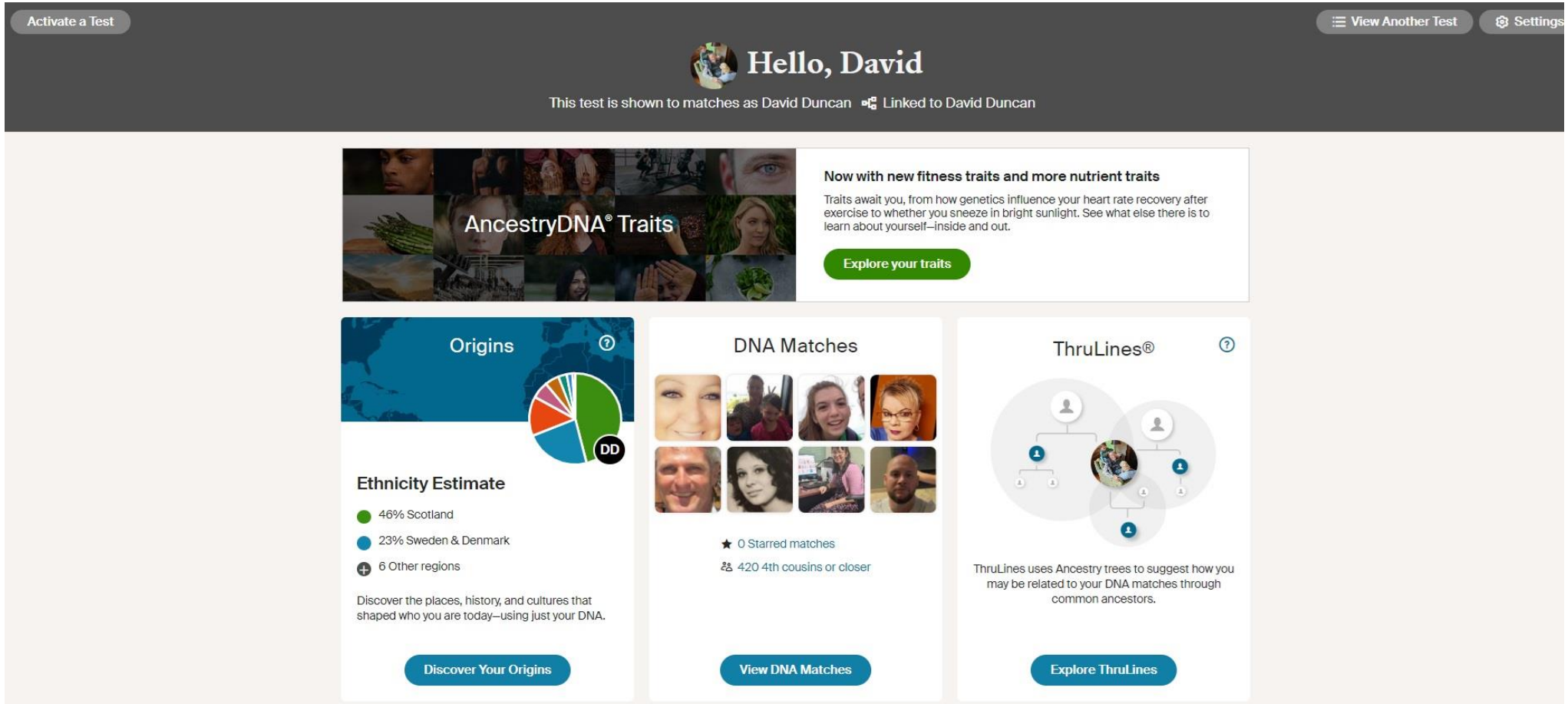
# 24,000 DNA Matches—Now What?



# My first test was a gift—23andMe.

23andMe HOME ANCESTRY HEALTH & TRAITS RESEARCH FAMILY & FRIENDS Buy kits DD

List Family Tree Map Frequently Asked Questions

Edit profile

## DNA Relatives

Get started with your predicted relationships, then connect and message to learn more.

We have temporarily disabled some features within the DNA Relatives tool as an additional precaution to protect your privacy. Read more here.

**Filters**

**Showing 5000 of 5000 relatives**

**Sort by** Strength of Relationship

**Search keywords**

Name, location, notes

Reset

**Notifications**

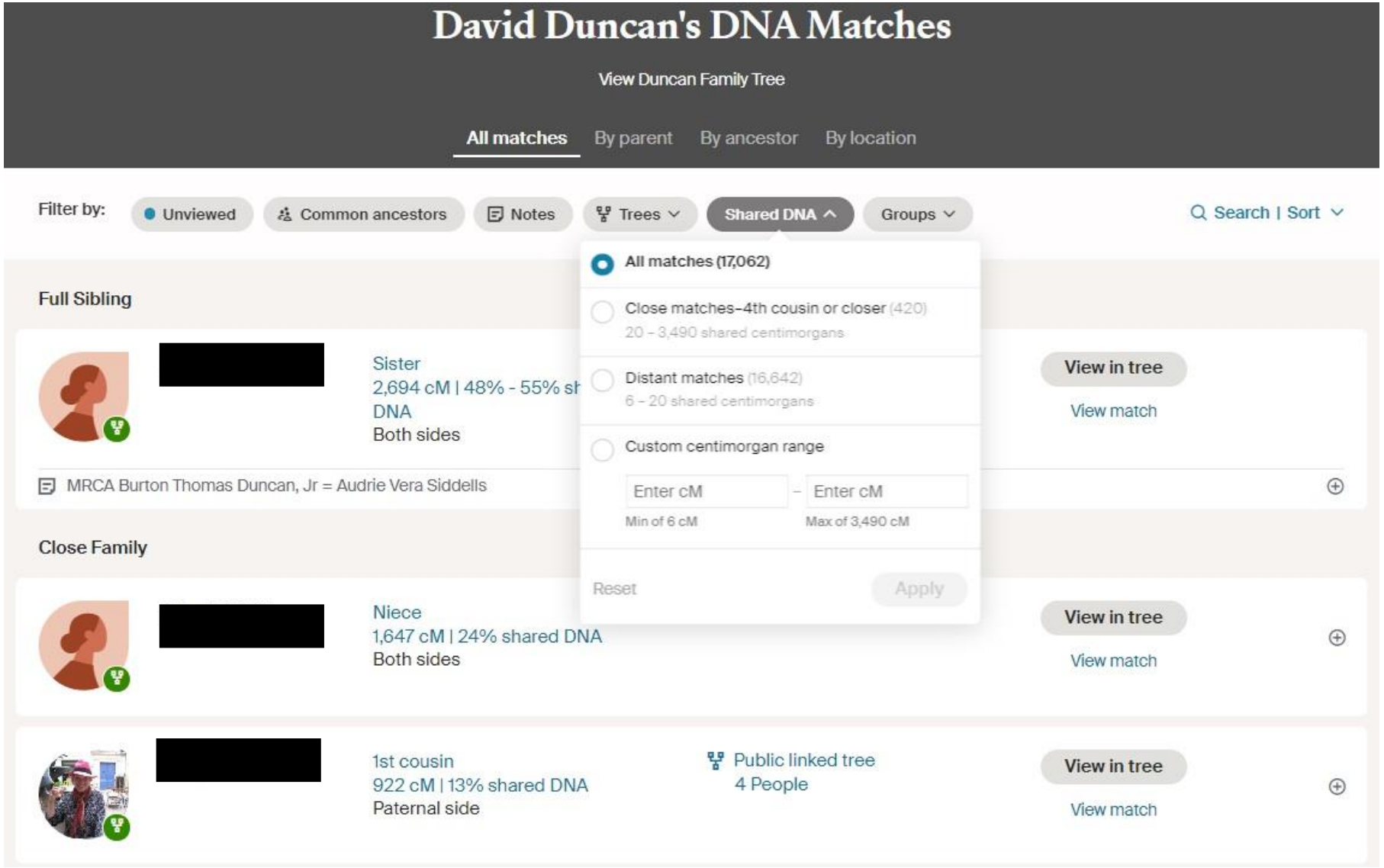
JD [redacted]
Son
47.46% DNA shared, 22 segments
Connected

GC [redacted]
1st Cousin
10.34% DNA shared, 28 segments

# Frustration Central!!

- 23andMe does not host user trees.
- My match list was overwhelming.
- How do these relatives connect to me?
- Saw value so I tested elsewhere.

# I have how many matches??



# Have you DNA tested at multiple companies?

Living DNA Ancestry

Relatives List | Messaging centre | Matchbox | Multiview browser | David Duncan

- Dashboard
- Recent Ancestry
- Motherline
- Fatherline
- Family Matching
- Wellbeing
- Viking
- Neanderthal
- Classical New feature
- Store

## David's DNA relatives

Search by initials or display name

Per page 10 | Sort by Genetic distance

### David's 7th degree matches

[redacted]
Very active
DNA Owner

2nd - 4th cousin
0.88% DNA shared (63.60cM)
5 shared segments

15 shared matches
Add to matchbox

[redacted]
Less active
DNA Owner

2nd - 4th cousin
0.64% DNA shared (46.30cM)
4 shared segments

4 shared matches
Add to matchbox

### David's 8th degree matches

[redacted]
Less active
DNA Owner

3rd - 5th cousin
0.67% DNA shared (48.30cM)
2 shared segments

2 shared matches
Add to matchbox

# Surprises? What you wanted to know?

- I learned a whole lot more than I thought I would.
- My traditional genealogy had holes.
- Surprise: a first cousin once removed I knew nothing about.
- I could see some matches shared the same common matches.
- These clusters showed I was connected to family groups I didn't know about and were not apparent in my paper trail.

# Testing Companies are not Equal

| Company | Estimated Number of DNA tests as of May 2023 |
|---|---|
| Ancestry | 23.0 Million |
| 23andMe | 13.8 Million |
| MyHeritage | 7.0 Million |
| Family Tree DNA | 1.5 Million |
| Living DNA | 1.5 Million |
| GedMatch | 1.5 Million |

# 23andMe VS MyHeritage

**Both Kits run on MyHeritage DNA Database**

| Metric | MyHeritage Kit | 23andMe Kit | Difference |
|---|---|---|---|
| | | | |
| Close DNA Matches | 20 | 20 | 0 |
| | | | |
| Total DNA Matches | 12,134 | **11,912** | -222 |
| | | | |
| AutoCluster Matches | 97 | 103 | 6 |

# MyHeritage DNA Kit

Showing 1–10 of 12,171 DNA Matches

Filters Sort by

**Stanley** [redacted]
Age: 80's
DNA managed by Michelle Butson
Contact Michelle

Probable relationship
Parent's 1st cousin

DNA Match quality
Shared DNA: 4.9% (347.7 cM)
Shared segments: 19
Largest segment: 74.4 cM

NEW
Review DNA Match
View tree

Appears in a family tree with 7 people, managed by Michelle Butson from New Zealand

**alana** [redacted]
Age: 50's
From: Australia
Contact alana

Probable relationship
2nd cousin's daughter

DNA Match quality
Shared DNA: 2.8% (197.6 cM)
Shared segments: 9
Largest segment: 62.7 cM

NEW
Review DNA Match
View tree

Appears in a family tree with 3 people that she manages

**Mait** [redacted]
Age: 70's
From: Sweden
Contact Mait

Probable relationship
2nd cousin

DNA Match quality
Shared DNA: 2.6% (184.3 cM)
Shared segments: 6
Largest segment: 61.8 cM

NEW
Review DNA Match
View tree

Appears in a family tree with 7 people that she manages

Showing 1–10 of 12,017 DNA Matches

# 23andMe DNA Kit

Filters Sort by

**Mait** [redacted]
Age: 70's
From: Sweden
Contact Mait

Probable relationship
2nd cousin

DNA Match quality
Shared DNA: 2.6% (183.9 cM)
Shared segments: 6
Largest segment: 61.8 cM

Review DNA Match
View tree

Appears in a family tree with 7 people that she manages

**Amy** [redacted]
Age: 30's
From: New Zealand
Contact Amy

Estimated relationships
2nd cousin's daughter, 3rd cousin's daughter

DNA Match quality
Shared DNA: 1.2% (83.8 cM)
Shared segments: 3
Largest segment: 57.9 cM

Review DNA Match
View tree

Appears in a family tree with 1,024 people that she manages

**Stanley** [redacted]
Age: 80's
DNA managed by Michelle Butson
Contact Michelle

Probable relationship
Parent's 1st cousin

DNA Match quality
Shared DNA: 4.7% (329.7 cM)
Shared segments: 20
Largest segment: 56.8 cM

Review DNA Match
View tree

Appears in a family tree with 7 people, managed by Michelle Butson from New Zealand

# Comparing 23andMe vs MyHeritage Kits

- Top three matches sorted by DNA segment length were not the same.
- Top DNA Segment length for each person not always the same.
- Number of shared DNA segments by match not the same.
- Total DNA shared not the same.
- Takeaway:  There are differences but they are small.

MyHeritage

VS

Ancestry

Review DNA Match

David Duncan
This is you
From: USA
Kit: 23-DA1268

alana [redacted]
Age: 50's
From: Australia

Appears in a family tree with 3 people that she manages view tree

Contact

Probable relationship
2nd cousin's daughter

DNA Match quality
2.7% (189.0 cM)
Shared DNA

11
Shared segments

40 cM
Largest segment

AR

You and Alana [redacted]

2nd cousin 1x removed | Maternal side

3% shared DNA: 190 cM across 10 segments

View in tree | Message | Edit Relationship

Add to group | Add note

# Alana: Ancestry versus MyHeritage

- “Most likely relationship” the same.
- DNA match in cM similar but not the same. 190 vs 189 cM.
- Number of matching DNA segments different. 10 vs 11.
- Longest DNA segment different: 45 cM Ancestry, 40 cM MyHeritage.
- Results are similar but not identical.

# You can upload Ancestry, 23andMe, and Family Tree DNA results to MyHeritage. Free. **Do it!!!**

## Uploading your DNA results from one company to another.

The **North of Ireland Family History Society** has a comprehensive instruction set for transferring your DNA results from **any** company to another here: https://www.nifhs.org/dna/uploading-your-dna/

**Diahan Southard** covers DNA uploads from Ancestry to other DNA testing companies here: https://www.yourdnaguide.com/transferring

**MyHeritage**'s page on how to upload your DNA results to MyHeritage: https://education.myheritage.com/article/how-to-upload-your-dna-data-to-myheritage/#:~:text=Go%20to%20www.myheritage.com,%2C%20then%20click%20%E2%80%9CUpload.%E2%80%9D

# Why upload to another DNA company?

- Gain access to more DNA matches.
- Gain access to more Family Trees.
- Gain access to a different suite of DNA tools.
- Gain ability to combine tools from different companies to extend results.

# Disclaimer

- My Cousin Method relies on the DNA data of living people.
- So there are privacy issues in sharing your DNA work employing that data with others.
- You need to ‘vet’ each DNA match you put into the ‘Cousin Method’ template so that all the DNA matches in a group share the same ancestral pair.  Hint:  in Ancestry you can use the DNA-match-linked-to-tree designation to mark this.

# The ‘Cousin Method’.

**Groups your target DNA matches by how they are related to you and each other.**

**For new matches, determines the MRCA—Most Recent Common Ancestor Couple.**

**You enter the target DNA match into the correct MRCA bucket in the template.**

**As you progress, the template more accurately defines where a new match fits.**

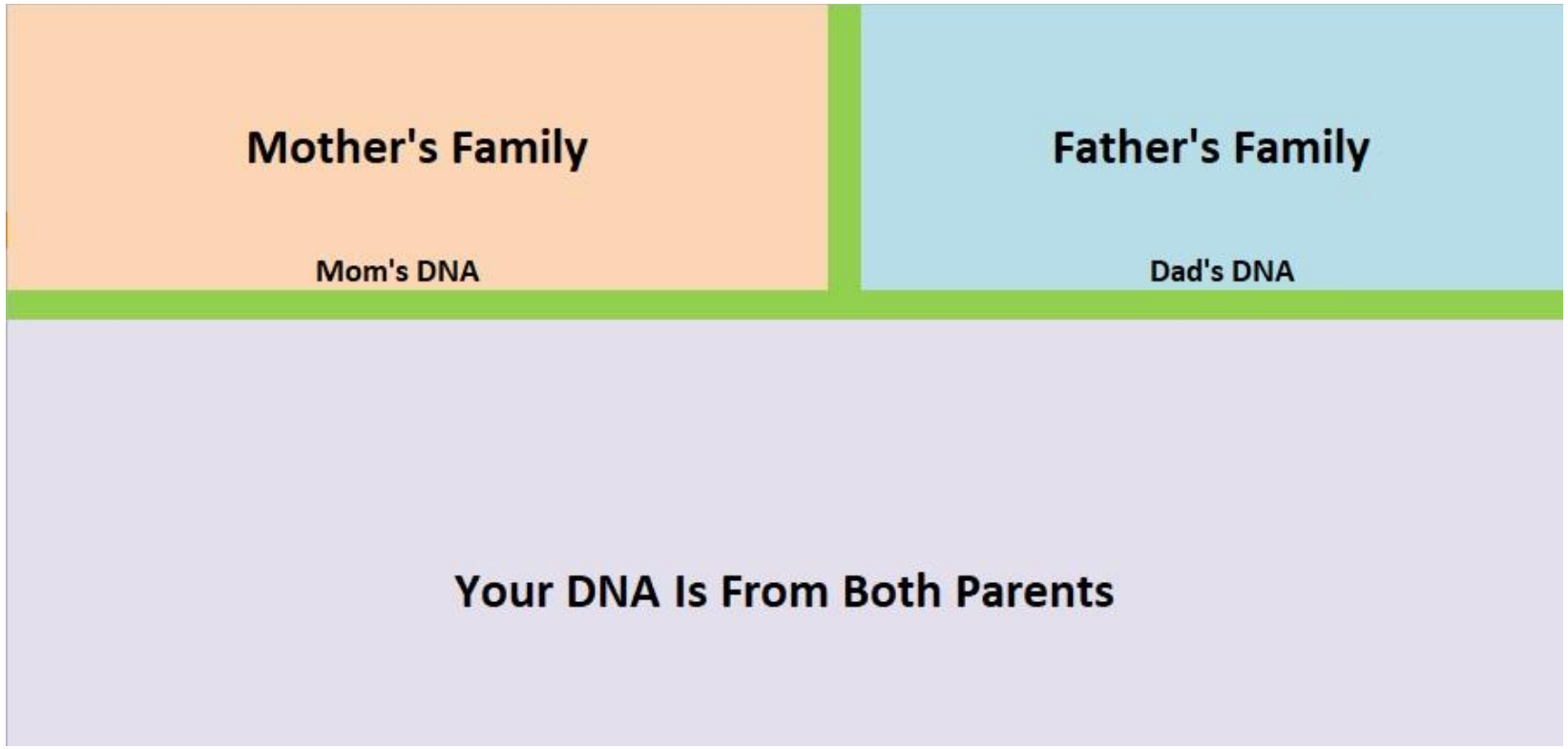
**Your First Cousins tell if your DNA match is on your Mother or Father’s side.**

**Your Second Cousins tell if your DNA match is on that parent’s Mother or Father’s side.**

**Your Third Cousins tell if your DNA match is on that grand parent’s Mother or Father’s side.**

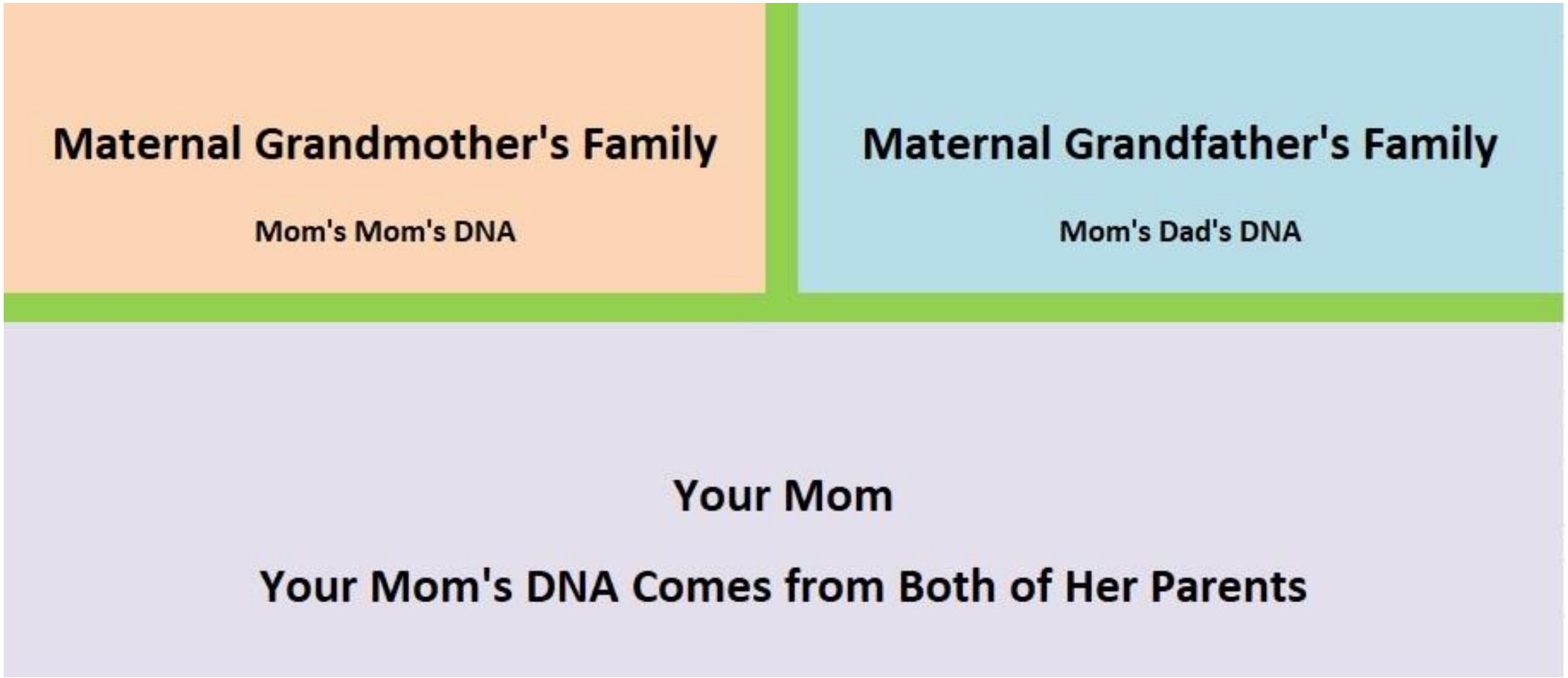
**And so on.**

# Your DNA Match List Can be Divided into Three Groups. Always.




**Three Groups: Mom's, Dad's, Both Mom & Dad's.**

# What If Your Mom has DNA Tested?




**Three Groups: Mom's Mom, Mom's Dad, Both Mom's Mom & Mom's Dad.**
**Your Mom's 'Both' Group is the same as your 'Mother's Family'.**

# Combining Generations: The Cousin Template

| Mom's Mom's Mom | Mom's Mom's Dad | Mom's Dad's Mom | Mom's Dad's Dad | Dad's Mom's Mom | Dad's Mom's Dad | Dad's Dad's Mom | Dad's Dad's Dad | Great Grands |
|---|---|---|---|---|---|---|---|---|
| Great Grandmother | Great Grandfather | Great Grandmother | Great Grandfather | Great Grandmother | Great Grandfather | Great Grandmother | Great Grandfather | Three Gens Up |
| | | | | | | | His Sibs, 2nd Grt Aunt/Un | Three Gens Up |
| | | | | | | | Their kids, your 1C2R's | Two Gens Up |
| | | | | | | | Their grandkids, 2C1R's | One Gen Up |
| | | | | | | | Third cousins | Same Gen |

| Mother's Mother | Mother's Father | Father's Mother | Father's Father | Grand Parents |
|---|---|---|---|---|
| **Maternal Grandmother** | **Maternal Grandfather** | **Paternal Grandmother** | **Paternal Grandfather** | Two Gens Up |
| Her Sibs, your Great Aunts and Uncles | His Sibs, your Great Aunts and Uncles | Her Sibs, your Great Aunts and Uncles | His Sibs, your Great Aunts and Uncles | Two Gens Up |
| Their children; your 1C1R's | Their children; your 1C1R's | Their children; your 1C1R's | Their children; your 1C1R's | One Gen Up |
| Their grandchildren, your 2C's | Their grandchildren, your 2C's | Their grandchildren, your 2C's | Their grandchildren, your 2C's | Same Gen |

| Mother's Side | Father's Side | Parents |
|---|---|---|
| Mother | Father | One Gen Up |
| Mother's Sibs = Your Maternal Aunts and Uncles | Father's Sibs = Your Paternal Aunts and Uncles | One Gen Up |
| Maternal First Cousins | Paternal First Cousins | Same Gen |
| Children of Maternal First Cousins | Children of Paternal First Cousins | One Gen Down |

| Both Parents | |
|---|---|
| You and Your Siblings | Same Gen |
| Your Nieces and Nephews | One Gen Down |
| Your Grandchildren, Grand Nieces and Nephews | Two Gens Down |

# How to ID the MRCA of a DNA target match.

- Note which of your first cousins are on the target's match list. Your target match is on your Mom's side if **all** 1C's are maternal 1C's.
- Note which second cousins are on the target's match list. Your second cousins are children of your parent's first cousins. Your target match is on **Mom's** Mom's side if all your second cousin matches with your target are children of your mom's maternal 1C's.
- Repeat with each level of cousins—3rd, 4th and so on until the cousins of that level don't fall into one group.
- Your DNA target match belongs to the highest level group where all cousins are in one group at that level AND all cousins of the next higher level fall into two groups.
- All DNA matches in a group share a common ancestral couple (MRCA).

# What Can Go Wrong?

- Endogamy.  You share more than one relationship with target.
- “Half” Relationships.  Children from multiple marriages.
- Misattributed parentage—children from affairs, rape, incest, ‘open’ marriage.
- Adoption and other ‘official’ obfuscation.
- Inadequate or non-existent genealogical and DNA records to connect DNA matches.

# Cousin Matching Conclusions

- Only use cousins where you know the descent path up to your MRCA and down to your match (mine are marked with the tree icon).
- Work to define the whole pathway for each candidate.
- As you add known confirmed cousins your template becomes better.
- Be aware that as the cousin level goes up, the error chance goes up.
- There are strategies to reduce the chance of error.
- Beyond the 2nd cousin level, use those strategies.

# Strategies to Improve Accuracy.

- Ethnicity
- Triangulation—work with shared *identical* DNA segments.
- Geographic location/time line info
- Tools from multiple DNA sites.

# MyHeritage Tools: "cM Explainer" Applies Age Filter to Bettinger's Shared cM Project

MyHeritage | Home | Family tree | Discoveries | Photos | DNA | Research

## 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): 189
Your age: 73 (Optional)
Match's age: 55 (Optional)
Submit

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

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

**Possible relationships**

| Relationship | Probability | Most Recent Common Ancestor(s) |
|---|---|---|
| 2nd cousin's child | 42.2% | Great-grandparents |
| 2nd cousin | 27.3% | Great-grandparents |
| 3rd cousin | 13.6% | Great-great-grandparents |

# MyHeritage DNA Match Page Alana

David Duncan
This is you

alana [redacted]
Shared DNA: 2.7% (189.0 cM)
Contact

Shared DNA Matches
alana rankmore and you share the following 200 DNA Matches
Sort by

| Probable relationship to you | Shared match | Probable relationship to alana rankmore |
|---|---|---|
| Parent's 1st cousin | 4.7% (329.7 cM) / 1.0% (74.0 cM) Stanley [redacted] | Parent's 3rd cousin |
| 4th cousin | 0.7% (50.2 cM) / 3.9% (276.9 cM) Edward [redacted] | Parent's 1st cousin |
| 4th cousin | 0.7% (52.0 cM) / 3.6% (254.1 cM) Cheryl [redacted] | Parent's 1st cousin, 2nd cousin |
| 3rd cousin | 1.0% (69.5 cM) / 2.8% (201.6 cM) Brian [redacted] | Parent's 2nd cousin |
| 2nd cousin | 2.9% (202.3 cM) / 0.9% (66.5 cM) Kerry [redacted] | 3rd cousin |
| 2nd cousin's son | 2.5% (176.4 cM) / 1.2% (83.2 cM) James [redacted] | 3rd cousin |

Triangulation Indicator—Stanley, Alana, and I share identical DNA.

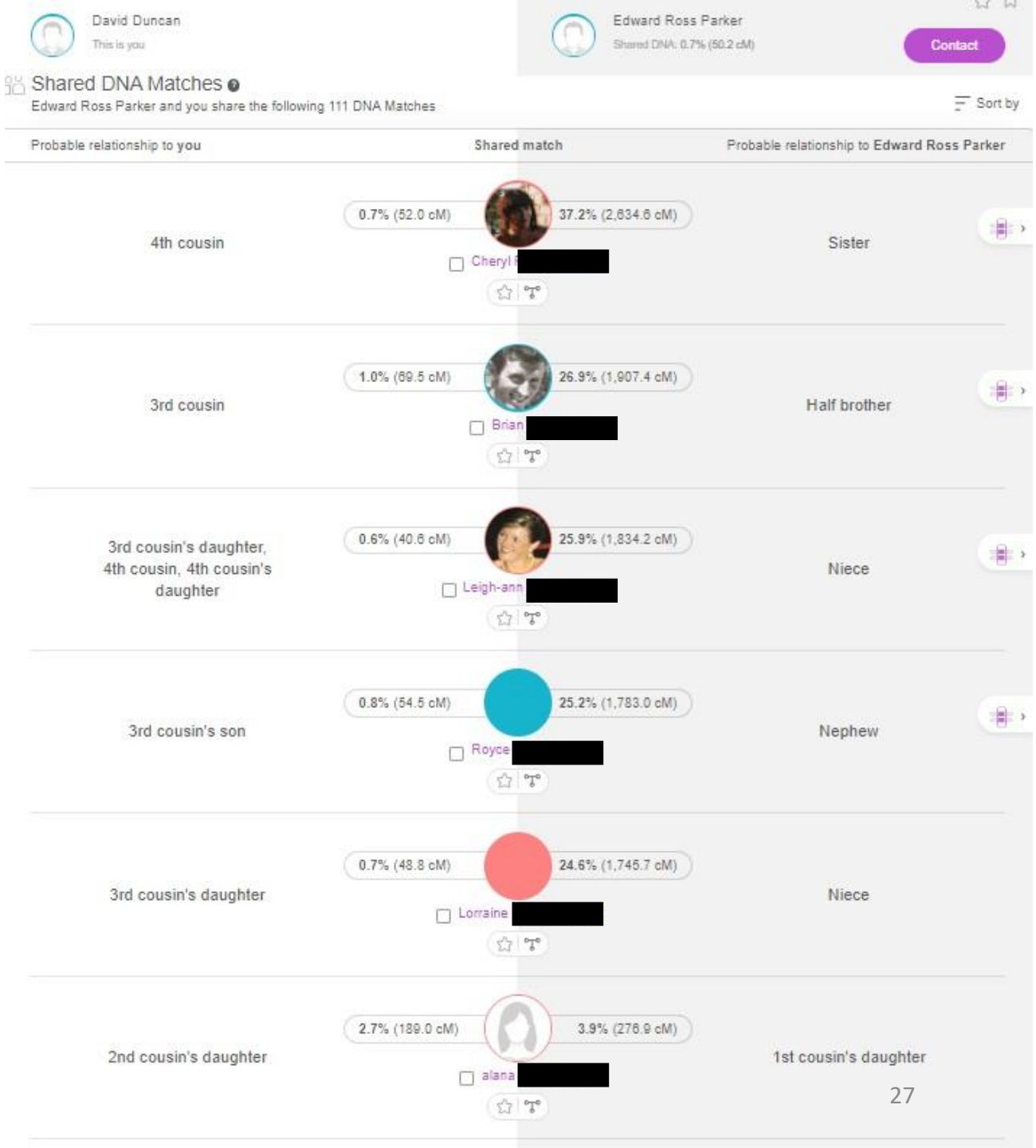
Column: Alana's Relationship to each DNA match in this column.

Triangulation indicator—Kerry, Alana, and I share identical DNA.

James, Alana, and I share identical DNA.

MyHeritage selection of DNA Match can simplify relationships of matches.

Ancestry does not show how your DNA matches are related to each other.

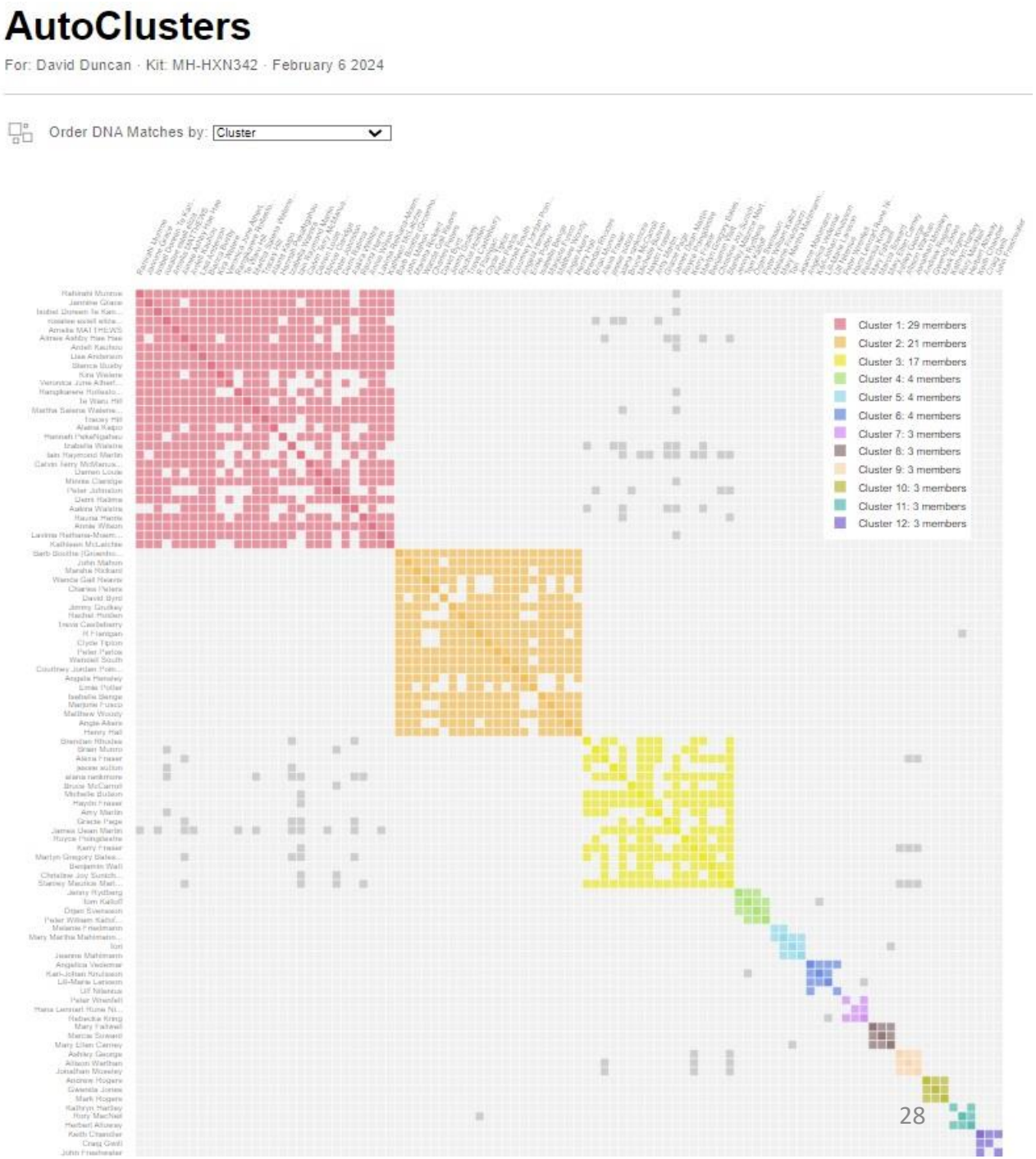


# MyHeritage AutoCluster Tool Kit MH-HXN342

This Tool groups your DNA matches by relationship to each other. Each group shares a common ancestor.

Each person in a group shares DNA with you and at least one other person in the same group.

I have two DNA kits at MyHeritage so I have two AutoCluster graphs. They are not the same.



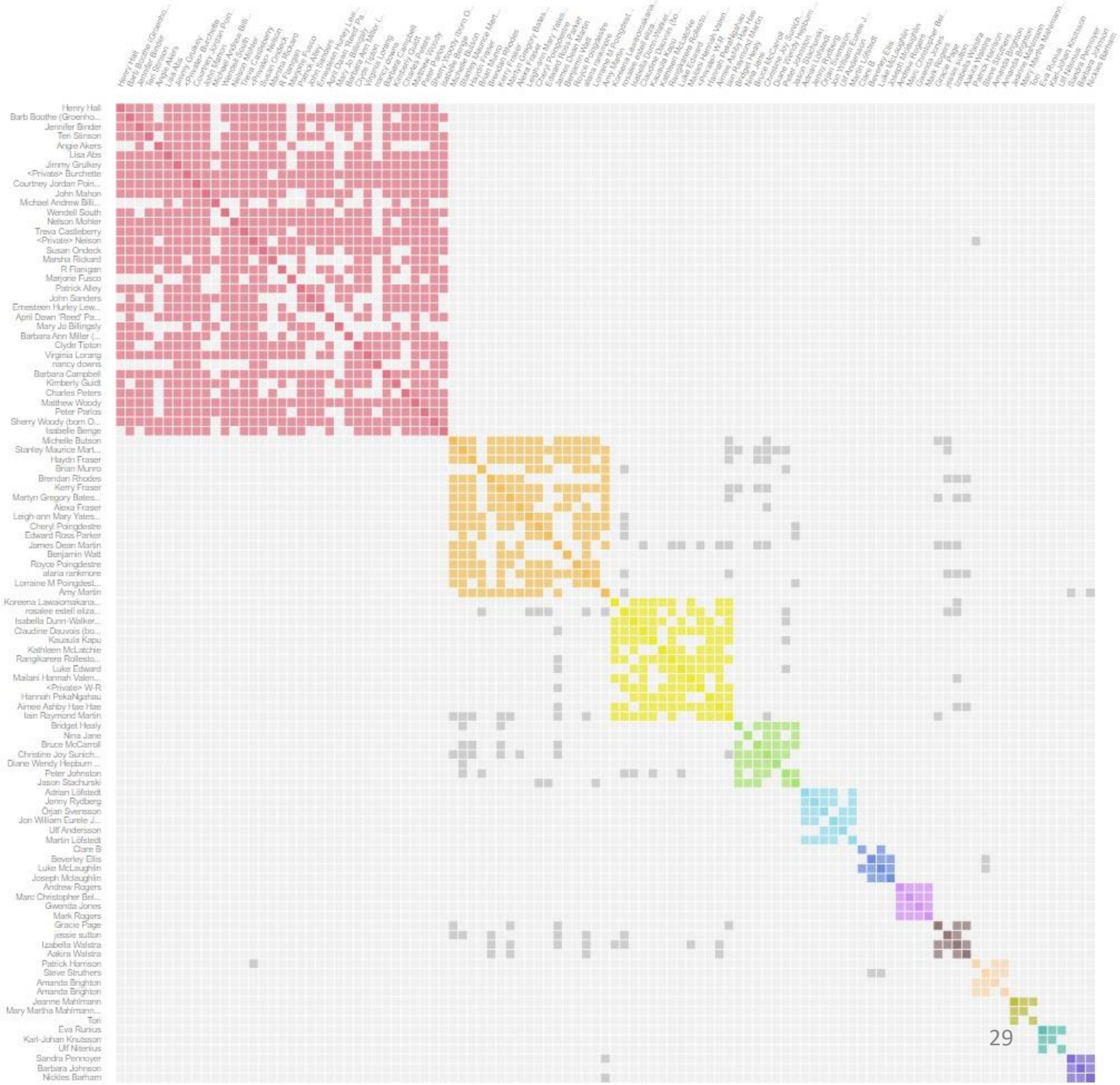
# MyHeritage AutoCluster Tool Kit 23-DA1268

You would research all the members of a group together. MyHeritage is telling you that everyone in each colored group shares a common ancestor.

The grey squares indicate a person DNA matches someone else in a different colored group.

To facilitate, a link for each person is provided (not shown but handy).

People who DNA match you but don’t DNA match anyone else are listed in report but not graphed.



# MyHeritage Chromosome Browser

The Chromosome Browser shows the gene segments you match with your target. In this case the target is Alana.

Up to 7 peoples' chromosomes can be compared at one time.

# MyHeritage Chromosome Browser Tool “One to Many”.

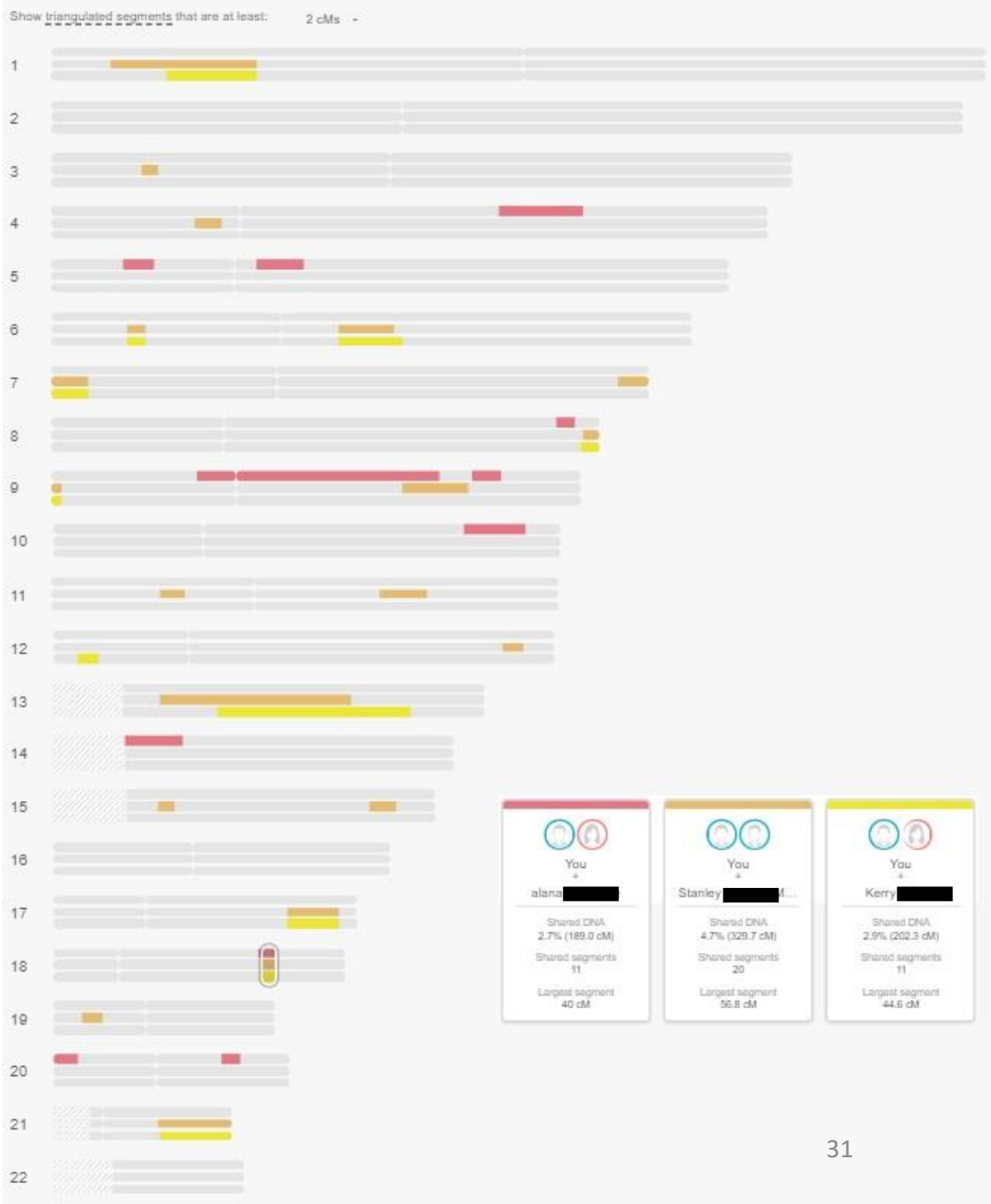
This tool allows you to compare DNA of up to 7 people on one screen. Shared identical segments of DNA are marked.

In this example, the DNA of Alana, Stanley, Kerry, and I are being compared.

The more people compared, the smaller any shared identical DNA segments will be.

Kerry shares much more DNA with Stanley than with Alana, indicating they are more closely related.

Identical DNA Segment on Chromosome 18—David, Alana, Stanley, Kerry share this DNA segment.

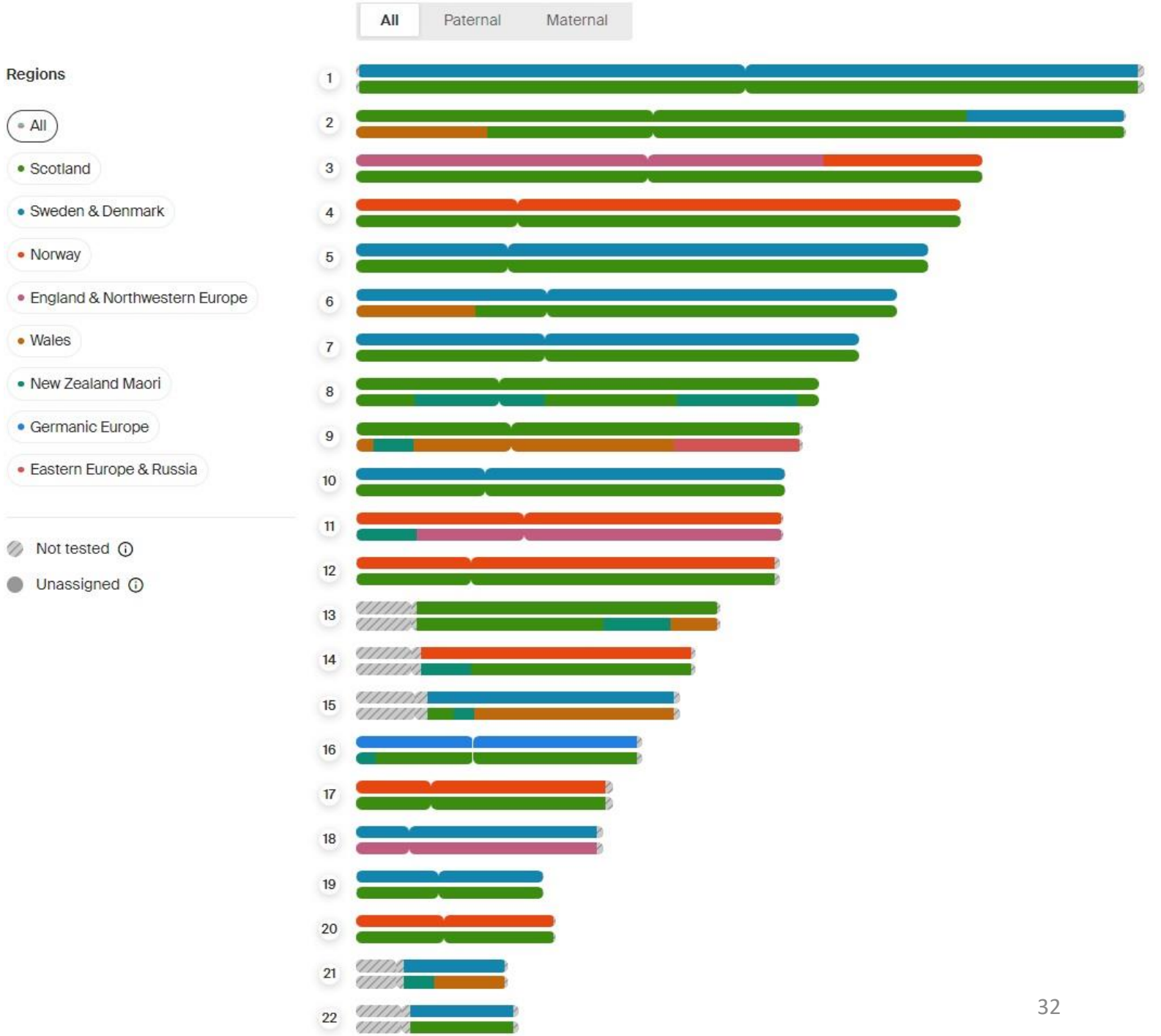


# Ancestry's Chromo Painter—Dave's

Shows genetic location of your ethnicity.

Can screen by ethnicity.

Can combine with MyHeritage Chromosome Browser to predict if a research target has 'marker' ethnicity(ies).



# Dave’s Ethnicity By Parent

Ethnicities on Mom’s side that aren’t on Dad’s side:
Wales, Maori, Russia/East Europe.

Ethnicities on Dad’s side that aren’t on Mom’s side:
Sweden, Norway, Germanic Europe.

**Detailed comparison** Share Edit parent labels

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 | Paternal | Maternal | You |
|---|---|---|---|
| **Total: 8** | **50%** | **50%** | **100%** |
| **Scotland** | 9% | 37% | 46% |
| **Sweden & Denmark** | 23% | 0% | 23% |
| **Norway** | 14% | 0% | 14% |
| **England & Northwestern Europe** | 2% | 4% | 6% |
| **Wales** | 0% | 5% | 5% |
| **New Zealand Maori** | 0% | 3% | 3% |
| **Germanic Europe** | 2% | 0% | 2% |
| **Eastern Europe & Russia** | 0% | 1% | 1% |

# Ancestry's Ethnicity Comparison Tool

Ethnicity estimates | DNA communities

Compare your ethnicities with family and friends. Learn more

| Ethnicity regions 11 | David [redacted] | KD Kathryn [redacted] | Mary [redacted] | BZ B.Z. | GC Gregory [redacted] |
|---|---|---|---|---|---|
| Scotland | 46% | 33% | 2% | 11% | 4% |
| Sweden & Denmark | 23% | 31% | 30% | 9% | 33% |
| Norway | 14% | 10% | 11% | 11% | 16% |
| England & Northwestern Europe | 6% | 11% | 19% | 12% | 29% |
| Wales | 5% | 11% | 0% | 2% | 0% |
| New Zealand Maori | 3% | 3% | 0% | 0% | 0% |
| Germanic Europe | 2% | 0% | 38% | 51% | 3% |
| Eastern Europe & Russia | 1% | 0% | 0% | 0% | 0% |
| Hawaii | 0% | 1% | 0% | 0% | 0% |
| France | 0% | 0% | 0% | 4% | 0% |
| Ireland | 0% | 0% | 0% | 0% | 15% |

# Notes on previous slide.

- All five people in chart share one set of grandparents. David and Kathryn's dad, Mary and B.Z.'s mom, and Greg's mom are siblings with same parents.
- David and Kathryn are siblings with same parents, but their ethnicity estimates are quite different.
- Mary and B.Z. are siblings with same parents and are first cousins to David and Kathryn. Their ethnicity estimates are quite different.
- Greg is a first cousin to the other four.

# Dave's Scotch Ancestry—On Both Sides. Probably too much Scotch.

Inherited from both sides so uncertainty as to where 'Scotch' comes from in target match.

Common in New Zealand so introduced into the descent line through marriage, possibly at multiple generations.

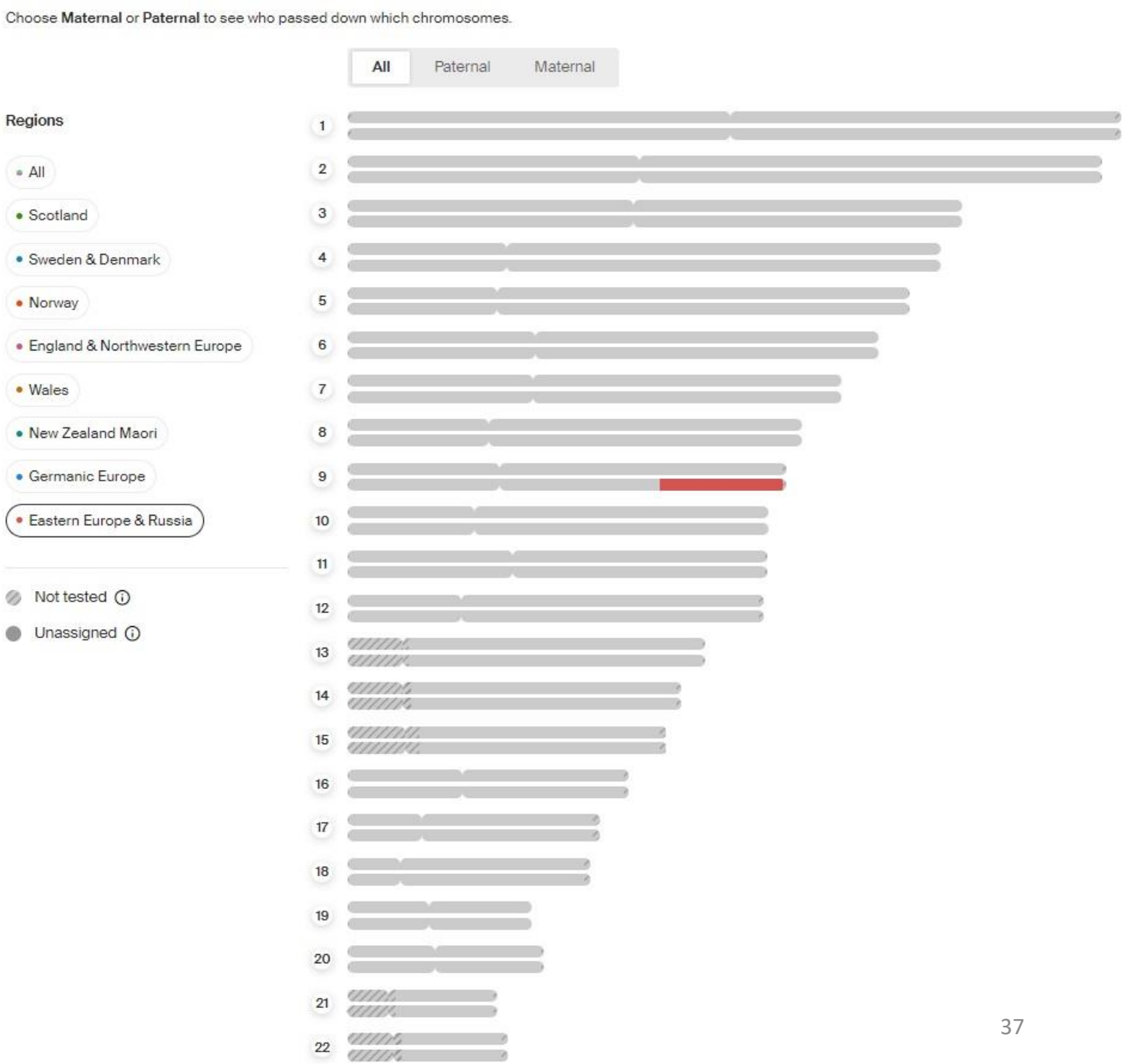
This is where identical DNA segments are better.

# Dave's Russian East European Ancestry

This ethnicity could be useful BECAUSE:

Only one known direct line ancestor has this ethnicity.

This ethnicity is uncommon in New Zealand—so unlikely to be introduced into the descent line through marriage.



# Dave's Maori Ancestry.

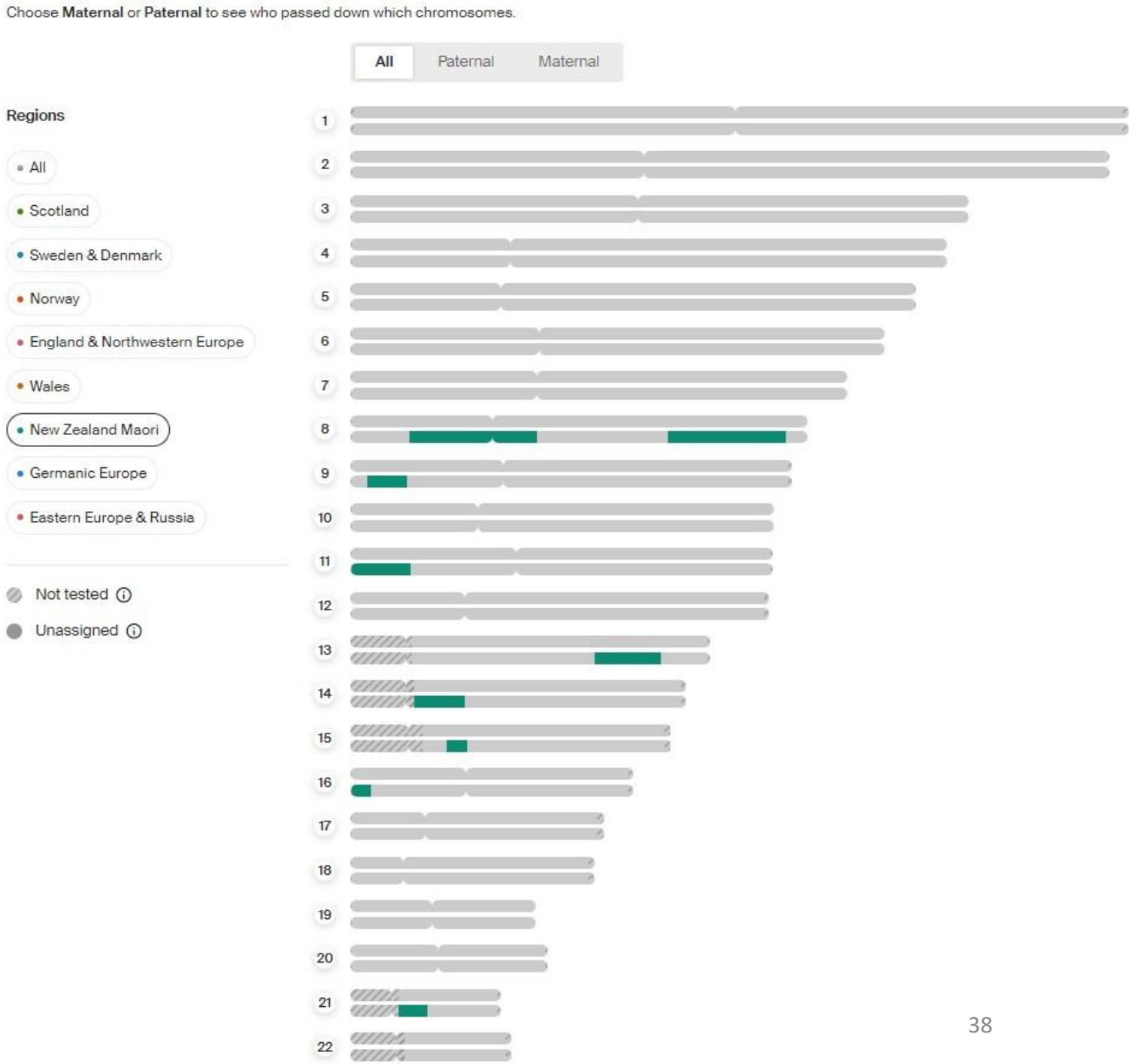
Can be useful because:

Only one known Maori ancestor, a 3rd Great Grand Parent.

This would give me 1/32nd Maori. This is my test result.*

English/Maori families followed requirements for English birth/marriage/death registration. A paper trail.

*Pacific Islander DNA at 99% accuracy threshold.



# Ethnic Descendancy Markers

| Evans = Johnston<br>Mom's Mom's Mom | King = Martin<br>Mom's Mom's Dad | Ross = Sutherland<br>Mom's Dad's Mom | Smith = Siddells<br>Mom's Dad's Dad | Fagerberg = Jonsson<br>Dad's Mom's Mom | Jonsdotter = Nilsson<br>Dad's Mom's Dad | Diringer = Allgeyer<br>Dad's Dad's Mom | Zimmerman = Duncan<br>Dad's Dad's Dad | Couple Surnames<br>Great Grands |
|---|---|---|---|---|---|---|---|---|
| Russian/East Europe<br>Welsh | Maori 1/4th | | | Sweden<br>Norway | Sweden<br>Norway | Germanic Europe | Germanic Europe | |

| Maternal Grandmother Johnston = Martin<br>Mom's Mom | Maternal Grandfather Sutherland = Siddells<br>Mom's Dad | Paternal Grandmother Pehrsdotter = Lundin<br>Dad's Mom | Paternal Grandfather Allgeyer = Duncan<br>Dad's Dad | Couple Surnames<br>Grand Parents |
|---|---|---|---|---|
| Russian/East Europe<br>Welsh<br>Maori 1/8th | | Sweden<br>Norway | Germanic Europe | |

| Mother's Side Martin = Siddells | Father's Side Lundin = Duncan | Surnames |
|---|---|---|
| Russian/East Europe<br>Welsh<br>Maori 1/16th | Sweden<br>Norway<br>Germanic Europe | |

| Both Parents Siddells = Duncan | |
|---|---|
| Russian/East Europe<br>Welsh<br>Maori 1/32nd<br>Sweden<br>Norway<br>Germanic Europe | |

# Ethnic Marker Recap

- Use ethnicities that are on one side of your tree.
- Favor use ethnicities that are uncommon in population.
- Favor use of ethnicities that have a unique descent path.
- Verify ethnic composition of known cousins—Ancestry’s ethnic comparison tool.
- Regard ethnic results with skepticism.  A guide, not fact, but better than nothing.

# Example of Ethnicity's Use to Parse Matches

- South India is an extremely uncommon ethnicity in New Zealand.
- My great uncle married a woman of South Indian descent.
- She was 1/2 South Indian.
- Her South Indian genes "mark" all her descendants.

# ← DNA compare

DNA compare for David Du...

Ethnicity estimates | DNA communities

Compare your ethnicities with family and friends. Learn more

| Ethnicity regions 15 | David [redacted] | K[redacted] | Anastasia [redacted] | Janice [redacted] | RG Ross [redacted] | Hayden [redacted] | HANA-LEIGH [redacted] |
|---|---|---|---|---|---|---|---|
| Scotland | 46% | 26% | 61% | 12% | 19% | 22% | 22% |
| Sweden & Denmark | 23% | 4% | 0% | 9% | 0% | 1% | 0% |
| Norway | 14% | 2% | 3% | 4% | 0% | 1% | 0% |
| England & Northwestern Europe | 6% | 20% | 15% | 49% | 52% | 7% | 18% |
| Wales | 5% | 1% | 1% | 5% | 3% | 3% | 1% |
| New Zealand Maori | 3% | 29% | 2% | 1% | 1% | 42% | 42% |
| Germanic Europe | 2% | 0% | 8% | 0% | 0% | 0% | 0% |
| Eastern Europe & Russia | 1% | 1% | 0% | 0% | 2% | 0% | 1% |
| Ireland | 0% | 7% | 7% | 10% | 16% | 12% | 0% |
| Southern India | 0% | 6% | 3% | 9% | 6% | 3% | 2% |
| Hawaii | 0% | 4% | 0% | 0% | 0% | 9% | 13% |

# Relationships in previous table.

- All have South Indian Ancestry (except me).
- K's great grandmother is 50% South Indian.
- K is my 2C1R.  His test shows 6%.
- Hana Leigh is K's daughter.  Her test shows 2%.
- Hayden is K's nephew.  His test shows 3%.
- Hana Leigh and Hayden are first cousins.
- Anastasia (3%), Ross (6%), Janice (9%) are new-to-me DNA matches.  Where do they fit?

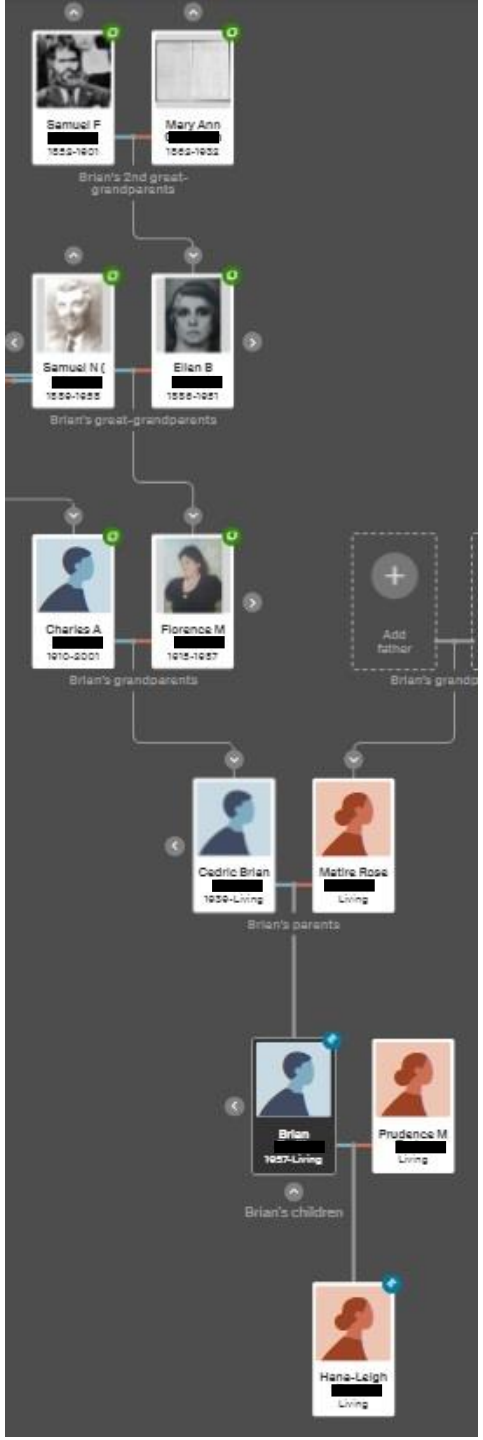
# Ethnicity ‘Flag’= South Indian

South India ‘Flag’ indicates new DNA matches Janice and Ross relate to me like K--2C1R. Anastasia relates to me the same as Hana-Leigh and Hayden—2C2R.

Not proven but probable.

Needs corroboration from traditional research. But ethnicity gives us a good idea how these people relate.

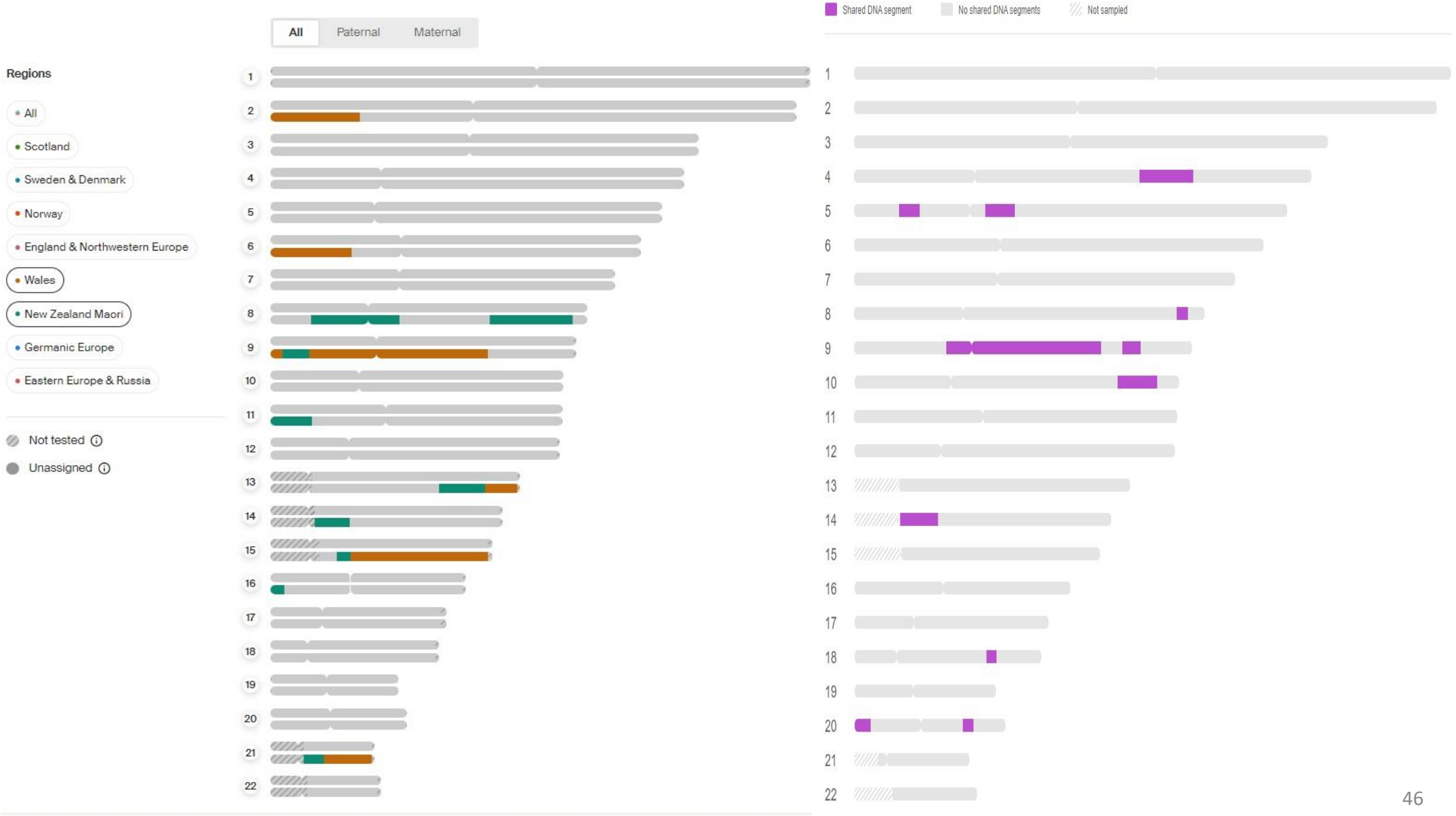
| | |
|---|---|
| Samuel T. | 100% |
| Ellen | 50% |
| Florence | 25% |
| Cedric | 12.5% |
| Brian | 6.25% |
| Hana-Leigh | 2% |
| Hayden | 3% |



# Combining Ancestry's Chromosome Painter with MyHeritage's Chromosome Browser.

- Ancestry's Chromosome Painter colors your genes by ethnicity.
- MyHeritage's Chromosome Browser marks gene segments you share with a target.
- By combining this information you can predict if a target has specific ethnicities.
- Both companies could do this for you, but it looks like they have a "Gentleman's Agreement" to not directly compete.
- The limitation is that your target must have tested on MyHeritage and you must have tested on Ancestry.

# Alana’s DNA match to Dave Aligns With His Welsh and Maori.



- Combining these two tools can suggest research ideas and, if unusual ethnicities are involved, flag relationships.

# Conclusions

- The DNA common match list you share with a DNA target match tells how you are related to that DNA target match. See excel attachment for template.
- By grouping your known and verified cousins by MRCA you create a tool (Cousin Template) that helps locate DNA matches by MRCA.
- Uploading your Ancestry or other DNA test to MyHeritage gives you more matches, more Family Tree info, and more DNA tools.
- Ethnicity *can* be a useful marker for tracking descendants through generations. Use carefully.

- This is an abbreviation of a presentation given 13 Feb 2024 to the Ancestry Detectives group of Silverton, Oregon.