Big Y 700 DNA test results yield new haplogroup branches and "Time Trees" for C-P39 Y DNA haplogroup and Germain Doucet b. 1641 descendants

... by Marie Rundquist with Deadra Doucet Bourke, Contributor. February 22, 2023

## Introduction

The discovery of the C-P39 Native Y chromosome DNA signature for genetic male descendants of Germain Doucet b. 1641, in 2008, had great significance for genealogists because the Native Y DNA signature attained for this line (1.) disproved a European ancestry for Germain Doucet b. 1641, (2.) disproved a father-son relationship between Germain Doucet b. 1641 and Germain Doucet Sr. of France and (3.) disproved that Pierre Doucet (b. ca 1621) and Germain Doucet (b. 1641) were blood brothers having descended from the same father.

Through exhaustive Y Chromosome DNA testing of numerous male, paternal line Doucet / Doucette descendants of Germain Doucet b. 1641, who was from Port Royal, Nova Scotia, Canada, our Acadian-Amerindian and C-P39 Y DNA projects have uncovered, validated, and then verified a Native American Y Chromosome DNA haplogroup signature (originally referred to as haplogroup C3b and now referred to as haplogroup C-P39) for his descendants through sons Charles, Claude and Laurent.

In 2019, the C-Z30754 single nucleotide polymorphism (SNP), or genetic marker, a subclade of the C-P39 Y DNA haplogroup, was identified as unique to genetic male, patrilineal (father to father) descendants of Germain Doucet b. 1641 through advanced Big Y 700 DNA testing. Y chromosome DNA is inherited through patrilineal line of descent and is passed, from one generation to the next, virtually unchanged, from father to father. Y chromosome DNA tests are separate test from mitochondrial and autosomal DNA tests and are for genetic males only.

The C-Z30754 marker also identified a new subclade of the C-P39 Y DNA haplogroup to which male descendants of Germain Doucet b. 1641 belong. Genetic male descendants of Germain Doucet b. 1641 who have had advanced Big Y 700 DNA test show a positive result for this marker (C-Z30754+) and the C-P39 marker (C-P39+) in Big Y 700 DNA test results.

Since the original identification of the C-Z30754 subclade as unique to the Germain Doucet b. 1641 surname lineage, new and unexpected branches, or subclades, of the C-Z30754 haplogroup have emerged among the Big Y 700 DNA test results of genetic male descendants of Germain Doucet b. 1641.

Further study of these new branches, and the SNPs (or genetic markers) that identify them, reveal that each new branch aligns, one-for-one, with a known surname lineage through a specific patrilineal line – traced from father to father - within the Germain Doucet b. 1641 family tree. The purpose of this update is to show how all of this works – and introduce some fascinating new Big Y 700 DNA tools and capabilities we may all use for our own genetic genealogy research at the same time!

# The C-P39 Y DNA Project Group Time Tree

Since the start of the C-P39 Y DNA project, volunteer administrators have been faced with three major challenges: (1.) how to display all of the new and emerging Big Y 700 DNA branches of the C-P39 Y DNA haplogroup tree in one, easy-to-read and concisely written report, (2.) how to predict the timelines for the C-P39 Y DNA haplogroup and its Big Y 700 DNA subclades, and (3.) how to show the unique relationships among Big Y DNA subclades and the members of the project who belong to them.

The "Group Time Tree" offered today by Family Tree DNA to members of participating projects helps us address all of these challenges – in living color – with helpful, "pop-up" annotations which you may read when viewing the Group Time Tree as it is displayed on the C-P93 Y DNA Project website: <a href="https://discover.familytreedna.com/groups/ydna-c-p39/tree">https://discover.familytreedna.com/groups/ydna-c-p39/tree</a>.

To show the C-P39 Y DNA Project Group Time Tree (click <u>here</u> to view online), we selected all of the C-P39 haplogroup subgroups we had in the C-P39 Y DNA project and checked off all of the "Display Options" available -- including notable connections reported by project members, ancient connections (sites where samples were found), and confidence bars for most recent common ancestor (MRCA) estimates for each of the Big Y 700 DNA branches in our chart. When you visit the C-P39 Y DNA Project Group Time Tree site <u>online</u>, you may hover over any of the elements displayed on the chart and read the pop-up annotations to learn more about them.

For example, when you hover over the C-P39 haplogroup icon (which you will see outlined in blue), you will learn that the most recent common ancestor (MRCA) of the C-P39 line is thought to have been born around 2466 BCE – which is about 4,488 years ago. When you hover over C-P39 notable connections, identified as Chief Pontiac and Germain Doucet b. 1641, you'll find out that Chief Pontiac lived between 1725 and 1769 and Germain Doucet b. 1641 (Canada, First Nations) lived between 1641 and 1698. A timeline at the bottom of the page shows during what chronological age members of individual haplogroups were born. Click here to reference project data, including Big Y 700 DNA results, online.

# Chart 1: C-P39 Y DNA Project Group Time Tree displays the C-P39 root haplogroup and its branches (read the chart from top to bottom, left to right).



# Reference: https://discover.familytreedna.com/groups/ydna-c-p39/tree





# C-P39 Y DNA Project Group Time Tree Discoveries for Descendants of Germain Doucet b. 1641

While the C-P39 Y DNA Project Group Time Tree establishes a contextual reference for patrilineal, genetic male descendants of Germain Doucet b. 1641, and gives a historical timeframe for the most recent common ancestors (MRCAs) of those who belong to the signature C-Z30754 haplogroup, most descendants of Germain Doucet b. 1641 want to know how the individual sub-branches shown in the chart relate to their particular surname lineages – through sons Charles, Laurent, and Claude. Let's find out how this works by drilling-down into the C-Z30754 branch of the C-P39 Y DNA haplogroup Time Tree.

# Chart 2: C-P39 Y DNA Project Group Time Tree displays the Big Y 700 C-Z30754 signature subclade, unique to genetic male, patrilineal descendants of Germain Doucet b. 1641, and its sub-branches (read the chart from top to bottom, left to right).



Reference: https://discover.familytreedna.com/groups/ydna-c-p39/tree?subgroups=89421,89423,89516

#### About the C-Z30754 Sub-branch

By hovering over the C-Z30754 marker in the Time Tree, outlined in red, we may discover that the most recent common ancestor (MRCA) of the C-Z30754 line was born around 1562 (about 461 years ago) – in the mid 16<sup>th</sup> century – around the time when English, Spanish, Portuguese, Basque, and French navigators and fishing fleets were beginning to explore the New World's waterways and make contact with Indigenous peoples. Germain Doucet b. 1641 is featured as a "Notable Connection" within the C-Z30754 sub-branch.

The C-Z30754 haplogroup story (see: <u>https://discover.familytreedna.com/y-dna/C-Z30754/story</u>) has that "the man who is the most recent common ancestor of this line is estimated to have been born around 1550." Notably, the C-Z30754 haplogroup split off from its ancestor, C-Z30750, in approximately 50 BCE, which is about 2,072 years ago – which is quite a long time when compared with the number of mutations that have occurred recently within the C-Z30754 haplogroup during the past dozen or so generations.

There are, at this time, at least four named descendant lineages of the C-Z30754 ancestor, which are, reading from top to bottom, C-FT188033, C-BY101109, C-FTA70851, and C-BY92312 as shown on the Time Tree.

By hovering over each of the three individuals who belong to the C-Z30754 branch of the C-P39 Y DNA haplogroup, we may learn that two C-P39 Y DNA project members who descend from Claude Doucet, born about 1674, and one who descends from Charles, born about 1665, had the Big Y 700 DNA test and belong to the C-Z30754 haplogroup sub-branch.

## About the C-FT188033 Sub-branch

By hovering over the C-FT188033 marker in the Time Tree, outlined in blue, we may learn that the most recent common ancestor (MRCA) of one member of the C-FT188033 line, whose kit number (219075) has been made public, was estimated to have been born around 1769.

The C-FT188033 haplogroup story (see: <u>https://discover.familytreedna.com/y-dna/C-FT188033/story</u>) has that "the man who is the most recent common ancestor of this line is estimated to have been born around 1750." Who could that most recent common ancestor have been?

By consulting kit 219075's surname lineage, which is featured here in an 8/9/2022 project update (see: https://www.familyheritageresearchcommunity.org/doucet\_dna), we discover that ancestor Michel Doucet, who was the descendant of Germain Doucet b. 1641 through son Claude, was born in <u>1754</u>, which is within the estimated MRCA timeframe and one year before the Great Expulsion began. The Great Expulsion, also referred to as the "Grand Upheaval," was an extremely stressful time for the Acadian people, for it was then that the British military government forcibly removed Acadian families from their homes in Nova Scotia, marched them aboard prison ships with nothing but the clothes on their backs, and exiled them to port towns up and down the east coast of what was to become the United States and also to other countries. This was a time of starvation, sickness, exile, imprisonment, and death for Acadians forced from their lands, which is why some historians refer to the Great Expulsion as an "ethnic cleansing." Michel Doucet, of this lineage, was born in 1754. Michel Doucet's wife, Marie Susanne Muis, was born in exile, in Massachussetts in about 1758. The two were married in about 1776 after the Great Explusion had ended in 1763.

#### About the C-BY101109 Sub-branch

By hovering over the C-BY101109 marker in the Time Tree, outlined in blue, we may discover that the most recent common ancestor (MRCA) of the C-BY101109 line was estimated to have been born around 1633, which is within eight years of the estimated birth date of Germain Doucet b. 1641.

The C-BY101109 haplogroup story (see: <u>https://discover.familytreedna.com/y-dna/C-BY101109/story</u>) has that "the man who is the most recent common ancestor of this line is estimated to have been born around 1650." So, estimates given are well within range of the birth date of Germain Doucet b. 1641, a First Nations man who married Marie Marguerite Landry, a woman of French European ancestry, in 1664. We further learn that C-BY101109 is the ancestor of at least four descendant lineages, of which only two are named: C-BY92312 and C-FTA70851.

Genealogies contributed for members of the C-BY101109 haplogroup, by Deadra Doucet Bourke, coadministrator of the Acadian Amerindian Ancestry DNA project, further refine the story, and have that each man who belongs to this sub-branch is a descendant Laurent Doucet (born about 1669) who is the son of Germain Doucet b. 1641 and that each man descends from Laurent's direct, patrilineal descendant, Joseph "Hillaire" Doucet (born around 1749) who was married to Anne Landry. Joseph "Hillaire" Doucet (b. 1749) had taken refuge in Restigouche and then the Nipisiguit area with his family during the time of the Great Explusion, and was imprisoned by the British in Halifax in 1763. He was one of the party who was later led to Louisiana by none other than Acadian hero Joseph Broussard dit Beausoleil, and arrived there in about 1765. Joseph went on to marry Anne Landry in St. Martinville, Louisiana, in 1772 and died in Louisiana in about 1803.

A son, Anselme, was born in St. Martinville, Louisiana, in about 1777. He married Marie Angeligue Lejeune in about 1802 in Attakapas. We find by consulting the Big Y 700 block tree, and comparing assigned markers with detailed genealogies of project participants, that it is at this generation when the C-BY101109 sub-branch surfaces. One member of the C-P39 Y DNA project inherits the marker through a surname lineage beginning with son Melon, born in 1811, and the other through a surname lineage beginning, born in 1807.

## About the C-FTA70851 Sub-branch

By hovering over the C-FTA70851 marker in the Time Tree, outlined in blue, we may discover that the most recent common ancestor (MRCA) of the C-FTA70851 line was estimated to have been born around 1745.

The C-FTA70851 haplogroup story (see: <u>https://discover.familytreedna.com/y-dna/C-FTA70851/story</u>) has that "the man who is the most recent common ancestor of this line is estimated to have been born around 1750."

Minus documentation of Alexandre's parents, the C-FTA70851 surname lineage, according to Deadra Doucet Bouke's genealogical research, begins with parents Alexandre Doucet who married Celeste Comeau on the 3<sup>rd</sup> of June in 1850 in the St. Landry Parish of Louisiana.

While there is no information about the parents of Alexandre Doucet in the records, we know that the Big Y 700 DNA sub-branch to which two of his descendants belong, C-FTA70851, is a descendant of the C-BY101109 sub-branch. So, if we couple that information, with the approximate timeframes given for the most recent common ancestor (MRCA), we arrive at a potential ancestor for Alexandre: Joseph "Hillaire" Doucet (b. 1749), the patrilineal descendant of Germain Doucet b. 1641 referenced earlier, who was born just prior to the Great Expulsion.

# About the C-BY92312 Sub-branch

By hovering over the C-BY92312 marker in the Time Tree, outlined in blue, we may discover that the most recent common ancestor (MRCA) of the C-BY92312 line was estimated to have been born around 1718 which is, consulting genealogy records, four years apart from the actual date of birth of Laurent Doucet's direct descendant Michel Doucet (1722) who was married to Marguerite Martin in 1749.

The C-BY92312 haplogroup story (see: <u>https://discover.familytreedna.com/y-dna/C-BY92312/story</u>) has that "the man who is the most recent common ancestor of this line is estimated to have been born around 1700."

Detailed genealogies for members belonging to the C-BY92312 haplogroup, contributed by Deadra Doucet Bourke, co-administrator of the Acadian Amerindian Ancestry DNA project, further refine the story told by the Big Y 700 Group Time Tree, and have that each man who belongs to haplogroup C- BY92312 is a direct descendant of Laurent Doucet (born about 1669) and that each man descends from Joseph of Attakapas Doucet (b. 1776 -- brother to Anseleme) and Celeste Bellard of Attakapas through sons Joseph and Joseph Julian. Joseph of Attakapas was the son of Joseph Hillaire Doucet b. 1749, who was in turn the son of Michel Laurent Doucet, born in 1722, who was married to Marguerite Martin. The Great Expulsion affected generations of Acadian families: Michel, for example, also took refuge in Restigouche and then the Nipisiguit area with the family and was later imprisoned in Halifax in 1763.

## Putting the C-Z30754 Group Time Tree to the Test

In preceding discussions, we've touched upon the relationships between sub-branches of the C-Z30754 haplogroup as presented in the Group Time Tree and surname lineages stemming from Germain Doucet b. 1641. From the data, we found, for example, the unexpected correlation between Most Recent Common Ancestors (MRCAs) born just before the Great Expulsion began and markers (or mutations) for sub-branches of the C-Z30754 haplogroup that arise in subsequent descendant surname lineages.

In a recent journal report, Yassine Souilmi et al, Admixture has obscured signals of historical hard sweeps in humans, Nature Ecology & Evolution (2022). DOI: 10.1038/s41559-022-01914-9, scientists wrote about how human DNA may reflect genetic adaptations to changes in the environment – similar to other animals, and that *"hard sweeps"* (that occur when a genetic variation suddenly enters and *"sweeps"* across a population), have happened at different times in human history.

Could it be that within C-P39 Y DNA project data, and specifically the sub-branches within the C-Z30754 haplogroup tree, we are witnessing the same trend? Could it be that the genetic mutations (or markers) within the Y chromosome DNA of genetic male descendants of a First Nations - Acadian people, which *add up* as surname lineages continue on and new sub-branches are introduced within the C-P39 Y DNA haplogroup tree, may be attributed to the Great Expulsion and other stressful events that were a part of their New World history?

Let's put this theory to the test by correlating "environmental stress events" (defined in this report as sudden and extreme changes in an environment) with the emergence of C-P39 Y DNA sub-branches as related to the Germain Doucet b. 1641 surname lineages.

# Chart 3: Correlation between C-P39 Haplogroup Sub-branches, Surname Lineages, Most Recent Common Ancestors (MRCAs) and Related Stress Events

Haplogroup Sub- branch	Surname Lineage	Most Recent Common Ancestor (MRCA) Estimates	Environmental Stress Events
C-Z30754	Germain Doucet b. 1641, married to Marie Marguerite Landry abt. 1664.	Approximately 1550- 1562	<ul> <li>(1.) First contact among</li> <li>Indigenous and European</li> <li>peoples. (2.) First Nations</li> <li>French European</li> <li>intermarriage.</li> </ul>

C-FT188033 [one step down from C- Z30754]	The C-FT188033 surname lineage begins with Michel Doucet b. 1754, married to Marie Susanne Muis. Michel was a direct patrilineal descendant of Germain Doucet b. 1641 through son Claude	Approximately 1750 - 1769	<ul> <li>(1.) First contact among Indigenous and European peoples. (2.) First Nations</li> <li>- French European intermarriage.</li> <li>(3.) The Great Expulsion</li> <li>(1755-1763). (4.) Exile.</li> <li>(5.) Resettlement.</li> </ul>
C-BY101109 [one step down from C-Z30754]	The C-BY101109 surname lineage begins with Germain Doucet b. 1641, m. Marie Marguerite Landry, 1664, and then son Laurent Doucet b. 1669, m. Jeanne Babin. The lineage continues through direct descendant Michel Doucet (b. 1722) m. Marguerite Martin in 1749, then his descendant Joseph "Hillaire" Doucet b. 1749, m. Anne Landry. A son, Anselme, was born in St. Martinville, Louisiana, in about 1777. He married Marie Angelique Lejeune in about 1802 in Attakapas. It is at this generation when the C- BY101109 sub-branch surfaces	Approximately 1633 - 1650	<ul> <li>(1.) First contact among Indigenous and European peoples. (2.) First Nations</li> <li>- French European intermarriage.</li> <li>(3.) The Great Expulsion</li> <li>(1755-1763). (4.). Refuge.</li> <li>(5.) Imprisonment in Halifax, Nova Scotia</li> <li>(1763). (6.) Release from prison.</li> <li>(7.) Resettlement first in Haiti then in Louisiana.</li> </ul>

and continues in descendants of son Melon, born in 1811 and son Anselme, born in 1807. Genealogy notes were

contributed by Deadra Doucet

Bourke.

C-FTA70851 [one step down from C-BY101109] The C-FTA70851 surname lineage starts with parents Alexandre Doucet who married Celeste Comeau on the 3<sup>rd</sup> of June in 1850 in the St. Landry Parish of Louisiana. While there is no information about the parents of Alexandre Doucet in the records, we know that the Big Y 700 DNA sub-branch to which two of his descendants belong, C-FTA70851, is a descendant of the C-BY101109 *sub-branch.* If we couple that information, with the approximate timeframes given for the most recent common ancestor (MRCA), we arrive at a potential ancestor for Alexandre: Joseph "Hillaire" Doucet (b. 1749). Genealogy notes were contributed by Deadra Doucet Bourke.

Approximately (1.) First contact among 1745-1750 Indigenous and European peoples. (2.) First Nations - French European intermarriage. (3.) The Great Expulsion (1755-1763). (4.). Refuge. (5.) Imprisonment in Halifax, Nova Scotia (1763). (6.) Release from prison. (7.) Resettlement -- first in Haiti then in Louisiana.

C-BY92312 [one step down from C-BY101109 and a sibling of subbranch C-FTA70851] The C-BY92312 surname lineage begins with Michel Doucet (b. 1722) m. Marguerite Martin in 1749. The surname lineage continues with Joseph Hillaire Doucet b. 1749 m. Anne Landry and then his descendant, Joseph of Attakapas (b. 1776) -- brother to Anseleme m. Celeste Bellard of Attakapas. It is at this generation where the subbranch C-BY92312 surfaces and continues in descendants of sons Joseph and Joseph Julian, who carry this marker. Genealogy notes were contributed by Deadra Doucet Bourke.

Approximately 1700-1718

(1.) First contact among Indigenous and European peoples. (2.) First Nations
French European intermarriage.
(3.) The Great Expulsion
(1755-1763). (4.). Refuge.
(5.) Imprisonment in Halifax, Nova Scotia
(1763). (6.) Release from prison.
(7.) Resettlement -- first in Haiti then in Louisiana.

# **Conclusion**

My intention was to write a paper about the latest haplogroup findings within the C-P39 Y DNA project, and demonstrate how the Big Y 700 DNA Time Tree works for genealogists in the process. My goal was to delve into the new Big Y 700 sub-branches that had emerged in the C-P39 Y DNA project, focusing specifically on the lineages stemming from Germain Doucet b. 1641 and the numbers of new branches that had materialized since the project's start some fifteen years ago.

I did find an expected correlation between Big Y 700 sub-branches and generations between ancestors and their descendants as shown in the Time Tree. But what I did not expect to find, that became apparent when correlating MRCA date estimates for each line in the Group Time Tree with the genealogies and historical background we have for our surname lineages, was how sudden and severe environmental stresses, such as those identified and described in this paper, may have literally left their marks on our people.

As more in the project have Big Y 700 DNA tests, and sub-branches are further refined, I predict that this unepected trend, described in this paper for genetic male descendants of Germain Doucet b. 1641, will continue.

## Next Steps

The C-P39 Y DNA Project and the Acadian Amerindian Ancestry DNA project encourages all genetic males to have the Big Y 700 DNA tests.

Your family history exists within you! Your surname lineages and your distinctive histories are the legacy you leave to patrilineal descendants of your line, and your Y chromosome DNA results, when correlated with genealogy and historic events, help you build and preserve your priceless family stories.