



# DNA TEST KIT SHOWDOWN

Presented by Kate Mills  
Algonquin Area Public Library  
Thursday, July 27, 2023

# Y DNA?

## Reasons to Test

- Preserve your elders' DNA information
- Learn about family health history or genomic medicine
- Further your genealogy research
- Help with adoption research
- Curiosity, fun (there are even DNA tests for dogs and cats)

## Reasons Not to Test

- Privacy
- Security
- Health Scare
- Use by Law Enforcement
- Finding Out Something You Didn't Know/Don't Want to Know

# DNA Definitions

## (the only science in the program!)

- Y (yDNA) Chromosome passed from father to son for paternal, male lines.
- X Chromosome, women inherit from both parents, men from their mothers.
- Chromosome painter, displays your ethnicities across your DNA.
- Chromosome browser displays segments of identical DNA shared by two people.
- Mitochondrial (mtDNA), passed on to both men and women from their mothers.
- Autosomal (atDNA), confirms known or suspected relationships, connects cousins, determines ethnic makeup, the standard test for most DNA kits.
- Centimorgan (cM), A centimorgan is a unit of genetic measurement that is used to describe how much DNA you share with your relatives. The more centimorgans you share with someone, the more closely you are related.
- Haplogroup is a genetic population or group of people who share a common ancestor. Haplogroups extend pedigree journeys back thousands of generations.

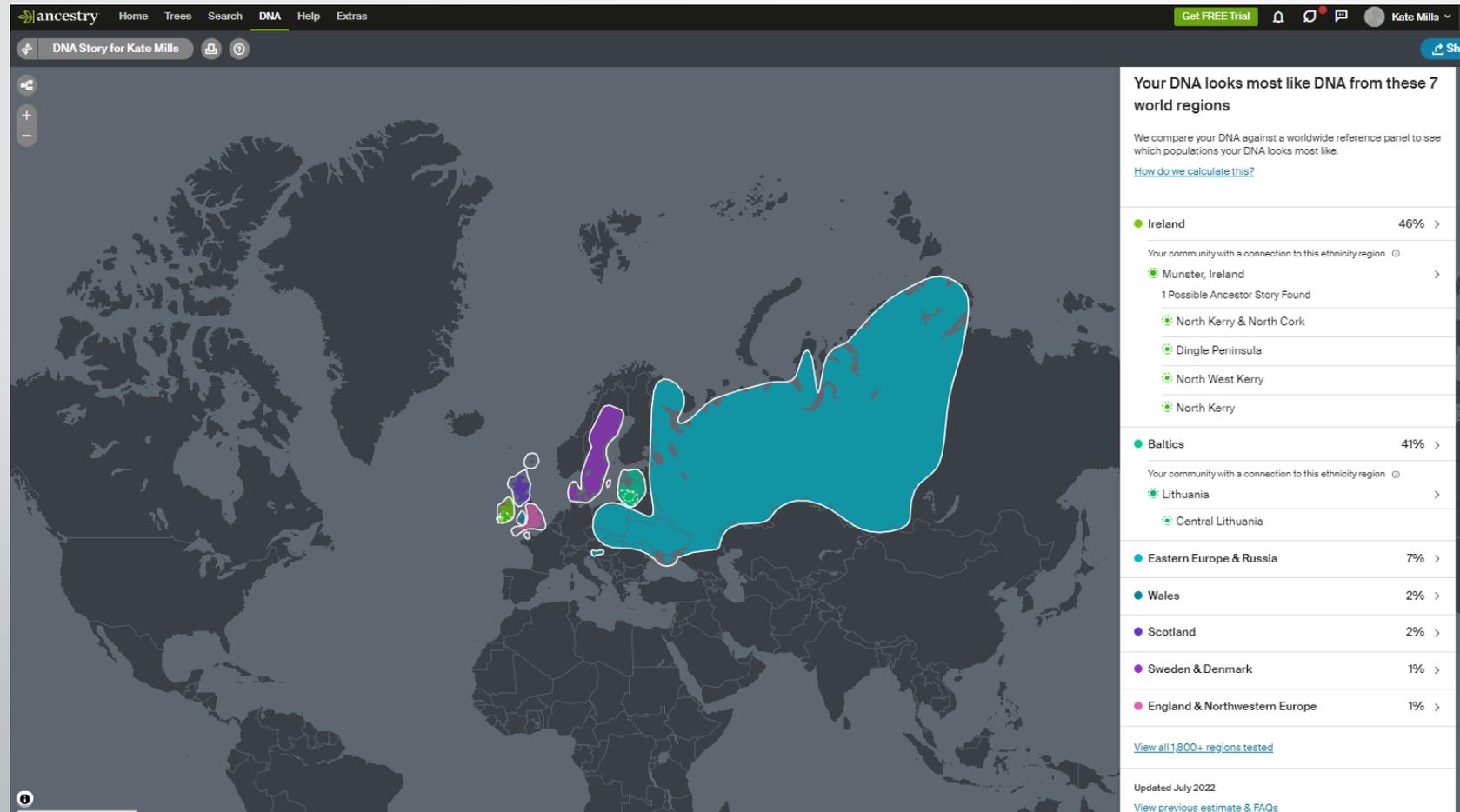


# AncestryDNA

- Ancestry
- Saliva Sample
- Results 6-8 Weeks
- DNA Matching
- App: Yes, Storymaker Studio is a new feature for photos/stories
- Largest database, approx. 23 million
- Tests: AncestryDNA: \$99; AncestryDNA + Traits: \$119; Package Deals include a subscription to Ancestry: \$100-\$199



# Kate's 6<sup>th</sup> Ancestry Ethnicity Results



# Ancestry Ethnicity Inheritance By Parent

This chart shows the percentages of each ethnicity you inherited from your parents. Added together, the percentages from each parent for a region equals your percent for that region.

This information comes from your results—not from testing your parents.

## Ethnicity inheritance

Ethnicities [Chromosome Painter](#) **BETA**

Overview [Share](#)



Select one or more regions to highlight.

[All](#) [Ireland](#) [Baltics](#) [Eastern Europe & Russia](#) [Wales](#) [Scotland](#) [Sweden & Denmark](#) [England & Northwestern Europe](#)

Detailed comparison [Share](#)

[Edit parents](#)

Same data, more detail. This chart shows the percentages of each ethnicity you inherited from your parents. Added together, the percents from each parent for a region equals your percent for that region.

Region	Parent 1	Parent 2	You
Total: 7	50%	50%	100%
Ireland	48%	0%	48%
Baltics	0%	41%	41%
Eastern Europe & Russia	0%	7%	7%
Wales	2%	0%	2%
Scotland	2%	0%	2%
Sweden & Denmark	0%	1%	1%
England & Northwestern Europe	0%	1%	1%

### Inheritance is random

Ethnicities may be passed down unevenly, or not at all.

[Tell me more](#)

### Their halves, your whole

This information comes from your results—not from testing your parents.

You inherited half of their DNA. An [AncestryDNA test](#) can provide their full results.

### How do we know this?

Our [SideView](#) technology splits up your DNA, then analyzes each half.

### Need help labeling parents? **NEW**

Check out which DNA matches belong on each side of your family.

[View matches](#)

### Chromosome painter **BETA**

See where your ethnicities appear in your DNA.

[Explore now](#)

# Ancestry Chromosome Painter

Use the chromosome painter to see where your ethnicities lie on your chromosomes and from which parent they were received.

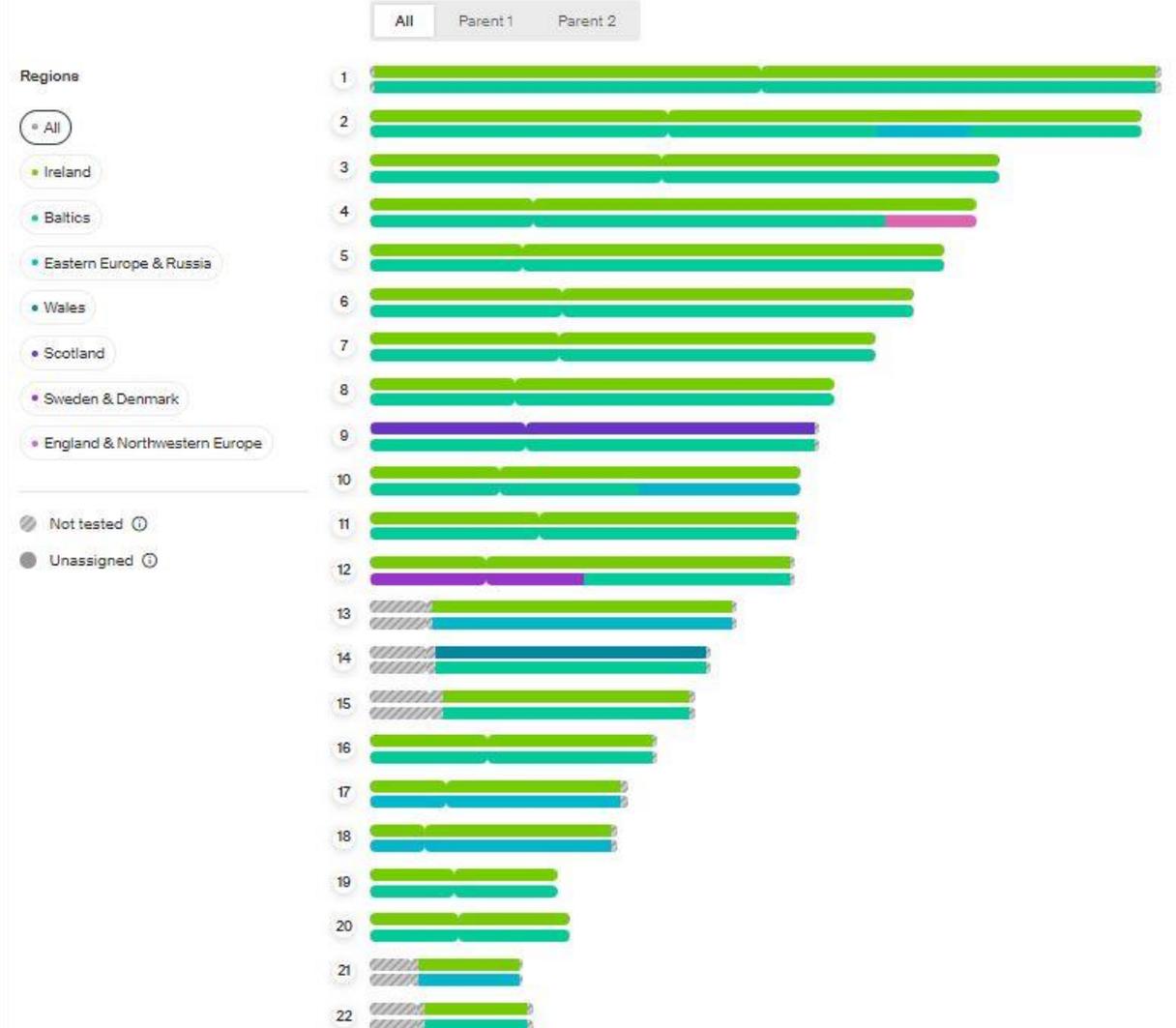
With this data, you can get a general feel for how recent your connections are to your ethnicity regions. The longer a segment (a single colored block) is for a region, the more recent your connection to that region may be.

## Ethnicity inheritance

Ethnicities **Chromosome Painter** BETA

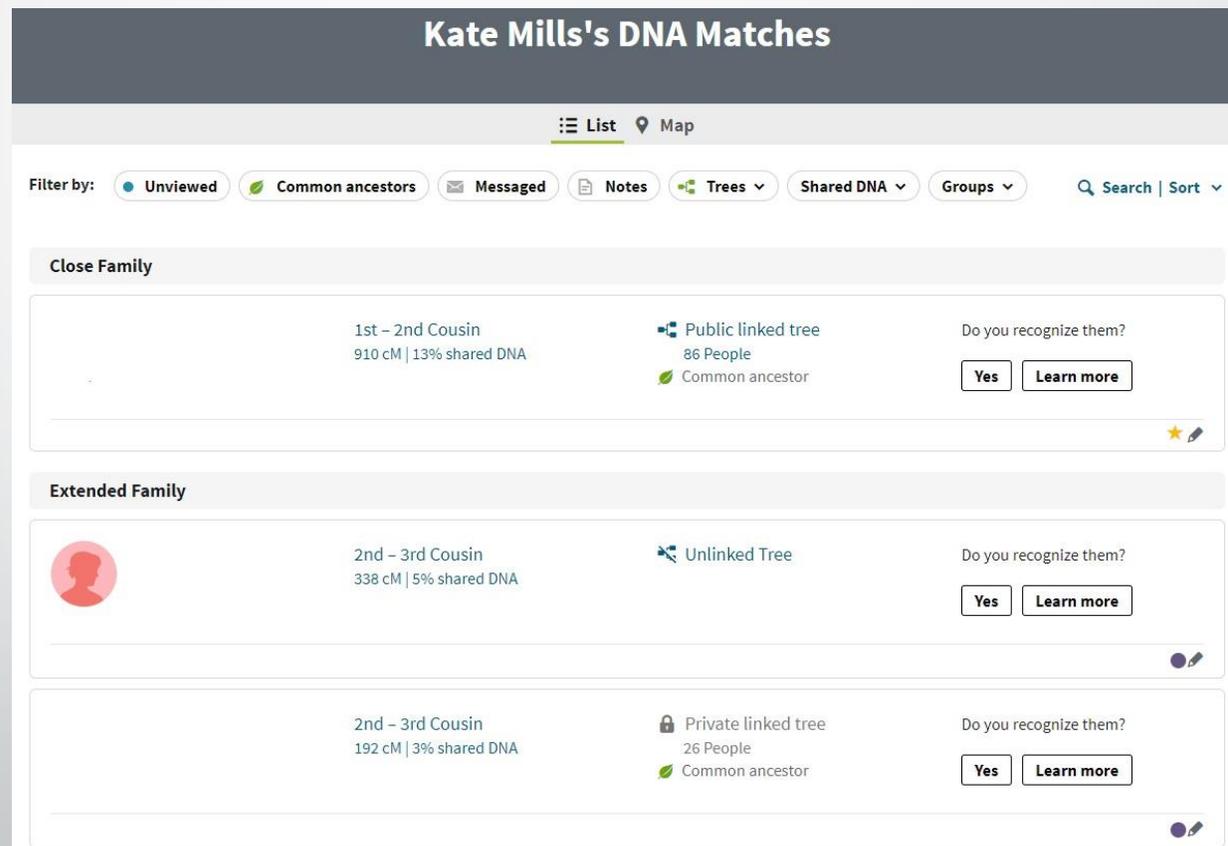
Share

Where are your ethnicities in your DNA? With the chromosome painter, you can see for yourself. We've "painted" your chromosomes (the colored bars below) with the regions they're associated with in your ethnicity estimate. Select an ethnicity to see it highlighted. Choose Parent 1 or Parent 2 to see which chromosomes were passed down by whom.



# Ancestry DNA Matching

A major part of your DNA results is the DNA matches. These are possible relatives whose DNA matches yours, listed in order of most to least. These results can be filtered and sorted in various ways and you can “star” matches and color code them.



The screenshot displays the 'Kate Mills's DNA Matches' interface. At the top, there are navigation options for 'List' and 'Map'. Below this is a 'Filter by:' section with buttons for 'Unviewed', 'Common ancestors', 'Messaged', 'Notes', 'Trees', 'Shared DNA', and 'Groups'. A search and sort function is also present. The matches are categorized into 'Close Family' and 'Extended Family'. Each match entry includes a relationship type, shared DNA amount, tree status, and a 'Do you recognize them?' prompt with 'Yes' and 'Learn more' buttons.

Relationship	Shared DNA	Tree Status	Do you recognize them?
1st - 2nd Cousin	910 cM   13% shared DNA	Public linked tree 86 People Common ancestor	Yes Learn more
2nd - 3rd Cousin	338 cM   5% shared DNA	Unlinked Tree	Yes Learn more
2nd - 3rd Cousin	192 cM   3% shared DNA	Private linked tree 26 People Common ancestor	Yes Learn more

# Ancestry DNA Matches By Parent (Sideview)

## Kate Mills's DNA Matches

[View Mills Family Tree](#)

[All matches](#) [By parent \*\*BETA\*\*](#) [By ancestor](#) [By location](#)

Updated Jan 2023

---

### Parent 1

  
5,650 matches

[View matches](#) [Edit parent](#)

Last names in trees

**Griffin**  
**Smith**  
**Allen**  
**Dunn**

In the trees of your closest parent 1 matches, these last names are the most common.

[View more](#)

Common communities

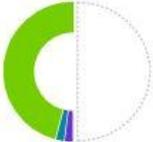
**Munster, Ireland**

[View more](#)

 Munster, Ireland

Ethnicity inheritance

Parent 1



[View more](#)

---

### Parent 2

  
1,007 matches

[View matches](#) [Edit parent](#)

Last names in trees

**Brown**  
**Briscoe**  
**Adkins**  
**Almada**

In the trees of your closest parent 2 matches, these last names are the most common.

[View more](#)

Common communities

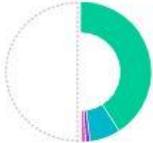
**Russians in Eastern Europe**

[View more](#)



Ethnicity inheritance

Parent 2



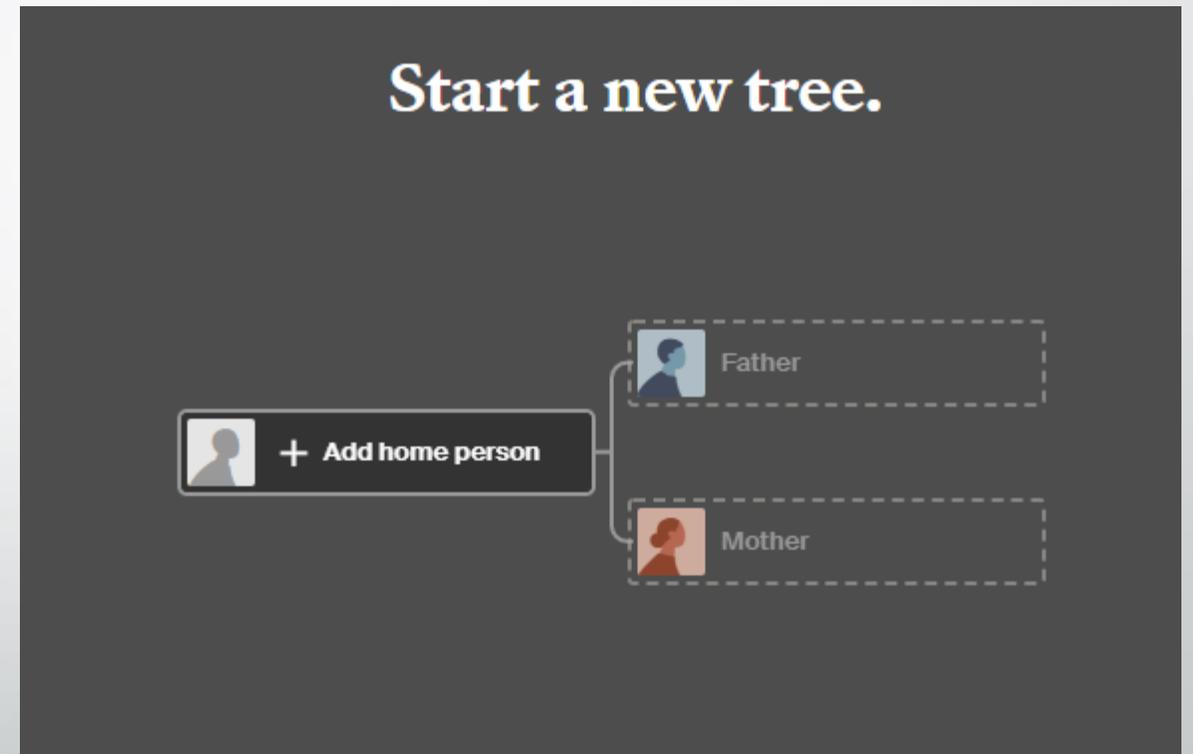
[View more](#)

# Build an Ancestry Family Tree

From any page on Ancestry, click the Trees tab and select Start a New Tree (if this is your first tree) or Create & Manage Trees > Create a new tree.

Add yourself, your parents, grandparents and all known relatives.

When you get your DNA results, link them to your tree!



# Ancestry ThruLines

ThruLines finds connections to your DNA matches by looking through other people's trees for you.

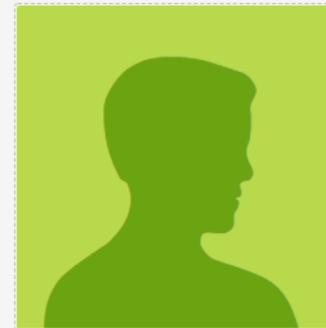
Possible ancestors are returned in the results, giving you new leads to research.

## 5th Great Grandparents



**Maurice Reidy**  
5th great-grandfather  
1760-

POTENTIAL ANCESTOR



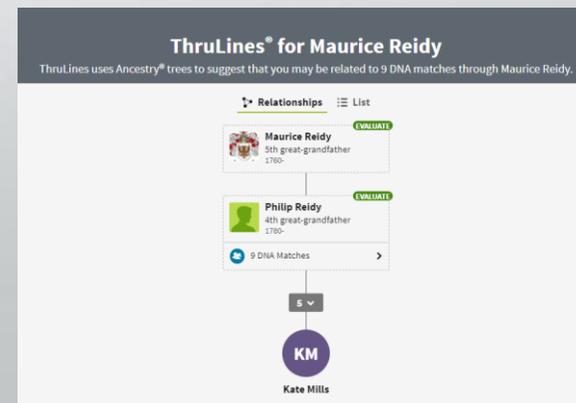
**John Dineen**  
5th great-grandfather  
1745-

POTENTIAL ANCESTOR



**Elizabeth Honora Driscoll**  
5th great-grandmother  
1740-

POTENTIAL ANCESTOR



# Ancestry StoryScout

**Introducing StoryScout™**

Family history search.  
Simplified.

StoryScout™ can bring the fascinating details of your ancestors' lives directly to you, and put you on a path to start making your own family history discoveries.

**NOW**  
included with  
AncestryDNA®



SEVICING IN THE TRENCHES EARLY CORPS DURING WORLD WAR II

Tell us about a **grandparent** and we'll find your ancestors in your family tree.

Grandfather  Grandmother

**First Name** **Last Name**  
 First Name  Last Name

**Place your ancestor might have lived**  
 City, County, State, Country

**Find your grandparent**

[How does this work?](#)

Add your grandparents' name and location and Ancestry will search the public and searchable trees. Returns are more social history than actual leads.

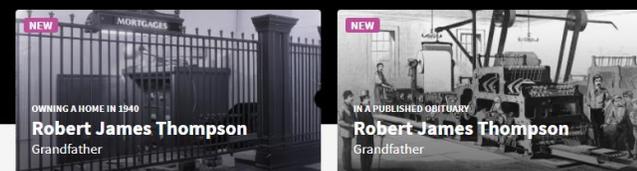
**StoryScout™**

**Your Family Stories**

Based on the grandparents' names you gave us, we were able to find these stories about your ancestors. We're finding new stories all the time, so check back often!

**NEW** OWNING A HOME IN 1940  
**Robert James Thompson**  
Grandfather

**NEW** IN A PUBLISHED OBITUARY  
**Robert James Thompson**  
Grandfather





# 23&Me

## 23&me

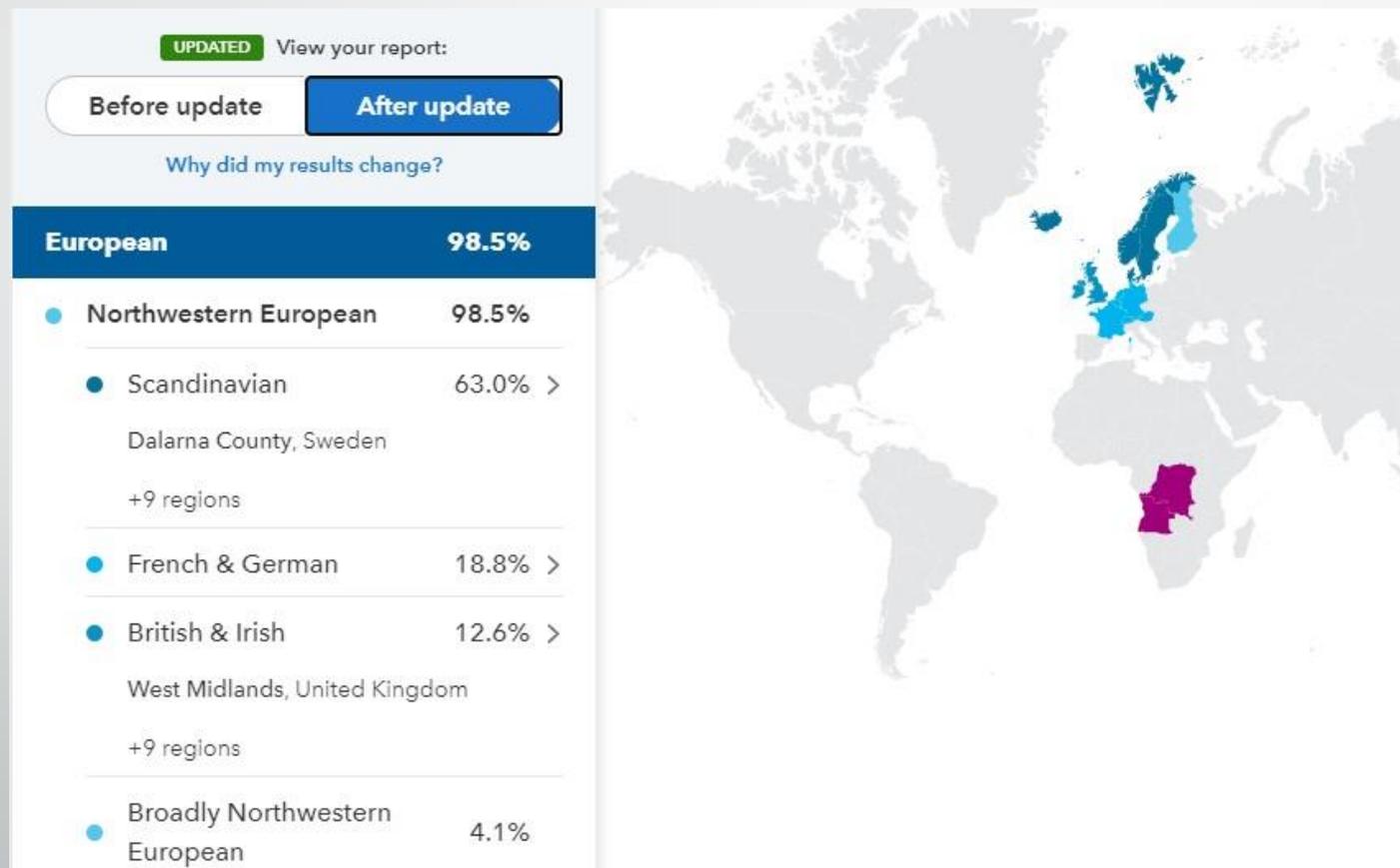
- Saliva Sample
- Results in 4-6 Weeks
- FDA-cleared for use with Genetic Health Risk and Carrier Status reports.
- DNA Matching, Family Tree Feature
- App: Yes
- Second largest database, approx. 14 million
- Tests: Ancestry + Traits: \$119; Health Upgrade: \$110-\$125; Health + Ancestry: \$229; 23&Me + Membership: \$298 and \$69/Year.
- A percentage of the cost can be paid with money from your healthcare flexible spending account. Check with your tax professional.

# 23&Me Health Reports

- Genetic Health Risks: Type 2 Diabetes, Celiac, Parkinson's, BRCA 1/2, etc.
- Wellness Reports: Caffeine, Sleep, Muscle Composition, Weight, etc.
- Traits: Cheek Dimples, Eye Color, Freckles, Taste and Smell, etc.
- Carrier Status: Cystic Fibrosis, Sickle Cell Anemia, etc.

**23&Me strongly suggests discussing the results with a health care professional.**

# Terry's 4<sup>th</sup> 23&Me Ethnicity Results



# Terry's 23&Me Chromosome Painting

Your Chromosome Painting shows where your ethnicities lie on your chromosomes.

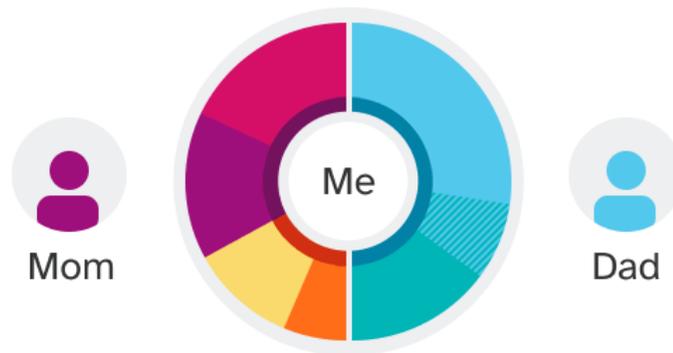
If you opt-in to DNA Relatives, there is also a chromosome browser where you can compare with your matches.



# 23&Me Parental Inheritance

How much of each ancestry did you inherit from your parents?

Connect a parent on 23andMe to see what ancestries you inherited from each parent. Or, connect with your children so they can see what you passed down to them. [Learn more](#) about the benefits of connecting.



[Order a kit for a family member](#)

Already have family that uses 23andMe? [Connect with them!](#)

Like Ancestry, 23&Me has a parental inheritance feature.

Unlike Ancestry, which generates the information from your DNA, you do need to opt-in and connect with other family members who have tested with 23&Me as they use DNA results to determine parental inheritance.

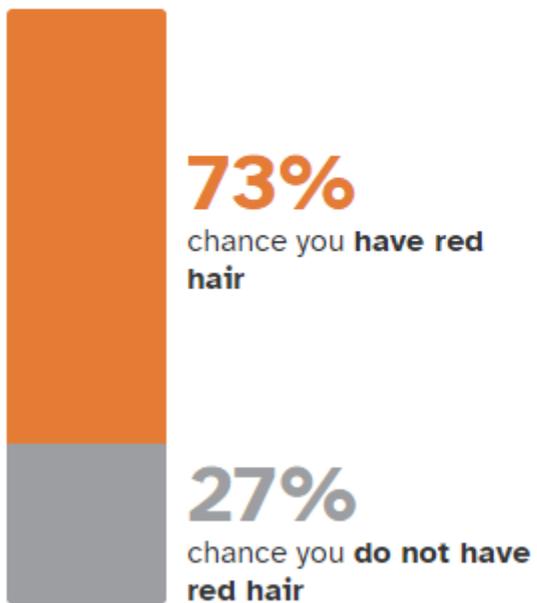
# 23&Me Family and Friends

- **DNA Family Tree:** Opt-In. A tree is generated based on your DNA matches; you will still need to fill in names once you've confirmed a match.
- **DNA Relatives:** Opt-In. Find your DNA matches with this feature.
- **Share and Compare:** Connect with other 23&Me users to compare reports.
- **DNA Comparison:** Compare segments of shared DNA with your relatives.
- **GrandTree:** Trace the flow of DNA from grandparents to grandchildren.



### Red Hair

Terry, your genetics predict



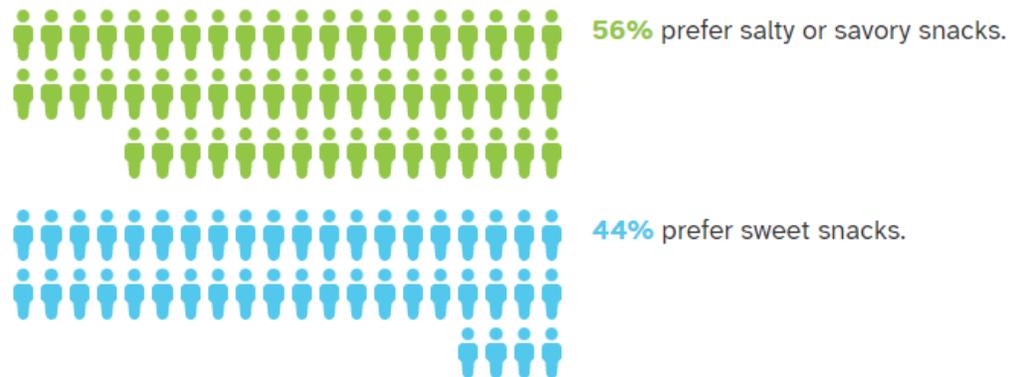
[View full report](#)

# 23&Me Terry's Traits



Terry, the combination of your genetics and other factors makes you **likely to prefer salty or savory snacks.**

Of 23andMe research participants with results like yours:



# Terry's 23&Me Neanderthal Ancestry

23&Me tests for Neanderthal DNA and compares the amount to the other people in the database.

Terry has more Neanderthal DNA than 47% of 23&Me customers and that accounts for less than 2% of his overall DNA.

You have more Neanderthal DNA than **47%** of other customers.

Neanderthals were prehistoric humans who interbred with modern humans before disappearing around 40,000 years ago.

[Summary](#)

[Scientific Details](#)

## What does this mean?



You have **<2%** Neanderthal DNA

You inherited a small amount of DNA from your Neanderthal ancestors. Out of the 2,872 variants we tested, we found **275 variants** in your DNA that trace back to the Neanderthals.

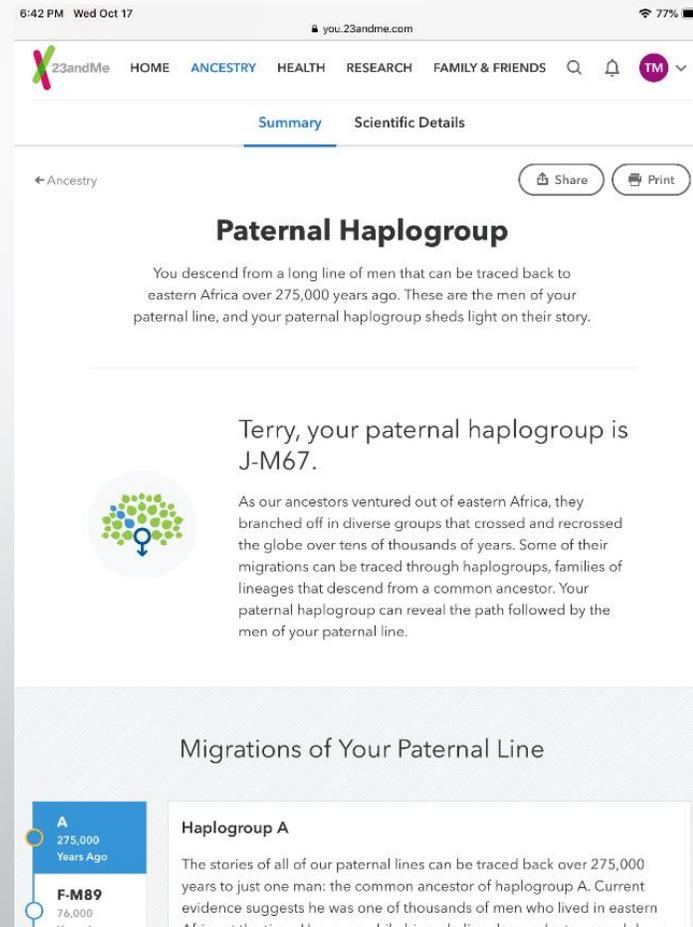
All together, your Neanderthal ancestry accounts for less than **~2 percent of your DNA.**

# Terry's 23&Me Paternal Haplogroup

Haplogroup is a group of people who share a common ancestor going back thousands of years.

Terry's paternal haplogroup is J-M67.

23&Me includes the migration patterns of the group.



The screenshot shows the 23andMe website interface. At the top, the navigation bar includes 'HOME', 'ANCESTRY', 'HEALTH', 'RESEARCH', and 'FAMILY & FRIENDS'. The 'ANCESTRY' tab is selected. Below the navigation, there are tabs for 'Summary' and 'Scientific Details'. The main content area is titled 'Paternal Haplogroup' and includes a brief explanation: 'You descend from a long line of men that can be traced back to eastern Africa over 275,000 years ago. These are the men of your paternal line, and your paternal haplogroup sheds light on their story.' Below this, a specific result is shown: 'Terry, your paternal haplogroup is J-M67.' A circular icon with a blue male symbol and green dots represents the haplogroup. A section titled 'Migrations of Your Paternal Line' is partially visible at the bottom, showing a timeline with 'A 275,000 Years Ago' and 'F-M89 76,000 Years Ago'.

# Terry's 23&Me Maternal Haplogroup

His maternal haplogroup  
is U4a2a.

6:41 PM Wed Oct 17 you.23andme.com 77%

Summary Scientific Details

← Ancestry Share Print

## Maternal Haplogroup

You descend from a long line of women that can be traced back to eastern Africa over 150,000 years ago. These are the women of your maternal line, and your maternal haplogroup sheds light on their story.

Terry, your maternal haplogroup is U4a2a.

As our ancestors ventured out of eastern Africa, they branched off in diverse groups that crossed and recrossed the globe over tens of thousands of years. Some of their migrations can be traced through haplogroups, families of lineages that descend from a common ancestor. Your maternal haplogroup can reveal the path followed by the women of your maternal line.

### Migrations of Your Maternal Line

<b>L</b> 180,000 Years Ago	<b>Haplogroup L</b> If every person living today could trace his or her maternal line back over thousands of generations, all of our lines would meet at a single woman who lived in eastern Africa between 150,000 and 200,000 years ago. Though she was one of perhaps thousands of women alive at the time, only the diverse branches of her haplogroup have survived to today. The
<b>L3</b> 65,000 Years Ago	
<b>L1</b>	

# Terry's 23&Me All Reports

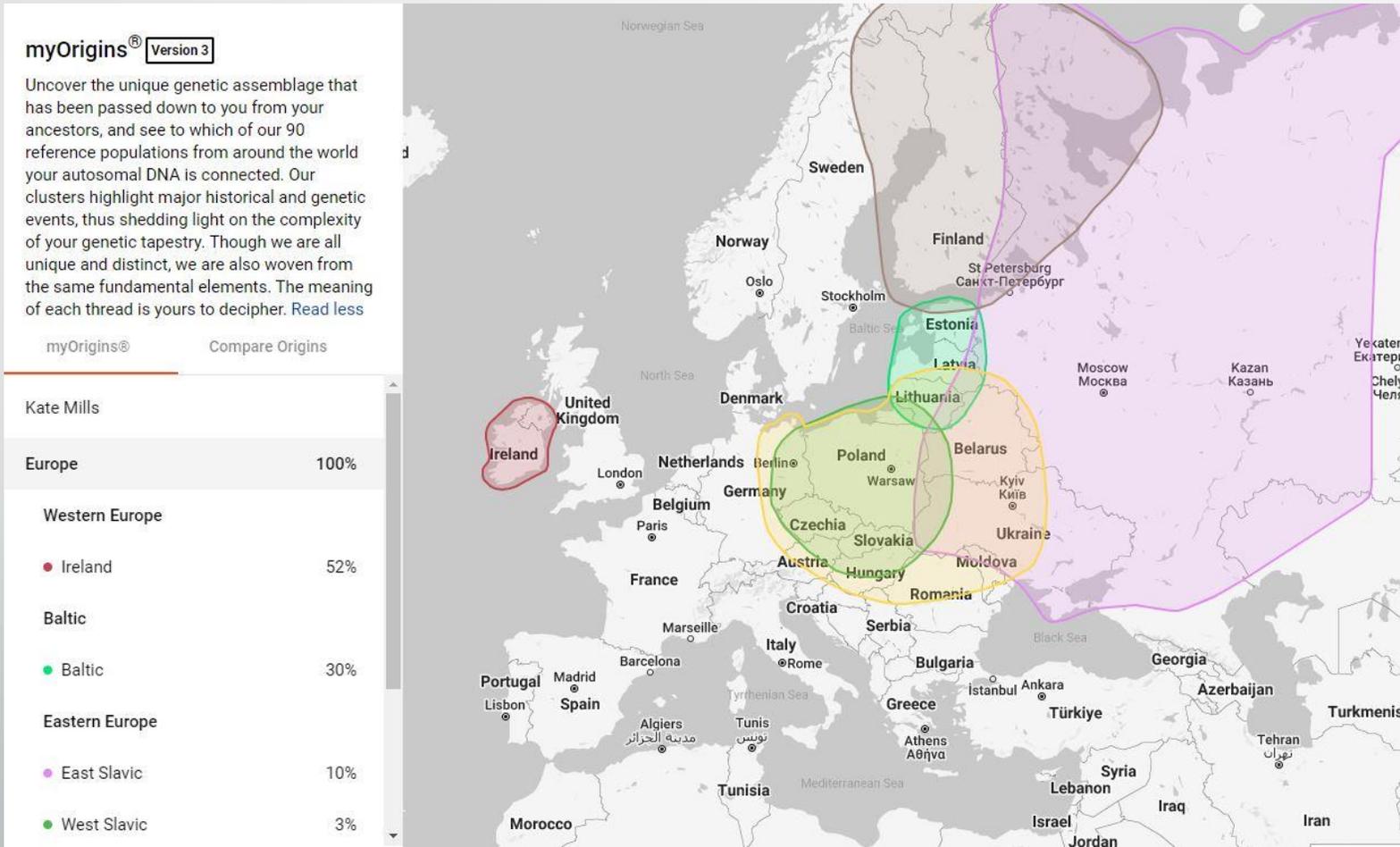
## All Ancestry Reports

Neanderthal Ancestry	<a href="#">275 Variants</a>	>
Maternal Haplogroup	<a href="#">U4a2a</a>	>
Paternal Haplogroup	<a href="#">J-M67</a>	>
Ancestry Composition	<a href="#">See Report</a>	>
Scandinavian	<a href="#">63.0% Scandinavian</a>	>
French & German	<a href="#">18.8% French &amp; German</a>	>
British & Irish	<a href="#">12.6% British &amp; Irish</a>	>
Angolan & Congolese	<a href="#">0.7% Angolan &amp; Congolese</a>	>

# FamilyTreeDNA

- [FamilyTreeDNA](#)
- Cheek Swab
- Results in 4-8 weeks, depending on the chosen test
- Offers Separate Y and mtDNA tests (paternal and maternal lines)
- DNA Matching
- App: No
- Database, 1.5 million
- Tests: Family Finder: \$79; Family Finder + myDNA Wellness: \$119; Y-DNA: \$119-\$449; mtDNA: \$159

# Kate's 3rd FTDNA Ethnicity Results



# FTDNA Family Finder Matches

The screenshot shows the 'Family Finder Matches' page. At the top left, there is a dropdown menu for 'All Matches' (1) and buttons for 'Detail View' (2) and 'Table View'. A search bar with a magnifying glass icon and the word 'Search' is on the right, with a dropdown menu set to 'All'. Below the search bar, there are filters for 'All (6893)', 'Paternal (200)', 'Maternal (589)', and 'Both (8)', along with a 'Filter' button. To the right of the filters are 'Sort by' and 'Export CSV' (5) options. The main content area displays two match cards. The first card is for 'Audrey Craig' (3), with a checkbox to its left. It includes an 'MTFULL SEQUENCE' label and a red 'i' icon. Below the name is a table with columns: 'Ancestral Surnames | View Details', 'Haplogroup', 'Relationship Range', 'Shared DNA', 'Longest Block', and 'X Match'. The data for Audrey Craig is: Ancestral Surnames: Atwell, Atwell, Sr., Attwell, Alford, Anderson, Ayres, B, Butler, Ballowe,...; Haplogroup: mtDNA: N/A; Relationship Range: Parent/Child DAUGHTER; Shared DNA: 3557 cM; Longest Block: 283 cM; X Match: 181 cM. A 'Match date: April 28 2021' is shown at the bottom right of the card. The second card is for 'Beverly Rose' and is partially visible. On the right side of the match cards, there are icons for a person, a family tree, and a message, with a red '5' above them. Below these icons are red callouts 6, 7, and 8.

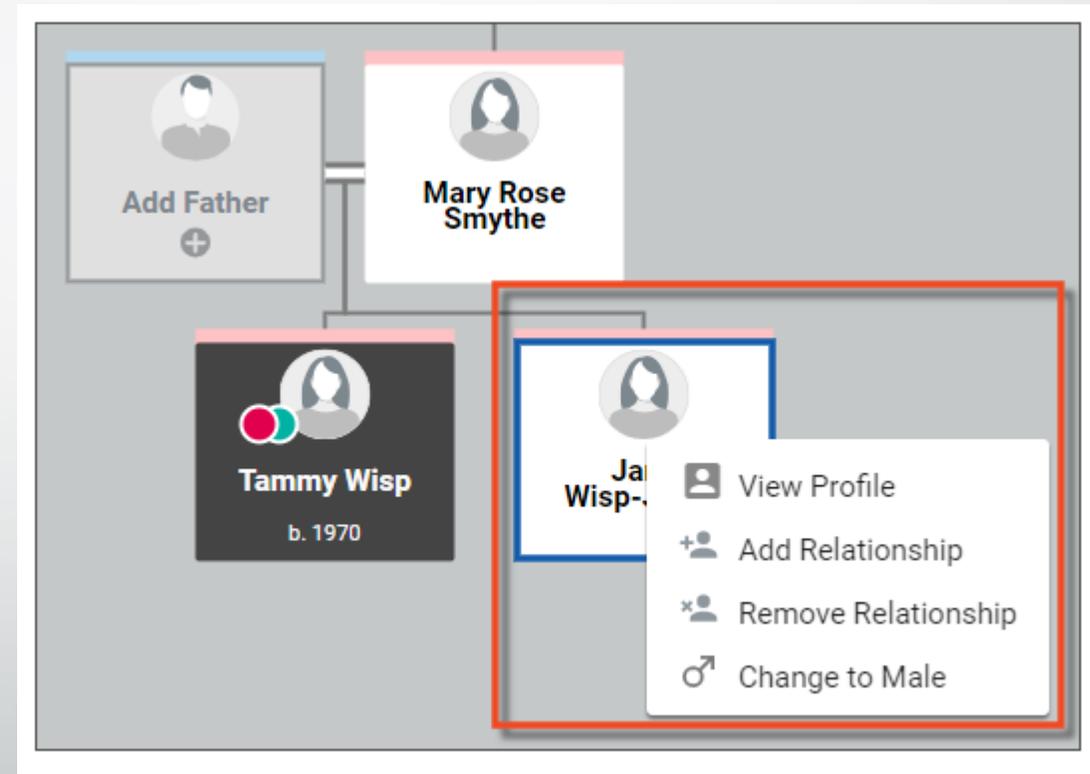
Ancestral Surnames   View Details	Haplogroup	Relationship Range	Shared DNA	Longest Block	X Match
Atwell, Atwell, Sr., Attwell, Alford, Anderson, Ayres, B, Butler, Ballowe,...	mtDNA: N/A	Parent/Child DAUGHTER	3557 cM	283 cM	181 cM

**Filter Matches, Select Matches for Comparison, See Matches in Common, Check Family Trees, Add Notes.**

# FTDNA FamilyTree

This tool allows you to build a family tree and link to your matches.

You can build one from scratch or upload a GEDCOM version of your existing family tree.



# FTDNA Chromosome Painter



# FTDNA Chromosome Browser (Opt In)

The Chromosome Browser allows you to view and compare the DNA segments that you share with your Family Finder matches (autosomal DNA relatives). Note: Only Family Finder matches who have opted in to matching are listed.

FamilyTreeDNA

Home Tools & Reports Family Tree Group Projects

Add Ons & Upgrades

Oscar Holt  
Kit No. 467321

Chromosome Browser

Help

Compare **1**

Oscar Holt YOU

With

Maura O'Riordan  
4th Cousin - Remote

Selected 1/7 Clear All

Compare Relationship

DNA Matches **2**

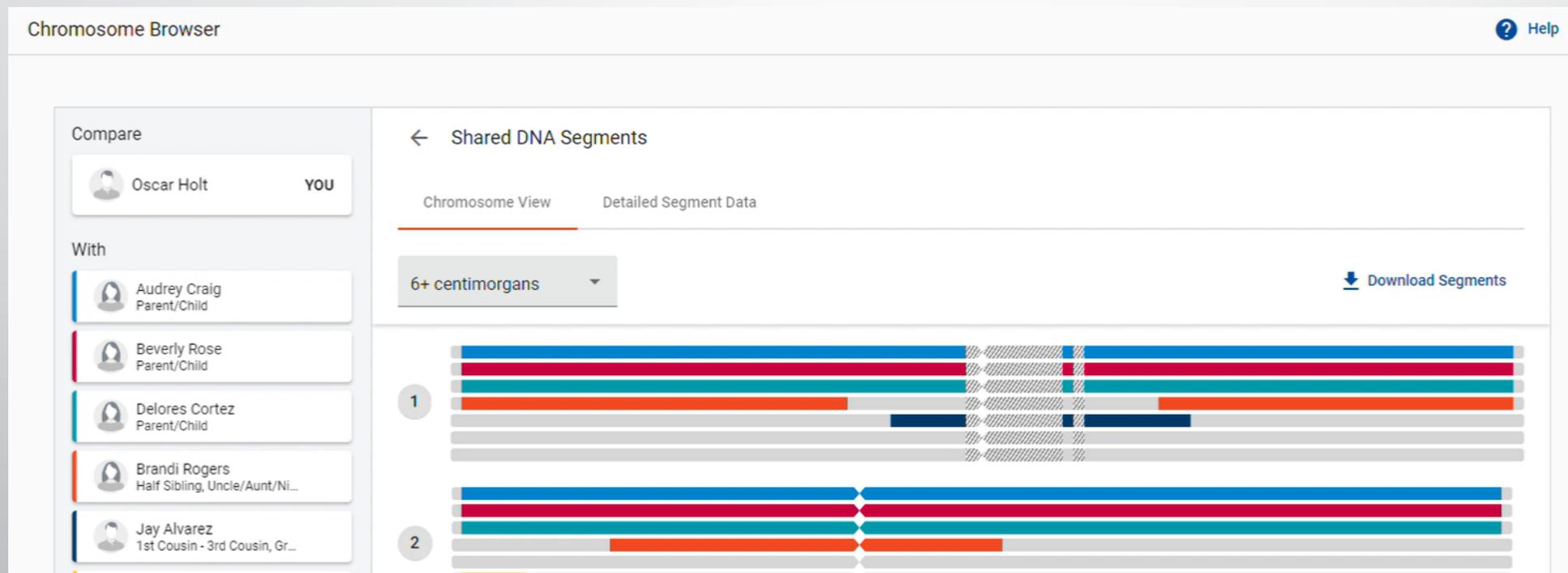
All Matches

Download All Segments **3**

Search Name

Name	Relationship Range	Shared Segments	Shared DNA	Longest Block
<input checked="" type="checkbox"/> Maura O'Riordan	4th Cousin - Remote	1	11	11
<input type="checkbox"/> Phillip O Branson	4th Cousin - Remote	1	10	10
<input type="checkbox"/> Jennifer Padilla		0	3,384	267

# FTDNA Chromosome Browser



# FTDNA Family Finder Matrix (Opt In)

The Family Finder Matrix allows you to select up to 10 of your matches and compare them to each other to see if they have an autosomal genetic relationship between each other. Once you have added at least two matches, the Matrix Matches grid is displayed below the list box. This grid displays the selected matches.

When two of the matches you selected have a genetic relationship, a blue checkmark is displayed in the matrix grid.

Matrix Matches			
	Rosemary	Debra	Jami
Rosemary		✓	
Debra	✓		
Jami			

✓ - This person is identified as a match.

# Kate's FTDNA Ancient Origins

6:59 PM Wed Oct 17 familytreedna.com

FamilyTreeDNA HOME myDNA myTREE myPROJECTS ADD ONS & UPGRADES Kate Mills Kit No. 809382

## Ancient European Origins

The European Continent has been witness to many episodes of human migration, some of which have spanned over thousands of years. The most up-to-date research into these ancient migrations on the European Continent suggests that there were three major groups of people that have had a lasting effect on present day peoples of European descent: Hunter-Gatherers, Early Farmers, and Metal Age Invaders. The graphics below display the percentages of autosomal DNA that you still carry from these ancient European groups. You can click on these graphics to display more information.

Group	Percentage
Metal Age Invader	13%
Farmer	37%
Hunter-Gatherer	50%
non-European	0%

Ancient European Origins map

[View Map](#)



### Hunter-Gatherer 50%

The climate during the Pleistocene Epoch (2.6 mill – 11,700 YA) fluctuated between episodes of glaciation (or ice ages) and episodes of warming, during which glaciers would retreat. It is within this epoch that modern humans migrated into the European continent at around 45,000 years ago. These Anatomically Modern Humans (AMH) were organized into bands whose subsistence strategy relied on gathering local resources as well as hunting large herd animals as they travelled along their migration routes. Thus these ancient peoples are



ancient ORIGINS

# Kate's FTDNA Public Haplotrees

Look up your Haplogroup number to see your country of origin

Y-DNA HAPLOTREE    **mtDNA HAPLOTREE**

View by Countries

Go to Branch Name    Search by Country

A B C D E F G H I J K L M N O P Q R S T **U** V W X Y Z

Branch	Countries
U5b2 45	+19
U5b2a 24	+6
U5b2b 14	+21
U5b2c 4	
U5b2c1	+14
U5b2c2 2	+12

# FamilyTree DNA and the DAR

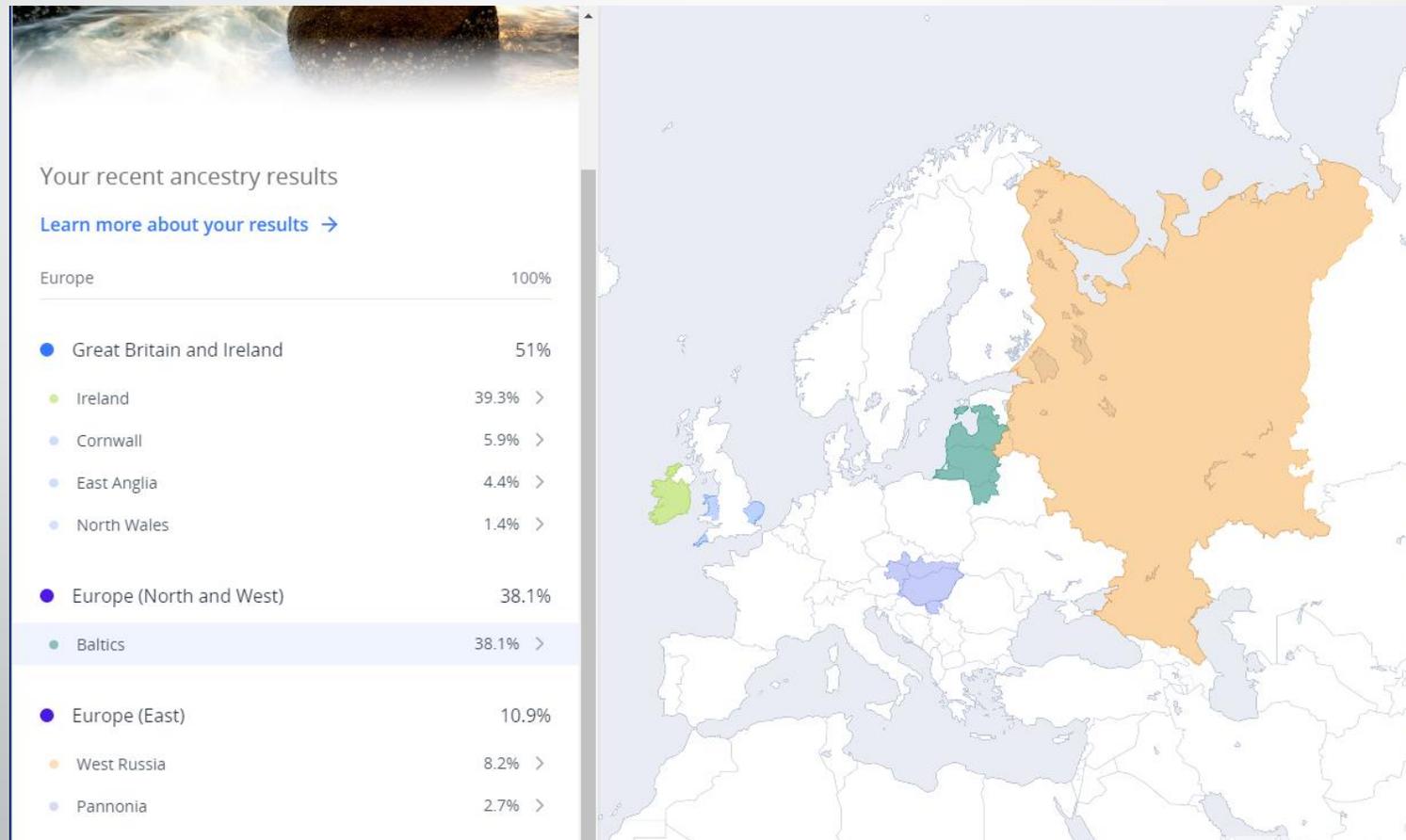
The Daughters of the American Revolution have partnered with FamilyTree DNA and will accept Y-DNA, atDNA and mtDNA as contributing, but not sole evidence of lineage.

<https://blog.dar.org/dar-begins-accepting-autosomal-dna>

# Living DNA

- [Living DNA](#)
- Cheek Swab
- Results take 6-8 weeks since they've opened a lab in the US.
- DNA Matching: Yes, called Family Networks/Matching
- Particularly strong in African, Great Britain and European Ancestry (based in the UK).
- App: No
- Database: approx. 300,000
- Tests: Ancestry Kit: \$105; Wellbeing Kit: \$139; Ancestry + Wellbeing: \$189

# Kate's 4th Ethnicity Results Update



# Kate's Motherline Updated

Haplogroup is U5b2c2 originating 23,000 years ago from Africa to Scandinavia

This is a migration map which shows the journey your ancestors may have taken for you to get where you are today.

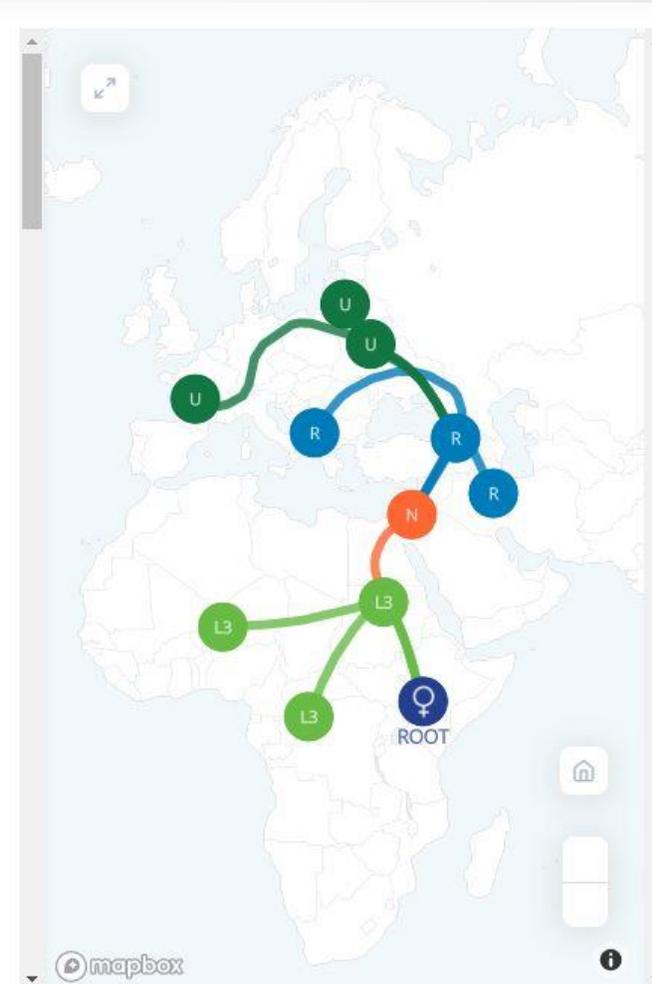
## Maternal (mtDNA) Migration Map

Your haplogroup is U5b2c2

[View Coverage map](#) →



U5b is 23,000 years old, originating at the height of the last Ice Age in Europe. Found as far north as Scandinavia and as far south as Africa.



## Paternal (Y DNA) Migration Map

Your haplogroup is J-FGC7860

[Learn more about your results](#) →

You're viewing your migration map which shows the journey your ancestors may have taken for you to get where you are today. Click on "Coverage Map" below to see the regions where people with your haplogroup are living today.

[Migration map](#)

[Coverage map](#)



Terry's Fatherline Updated  
Haplogroup J-FGC7860 originating 21,000  
years ago in Asia, the Middle East, Turkey and  
the Mediterranean.

# Living DNA-Family Matching

The screenshot shows the 'Sunny's DNA relatives' page. At the top, there is a search bar and a 'Sort by' dropdown menu set to 'Relationship degree'. A callout points to the 'Sort by' menu with the text: 'Sort by relationship, new matches, or alphabetic (by first name)'. Below the search bar, the page is divided into sections: 'Sunny's immediate family' and 'Sunny's 7th degree matches'. The 'immediate family' section lists 'Dad Parent' with '39.72% DNA shared (2880.21cM)'. A callout points to this percentage with the text: 'Total shared DNA'. A right-pointing arrow next to the 'Dad Parent' entry has a callout: 'Open to see more details'. The '7th degree matches' section lists 'PA' (2nd - 4th cousin, 0.81% DNA shared) and 'Renee' (2nd - 4th cousin, 0.48% DNA shared). A callout points to the location of the match icon (a small flag) with the text: 'Location of match'. Below this is 'Sunny's 8th degree matches' section, listing 'Tami' (3rd - 5th cousin, 0.64% DNA shared), 'Glenn' (3rd - 5th cousin, 0.61% DNA shared), 'Rob' (3rd - 5th cousin, 0.45% DNA shared), and 'James Carpenter' (0.44% DNA shared). A callout points to the 'Genetic relationship possibilities' icon (a circle with a question mark) with the text: 'Genetic relationship possibilities'.

Match Name	Relationship	DNA Shared
Dad Parent	Parent	39.72% DNA shared (2880.21cM)
PA	2nd - 4th cousin	0.81% DNA shared (59.03cM)
Renee	2nd - 4th cousin	0.48% DNA shared (34.74cM)
Tami	3rd - 5th cousin	0.64% DNA shared (46.75cM)
Glenn	3rd - 5th cousin	0.61% DNA shared (44.24cM)
Rob	3rd - 5th cousin	0.45% DNA shared (32.84cM)
James Carpenter		0.44% DNA shared (32.13cM)

The Family Matching tool helps you to discover genetic relatives that have also tested with Living DNA. Your DNA is compared against potential matches to determine your predicted relationship to each person.

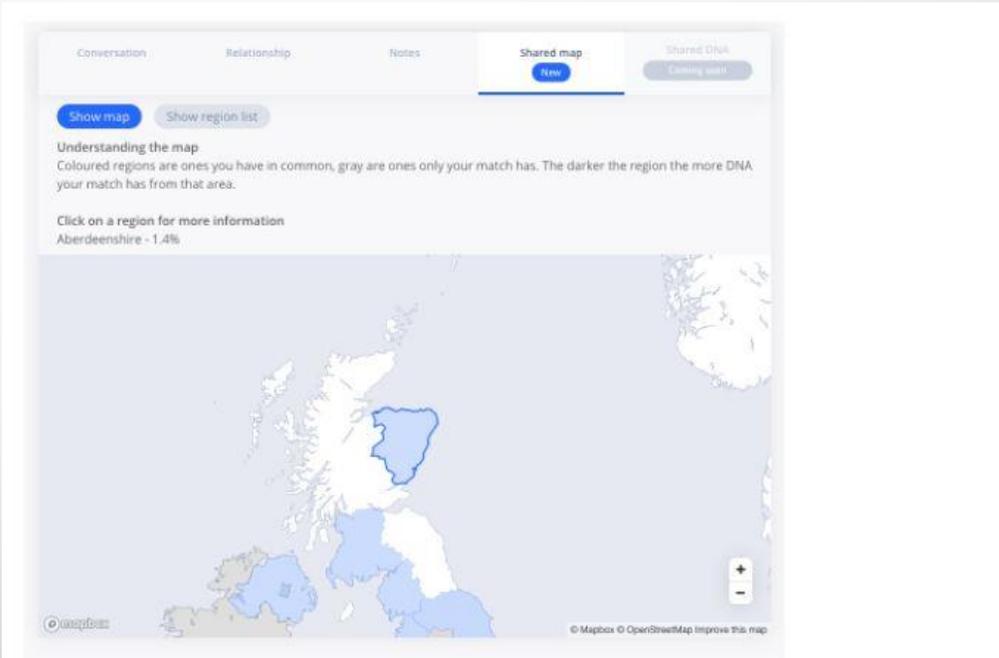
You must be opted into Family Matching. It can take up to 2 weeks for matches to appear once you have opted in.

Matches can be searched, as well as filtered and sorted in a number of different ways.

# Living DNA Shared Map

Shared maps is a new feature within Family Networks which allows you to view your matches on an autosomal map, so you can compare your shared autosomal regions.

Once you opt in, you can select a match and see your results on a map. The regions in color are shared, the regions in gray are not.

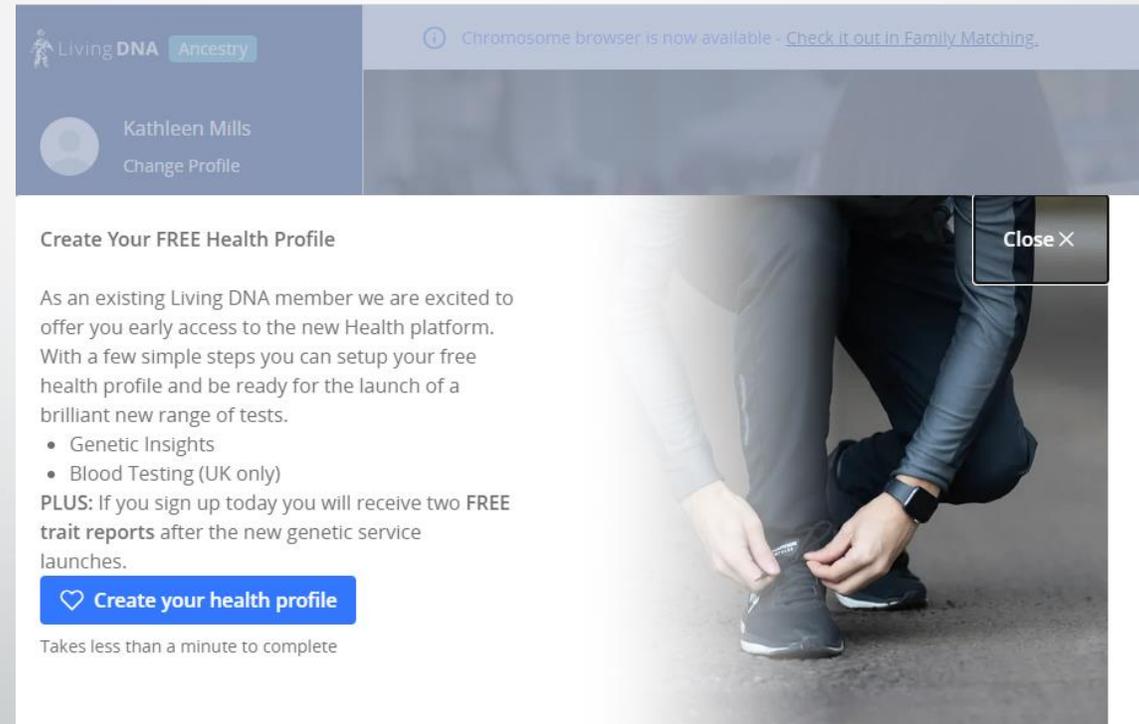


## What is Shared Maps?

Shared maps is a new feature within Family networks which allows you to view your matches autosomal map. As well as this it enables you to compare your shared autosomal regions.

# Living DNA Health

**A new feature adding wellbeing, traits and even blood tests (any or all could be UK only), possibly fee-based in the future.**



The screenshot shows the Living DNA website interface. At the top left, there is a navigation bar with the Living DNA logo and the word "Ancestry" in a blue box. Below this, the user's name "Kathleen Mills" is displayed next to a profile picture icon, with a "Change Profile" link underneath. A notification banner at the top right states "Chromosome browser is now available - [Check it out in Family Matching.](#)". The main content area features a white card titled "Create Your FREE Health Profile". The card contains the following text: "As an existing Living DNA member we are excited to offer you early access to the new Health platform. With a few simple steps you can setup your free health profile and be ready for the launch of a brilliant new range of tests." This is followed by a bulleted list: "• Genetic Insights" and "• Blood Testing (UK only)". Below the list, it says "PLUS: If you sign up today you will receive two FREE trait reports after the new genetic service launches." A prominent blue button with a heart icon and the text "Create your health profile" is centered on the card. Below the button, it says "Takes less than a minute to complete". To the right of the card, there is a blurred background image of a person's legs and feet, with a "Close X" button overlaid on the image.

# Living DNA Add-Ons (for a Fee)

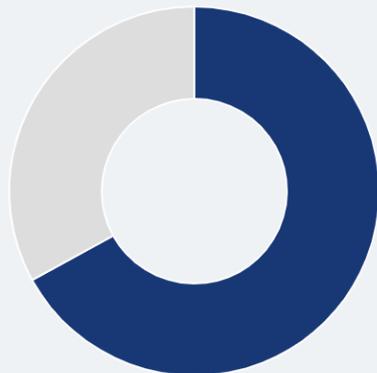
- Wellbeing (Nutrition, Fitness, etc.)
- Neanderthal
- Vitamin Subscription
- Viking

# Living DNA Viking Index \$20 Add-On Fee

Using your raw DNA data (from a Living DNA test or an upload, LivingDNA can compare your DNA to each of four groups to tell you which Vikings you are most genetically similar to: Norway, Eastern Europe, Denmark and Sweden or Great Britain, Ireland and Iceland. The Viking index represents the amount of DNA that you share with ancient Vikings.

## Kate's Viking Index

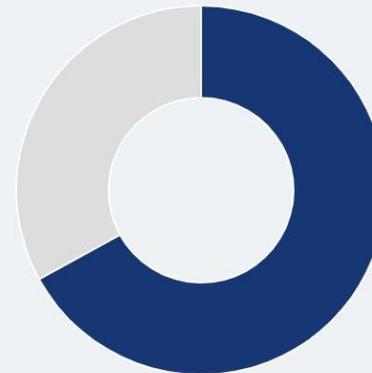
Your viking index is 67%



You are most closely associated with the Vikings of Norway

## Terry's Viking Index

Your viking index is 80%



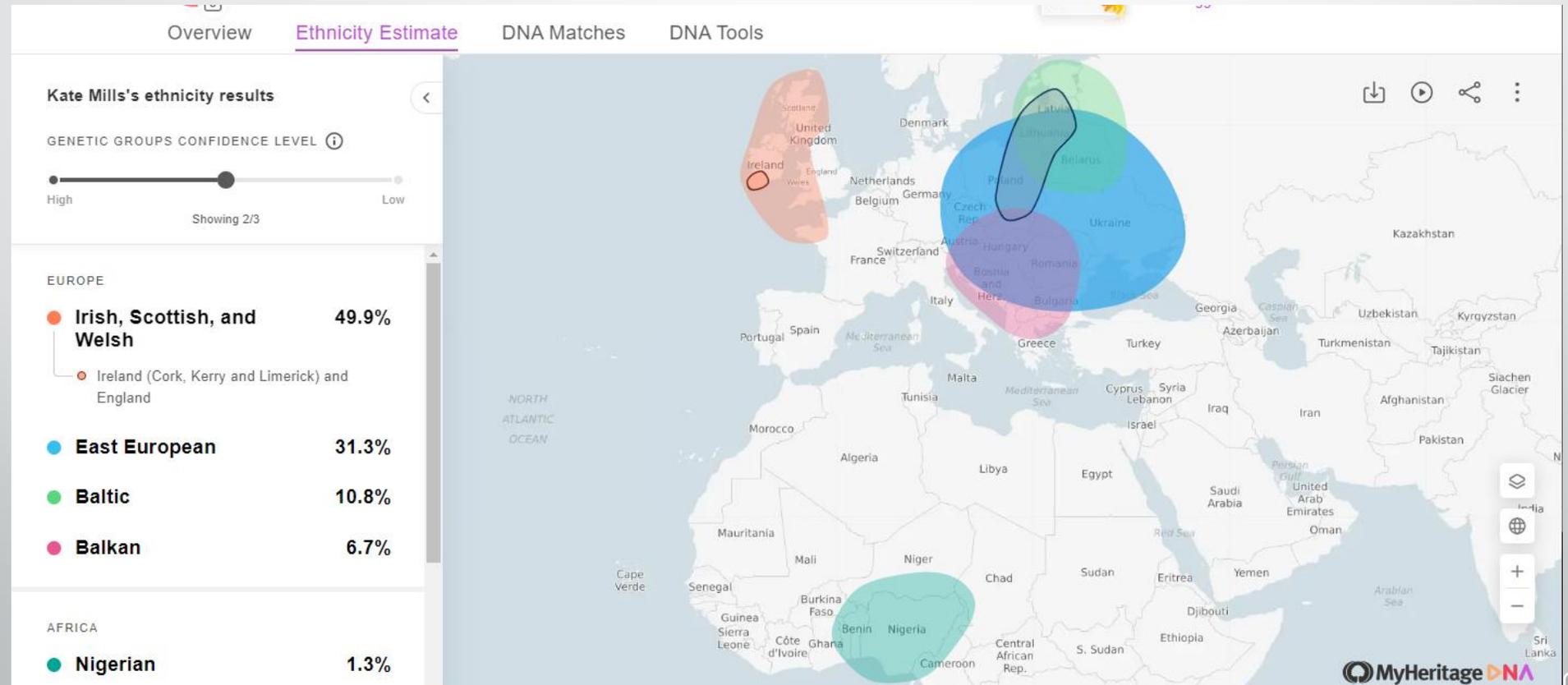
You are most closely associated with the Vikings of Norway

# MyHeritage

- [MyHeritage](#)
- Cheek Swab
- Results in 3-4 Weeks
- Ancestry
- DNA Matching
- App: Yes
- Database: about 6.8 million
- Tests DNA Kit: \$89; DNA Kit and 30-day trial of MyHeritage: \$89



# Kate's MyHeritage Ethnicity Results



# Kate's MyHeritage cM Explainer

This tool predicts how you might be related to a DNA Match, based on the amount of DNA you share with the match, and self-reported ages (if available).

### cM Explainer™

Enter the total amount of shared DNA with a DNA Match to view relationship predictions.  
For improved predictions, enter the ages as well.

**Test additional family members**  
[Order more kits](#)



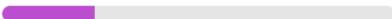
Shared DNA (cM)  Your age  Match's age

Optional Optional

Most probable relationship: **Parent's 2nd cousin**

Most Recent Common Ancestor (MRCA): You and this DNA Match most likely share a pair of **Great-great-grandparents**

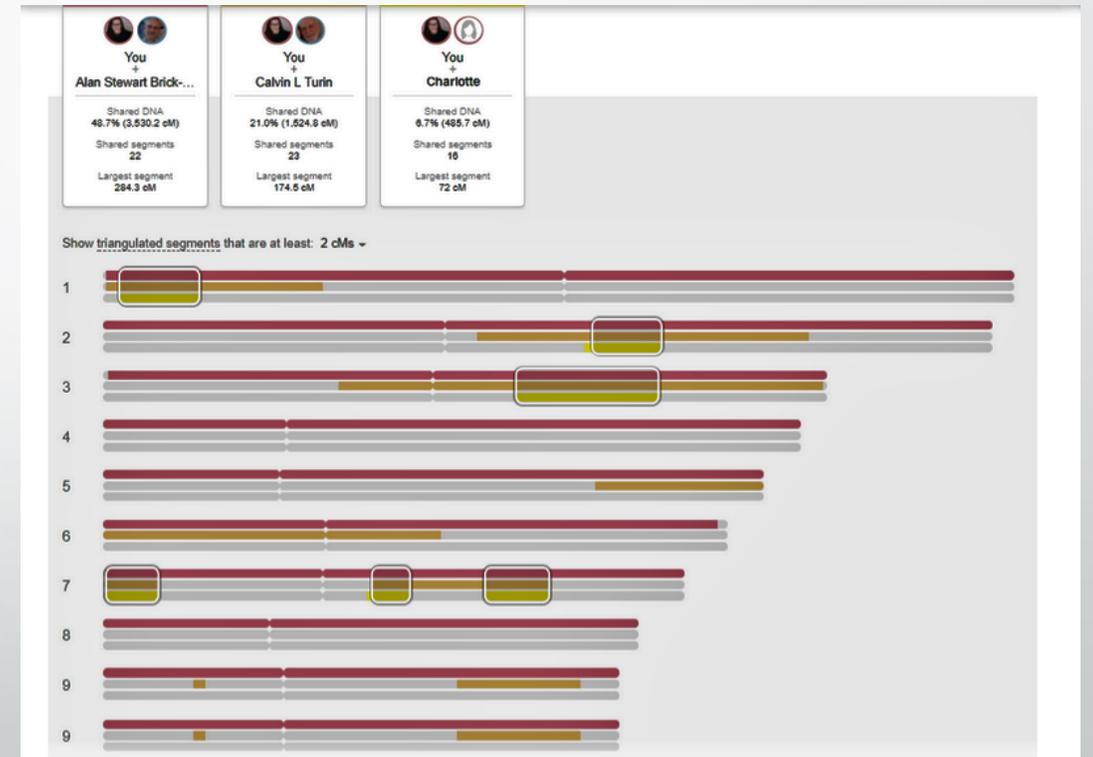
#### Possible relationships

Relationship	Probability	<u>Most Recent Common Ancestor(s)</u>
Parent's 2nd cousin	47.7% 	Great-great-grandparents
3rd cousin	23.5% 	Great-great-grandparents

# MyHeritage Chromosome Browser

Shared DNA segments are sections of DNA that two DNA Matches may have inherited from a common ancestor.

In this Chromosome Browser you can view shared DNA segments between yourself and up to 7 DNA Matches, simultaneously.



# MyHeritage AutoClusters

AutoClusters organizes your MyHeritage DNA Matches into shared match groups that likely descended from common ancestors.

Each color represents one shared match cluster. Members of a cluster match you and most or all of the other cluster members.

7:30 PM Fri Mar 15  
myheritage.com

Terry & Kate's Website: Links Mills Web Site - MyHeritage Favorites

Mills Web Site Order DNA kits

Home Family tree Discoveries DNA Research

## AutoClusters

An automatic tool that organizes your DNA Matches into clusters that likely descended from common ancestors.

### Example of AutoClusters

AutoClustering organizes your MyHeritage DNA Matches into shared match clusters that likely descended from common ancestors. Each of the colored cells represents an intersection between two of your matches, meaning that both individuals match you and each other. These cells are grouped together physically and by color to create a powerful visual chart of your shared match clusters. Each color represents one shared match cluster. Members of a cluster match you and most or all of the other cluster members.

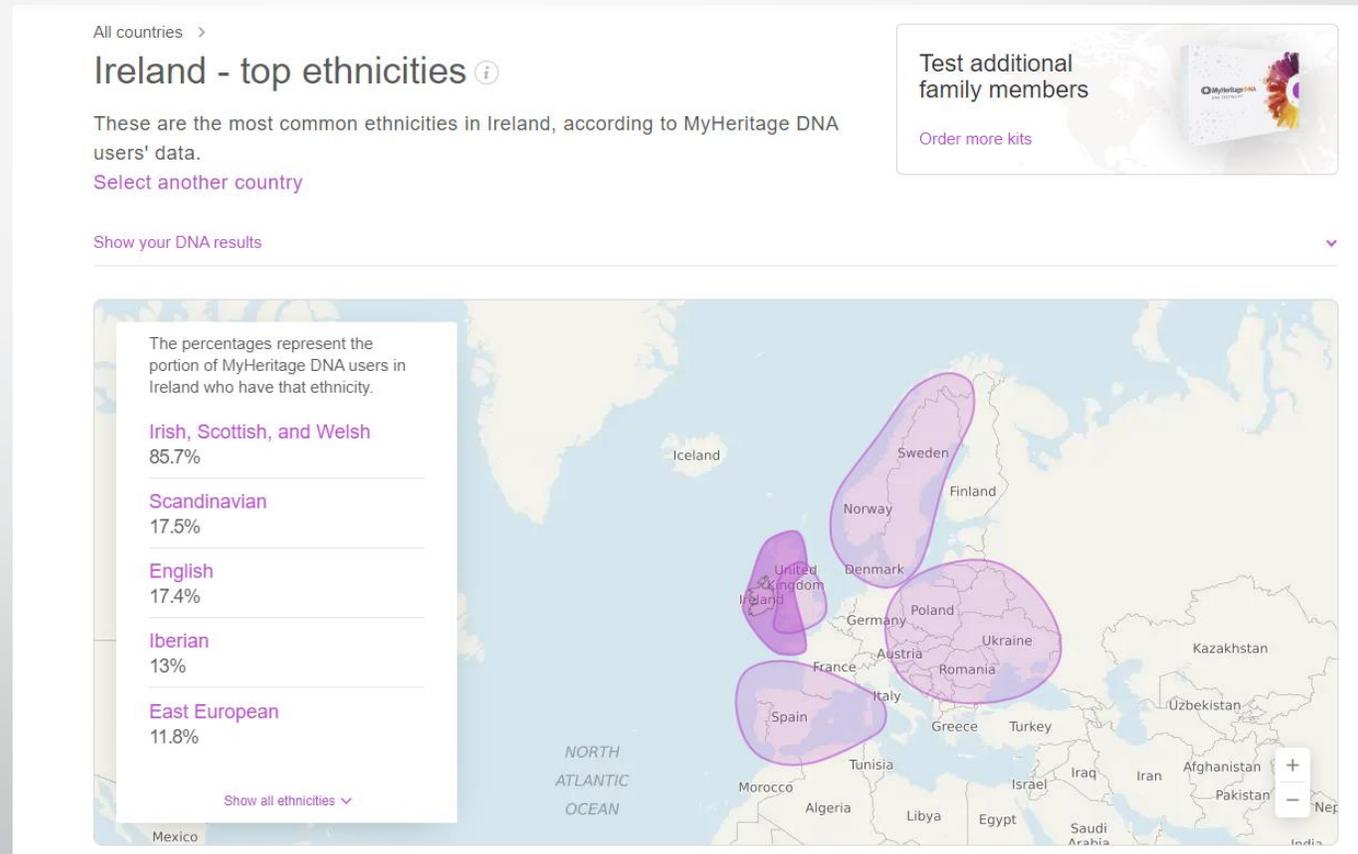
Generate clusters for:  
Kate Mills



# MyHeritage Ethnicities Map

MyHeritage has collected DNA data from people around the world.

Using the ethnicities around the world feature, you can explore the most common ethnicities in different countries, and the top countries for each ethnicity, based on people who have tested with MyHeritage.



# Specialty DNA Tests

- Home DNA: tests for ancestry, African and Asian Origins, paternity, dog/cat breeding, skin care, weight; most can be found at CVS, Walgreens and Wal-Mart (\$69-\$199). <https://homedna.com/>
- Wisdom Panel <https://www.wisdompanel.com/en-us> for dogs and cats, Embark <https://embarkvet.com/> for dogs (\$99-\$199); Basepaws <https://basepaws.com/> for cats; order from Amazon (\$99-\$499). Etalon Diagnostics Horse DNA Test (\$119-308) <https://www.etalondx.com/>
- Vitagene <https://try.vitagene.com/> for ancestry & health; order from Vitagene (\$99). Other health tests are available.
- TellMeGen: Based in Spain/website in Spanish, has health and ancestry tests; order from TellMeGen or Amazon (\$189-\$149). <https://www.tellmegen.com/en/>
- Somos: DNA test for the Latinx community (\$199); order from Amazon. <https://www.somosancestria.com/>
- CircleDNA: DNA for Health, Diet, Nutrition, etc. (\$329-\$699); order from CircleDNA. <https://circledna.com/>
- GenoPalate: DNA for Nutrition, Stress, Personalized Recipes and Supplements, \$179; order from GenoPalate. <https://www.genopalate.com/>

# I Got My Results, Now What?

- Upload them to other testing sites and get their analysis of your results.
- Upload them to GEDMatch and DNAGedcom to learn even more.
- Start/Continue your research with the new information you've received.
- Start building your family tree.
- Start contacting your matches.
- Check your results for updates.

# Want to Know More?

- International Society of Genetic Genealogy  
[https://isogg.org/wiki/Wiki\\_Welcome\\_Page](https://isogg.org/wiki/Wiki_Welcome_Page)
- ISOGG DNA Kit Comparison Chart  
[https://isogg.org/wiki/Autosomal\\_DNA\\_testing\\_comparison\\_chart](https://isogg.org/wiki/Autosomal_DNA_testing_comparison_chart)
- U.S. National Library of Medicine Genetics Home Reference  
<https://ghr.nlm.nih.gov/primer/dtcgeneticstesting/ancestrytesting>
- YouTube Videos: Most of the major kit providers and National Geographic have them

	Ancestry	23&Me	FTDNA	Living DNA	MyHeritage
Cost	\$99-\$119	\$119-\$298	\$79-\$449	\$105-\$189	\$89
Database	23 Million	14 Million est.	1.5 Million	300,000 est.	6.8 Million
Sample	Saliva	Saliva	Swab	Swab	Swab
Time	6-8 Weeks	4-6 Weeks	4-8 Weeks	6-8 Weeks	3-4 Weeks
Ethnicity Estimate	Yes	Yes	Yes	Yes	Yes
Matching	Yes	Yes	Yes	Yes	Yes
Neanderthal	No	Yes	Yes	Yes, for a fee	No
Haplogroup	No	Yes	Yes, with Y or mtDNA	Yes	No
Chromosome Painter/Browser	Yes/No	Yes/Yes, Opt-In	Yes/Yes	No/No	No/Yes
Health	No	Yes, FDA cleared, additional fee	No	Yes, UK only?, fee?	No
Wellbeing (Nutrition, Fitness)	No	Yes, in Health if purchased	Yes, in myDNA if purchased	Yes, new feature coming soon, UK Only?	No
Traits	Yes, fee for new customers	Yes	No	No	No
App	Yes	Yes	No/Yes, myDNA	No	Yes
Subscription	Yes	No	No	No	Yes
Uploads	No	No	Yes	Yes	Yes
Owned By	Blackstone (investment)	VG/Richard Branson	myDNA/Gene by Gene	David and Hannah Micholson	Francisco Partners (investment)

ISOGG: [https://isogg.org/wiki/Autosomal\\_DNA\\_testing\\_comparison\\_chart](https://isogg.org/wiki/Autosomal_DNA_testing_comparison_chart)

# Questions?

Contact: Kate Mills, [kmills@balibrary.org](mailto:kmills@balibrary.org)

PDF slides available at: <https://balibrary.org/component/content/article/1497>