd 1802-1880 Magherabane, Glenwherry, Co Antrim	Randy H. Todd
Scotland	Haghill, Glasgow Scotland Todds	John Todd b abt 1660 Haghill of Glasgow	George Buchanan Todd
	Bonhill (near Loch Lomond) Todds	John Todd md 1777 Barbara Scott (Bonhill) possible grandfather of John Todd b 1808 Bonhill md Margaret Ewart	Leo Michael Todd

The raw data for our analysis is shown on this fairly complicated chart below. Following the chart is our family tree of the various branches of Todd families which hopefully makes the relationships a little bit clearer.

Using tradition STR Y-DNA testing, we were able to show that Todds with DNA patterns similar to those of Mary Todd Lincoln family of Todds (MTL) were located in area of County Antrim about 7 miles N-S and 10 miles E-W bounded by Ballyalbanagh/Carnlea in the north to Ballyclare in the south, Donegore to the west and Legaloy to the east. Todds to the north, south and west tended to have very different DNA patterns. The one exception to this is that a sample from a family in the town of Londonderry has a pattern similar to the MTL family though with two consistent mutations. Also, we have not sampled thoroughly the Todds to the east of this area from Larne to Glynn to Raloo to Templecorran to Carrickfergus. So the zone of Todds with DNA patterns similar to MTL in County Antrim could extend further to the east than described here. Some Todds from our study area migrated to the east; so we can not be sure how early the families that lived in the towns and townlands to the east reflect an early boundary of Todd residence or a later expansion.

Our Big Y study focused on the Todd families within our study area in County Antrim and on the families that came to America and two families in Scotland. The Big Y results in a genetic tree back to the

genetic adam. Hence, Todd branches having the same most “downstream” genetic mutation marker are more closely related to each other than to Todds who branched from the genetic tree with a different most downstream genetic mutation marker or an earlier most downstream genetic mutation marker.

We were able to show that:

1. All the Todds in our study trace back to the oldest Todd genetic mutation marker I-FT310259. Several families have not had any mutations from this marker. They are the **Todds of Ballyalbanagh, County Antrim**, the **Todds of Magherabane, Glenwherry, Co Antrim**, the family of **Patrick Todd d 1852 Laurens Co SC**, the family of **Nathaniel Todd 1790-1873 Ireland to Ontario** (probably a Ballyalbanagh family), the family of **James Todd d 1799 Augusta Co VA**, the **Todds of Glasgow** (dating back to the 1500s), and the **Todds of Bonhill, Dumbartonshire** (west of Glasgow) All the other Todds in our study are branches from this trunk of the Todd genetic tree.
2. From this trunk of the tree come 5 genetic branches:
 - a. The Todd families of **Coggry and Ballyclare**.
 - b. The family of **Nathan/Nathaniel Todd d 1828 Laurens Co SC**
 - c. The family of **John Todd d 1799 Mecklenburg Co North Carolina** and the family of **Adam Todd b 1784 of Banagher, Co Derry**. This suggests that the Mecklenburg Co Todds came from County Derry.
 - d. The fourth branch has a subbranch. In the main branch are the Donegore Co Antrim Todds and in the subbranch are three families: The family of **John Todd 1755-1820 of Somerset Co New Jersey** (who married a dau of an unrelated Hunterdon Co NJ Todd family) the family of **James Todd and Jane Erksine** who came to Pendleton Co SC about 1802, and the **Todds of Rashee**, County Antrim. Hence, these American families probably came from Rashee.
 - e. The fifth branch is even more complicated but also the most tantalizing for revealing origins of American families. The main branch contains the family of **Robert Todd 1697-1775**, the family of **Andrew Todd d 1801/2 Tazewell Co VA**, two branches of the **Todds of Carnlea, Co Antrim**, and the **Hunterdon Co NJ Todds**. This suggest that all these American families came from Carnlea.

There are two sub-branches to this branch. One is occupied by the family of Andrew Todd d 1791, the half-brother of Robert Todd 1697-1775. This is a surprise that a half-brother would be from a different SNP. This means that Andrew himself experienced the mutation at his birth.

The second subbranch has two families: one is the family of William Todd b abt 1700 moved in Augusta Co VA in 1750; the second is the family of a James Todd 1774-1838 who married and died in Quebec. This supports our theory that William could have been a brother or cousin though it is surprising that he also has a different SNP than Robert 1697-1775. The connection of the Quebec family is surprising and hard to explain genealogically.

3. Surprisingly, the three earliest ancestors of the **Mary Todd Lincoln family** of Todds (Robert Todd 1697-1775 and his half-brother Andrew Todd d 1791 and William Todd a brother or close

cousin) all had different most downstream genetic mutation markers. We had expected they would all have the same most downstream genetic mutation marker since they came from the same family. The mutation for Andrew d 1791 from the older pattern of Robert d 1775 implies that Andrew d 1791 himself had that mutation. So we can date Andrew's mutation as happening about 1715. The mutation that included Robert d 1775 and the other families sharing Robert's most downstream genetic mutation marker occurred an unknown number of generations before 1715. The connection between Andrew Todd b 1755-1760 d 1801/2 Tazewell County, Virginia and the Todds of Ballymena and Carnlea may be very close based on an autosomal DNA match between a descendant of the Andrew d 1801/2 family and the Carnlea families.

4. The **William Todd of Augusta County Virginia** who came to Augusta County in 1750 from Hunterdon County New Jersey is closely related to the MTL family of Todds based on the intermarriage of a granddaughter of William Todd of Augusta County, Virginia and a grandson of Robert Todd d1775 of Pennsylvania. Based on the genealogical record, William could be a brother or a close cousin to Robert d 1775 and Andrew d 1791. However, his branch had a unique SNP DNA mutation that enables his descendants to be distinguished from the descendants of the other branches of the MTL family. Hence we confirmed that **John Todd 1746-1829** was a descendant of William Todd of Augusta County Virginia, not Andrew Todd d 1791 of the Mary Todd Lincoln family as asserted by earlier family historians. Similarly, we discovered that **Preston Todd 1805 TN -1875 Macon Co MO** and **Matthew Todd b 1820 TN md Roane Co 1838** were part of the William Todd family and hence probably descended through William's son Low Todd 1723-1793 and through either Low's son James or John mentioned in Low's 1793 will.
5. The William Todd family of Augusta County, Virginia was also shown to be closely related to the **James Todd 1774-1838** who married and died in Quebec. We have not been able to figure out how this James Todd is related genealogically to the William Todd family. It is conceivable that James b 1774 was the son of Low Todd b 1723 d 1793 Tennessee, but we have no evidence of a Tennessee-Quebec migration. The more likely possibility is that James is an Irish immigrant and a grandson descended from a brother or cousin of William Todd that remained in Ireland.

Refutation of Previous Theory

In past research using STR Male DNA analysis, a pattern emerged where families with multiple samples showed a consistent pattern of either being identical to the Mary Todd Lincoln STR DNA pattern or having a consistent mutation in markers 570 and 576. Mary Todd Lincoln family had a consistent 16-22 pattern for these markers; descendants of Andrew Todd d 1801 had a consistent 16-21 pattern; descendants of John Todd d 1799 Mecklenburg County, North Carolina had a consistent 17-22 pattern.

I theorized that all Todds with a 16-21 pattern came from a different ancestor than the Todds with a 16-22 pattern.

The Big Y analysis proved this wrong.

It appears that the 16-21 pattern emerged spontaneously and randomly in different branches of the family as determined by the Big Y SNP mutation. Hence the branches with 16-21 in the STR patterns do not all stem from the same common ancestor. For example in the branch of the family in which William

Todd of Augusta County, VA occurs William's family had a consistent 16-22 but the family of James Todd 1774-1838 had a 16-21 despite having the same terminal SNP.

We also secured two STR male DNA samples from descendants of the Todds of Ballyalbanagh and found, to our surprise, that one had a 16-21 and one had a 16-22. This was also evidence of a spontaneous mutation.

So the above is what we able to conclude from this very ambitious project!

Thanks to all of those who contributed samples or contributed funds to make these discoveries possible!!!

Future Research

It takes an enormous amount of time and effort to raise the funds to pay for these expensive tests and a similarly enormous amount of time to recruit new samples to expand our understanding.

If anyone reading this would like to help us continue our research, feel free to donate funds to help us continue our research. Email me and I'll tell you how to donate (RMcMurtry@baymoon.com). We will use those funds to:

1. Secure more samples from Todds of Scotland (especially Glasgow and Ayrshire) to better characterize the DNA patterns of families likely to have sent branches to Ireland..
2. Secure an additional sample from the Mary Todd Lincoln family of Todds (Robert b 1697, Andrew b 1715).
3. Secure samples from Todds of southern Ireland.

Figure 1: Raw Data: Block Diagram of Big Y results for Group 1 Todds

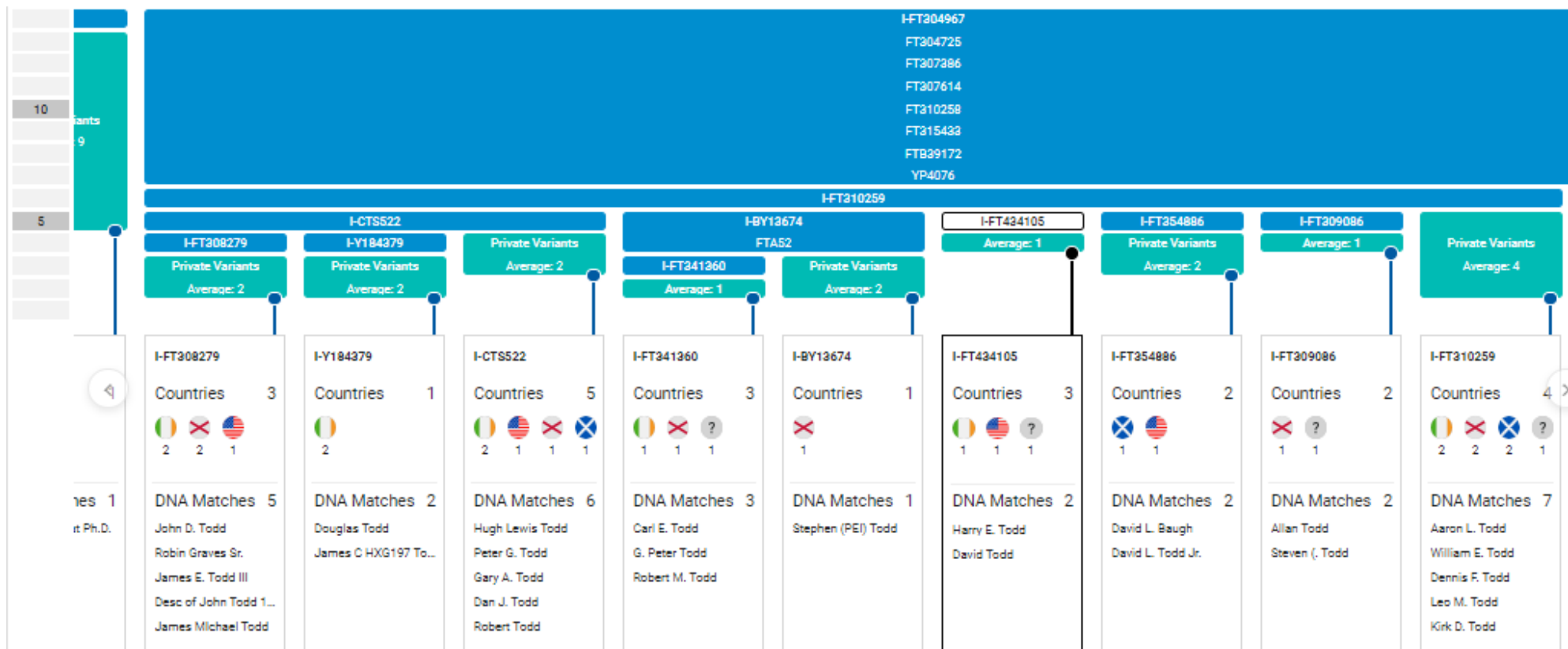
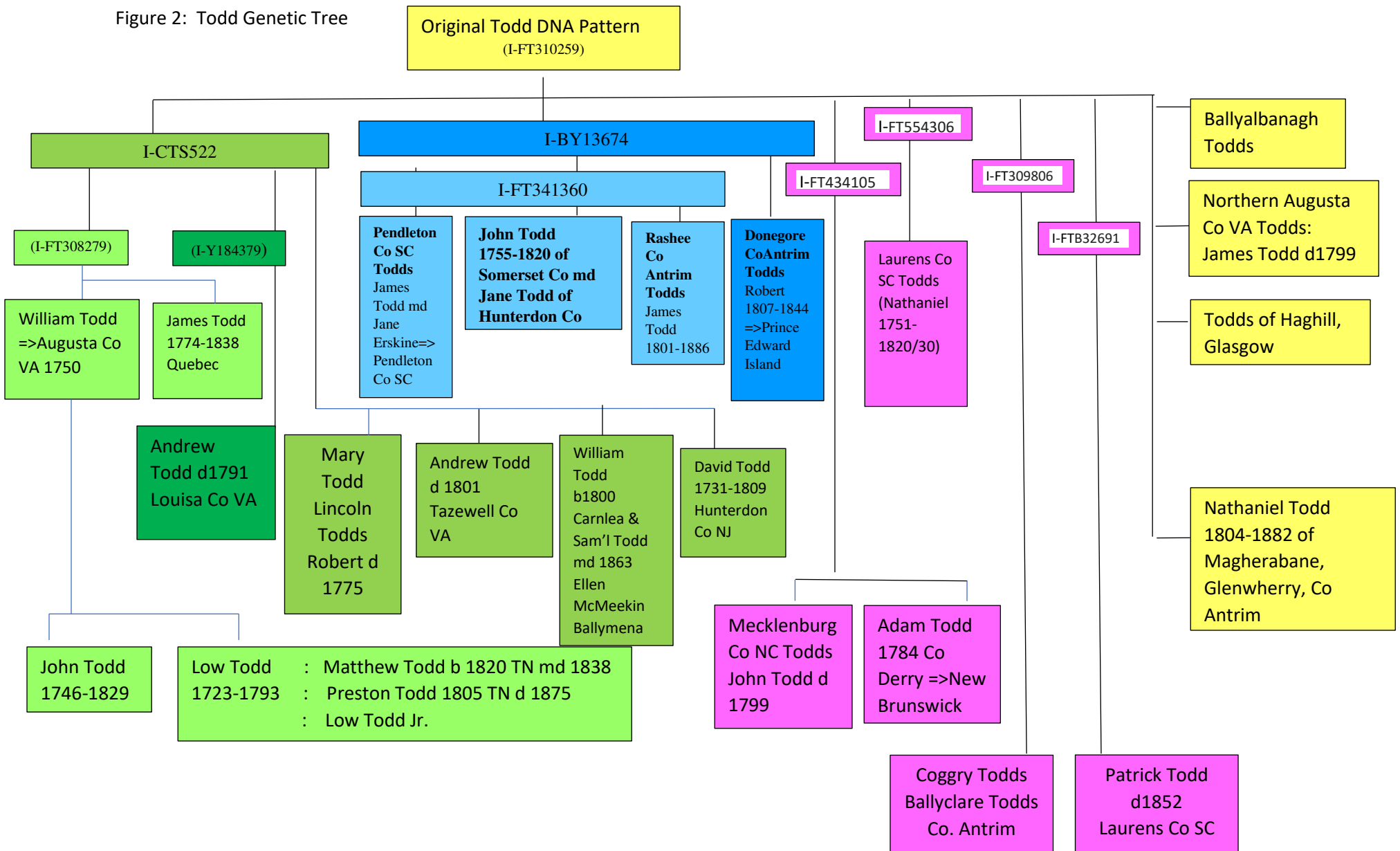


Figure 2: Todd Genetic Tree



Ancient Origins

One of the results of the Big Y test is a genetic tree back to the genetic Adam – the humanoid of homo sapiens about 240,000 years ago from which all present-day humanity descends.

Below is an example of a map that derives from the Big Y testing. (From Scaledinnovation.com) This map shows the migrations of the ancestors of two of our Todd groups (the Mary Todd Lincoln family CTS522 and the William Todd family FT308279).

Note that the map also shows the emergence of the family from Central Africa, into the middle east, up into central Europe, up into Scandinavia, back down into NW Europe, then westward into the British Isles.



The timelines between the emergence of the various SNPs shown in the chart above are very approximate. They suggest that all the Todds derive from a common ancestor 930 years ago. However, I suspect these families are much more closely related than that.

This completes our analysis of the Big Y testing of the Group 1 Todds.