MyHeritage DNA

Endogamy Example as an Exercise in learning to use MyHeritage
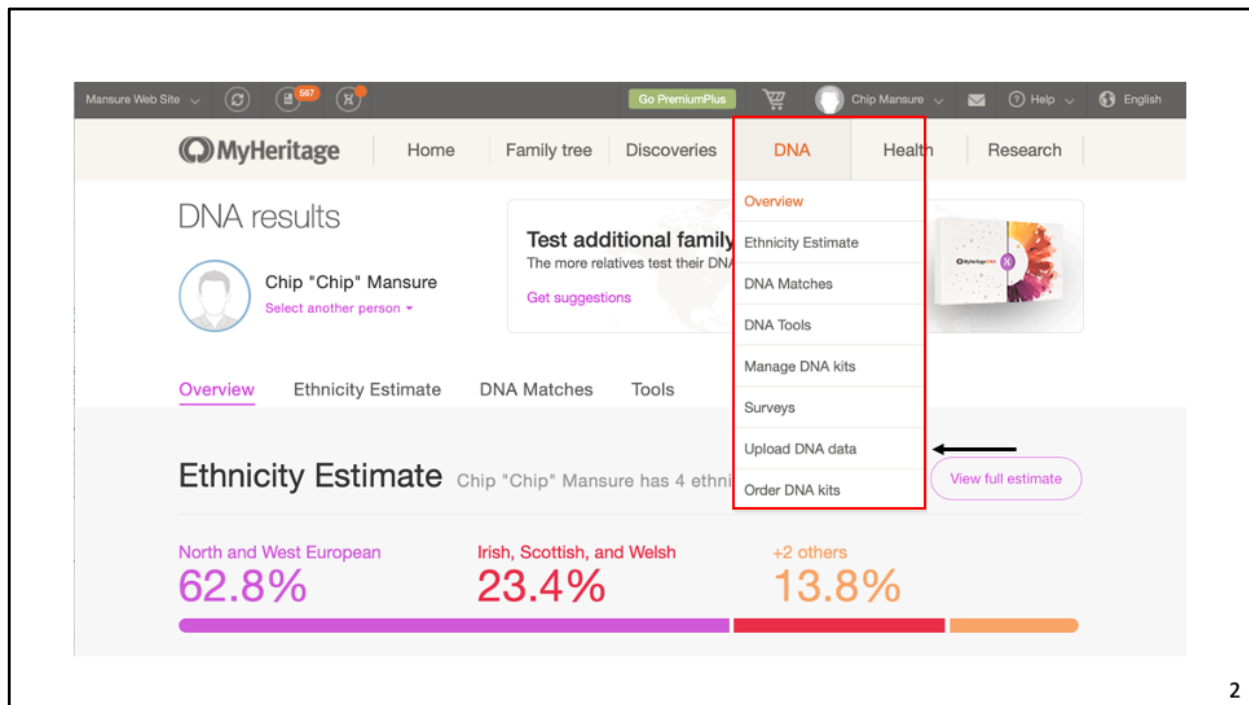
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My goal today is to introduce you to what you can do at MyHeritage DNA.

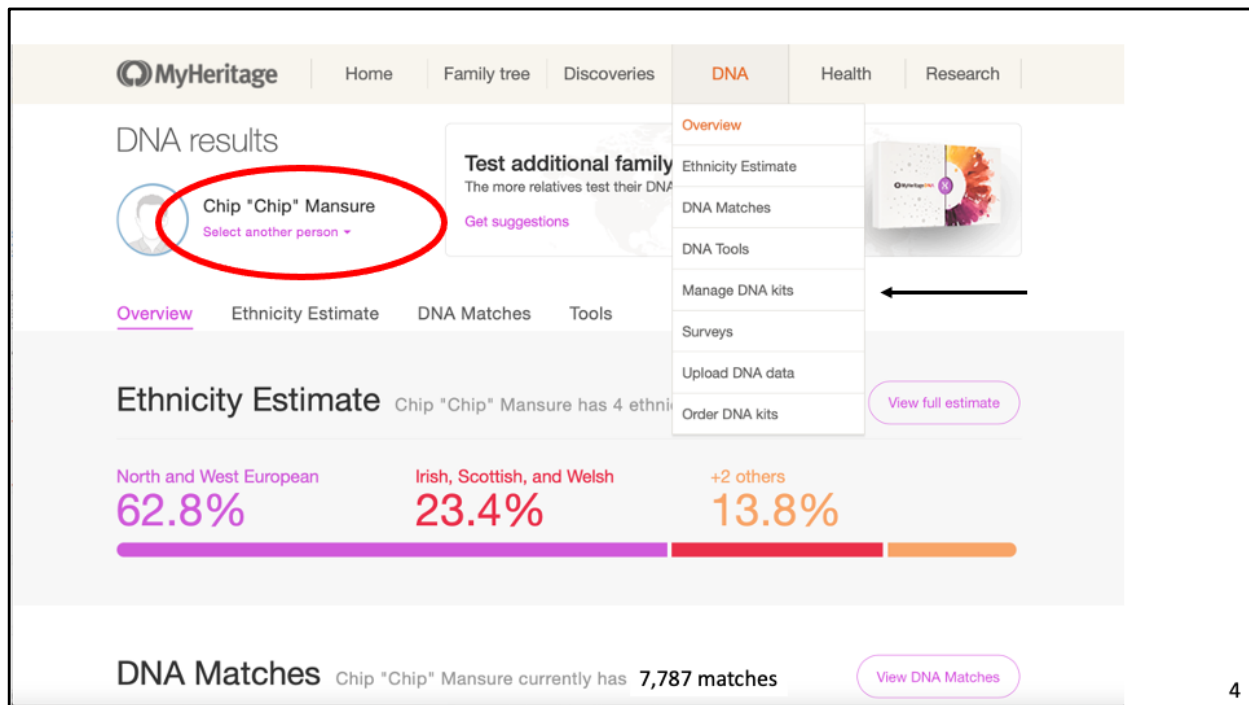I have an example that you may find interesting.

My VU-graphs will be available.

Hover over DNA in top menu bar and you see this dropdown. Next to the bottom you see where your can upload to MyHeritage your DNA data from other sites.

	Limited family tree	Enhanced family tree		Access to all historical records	The ultimate package
	Basic	Premium	PremiumPlus	Data	Complete
	Free	$129/year 1st year: $89	$209/year 1st year: $149	$189/year 1st year: $129	$299/year 1st year: $199
Family tree size ?	250 people	2,500 people	Unlimited	250 people	Unlimited
Priority customer support ?	–	✓	✓	✓	✓
Smart Matches™ ?	–	✓	✓	–	✓
Advanced DNA features ?	–	✓	✓	–	✓
Instant Discoveries™ ?	–	–	✓	–	✓
Tree Consistency Checker ?	–	–	✓	–	✓
12.5 billion historical records ?	–	–	–	✓	✓
Record Matches ?	–	–	–	✓	✓
Save records to your tree ?	–	–	–	✓	✓
		Learn more	Learn more	Learn more	Learn more

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However, to use uploaded data to find matches you need a subscription.
Subscriptions start at $129/year.

You can manage multiple DNA kits through a single login.

The black arrow shows where to go to assign a DNA kit to a particular person in your tree.

The red oval is where you choose which person's DNA you want to examine.
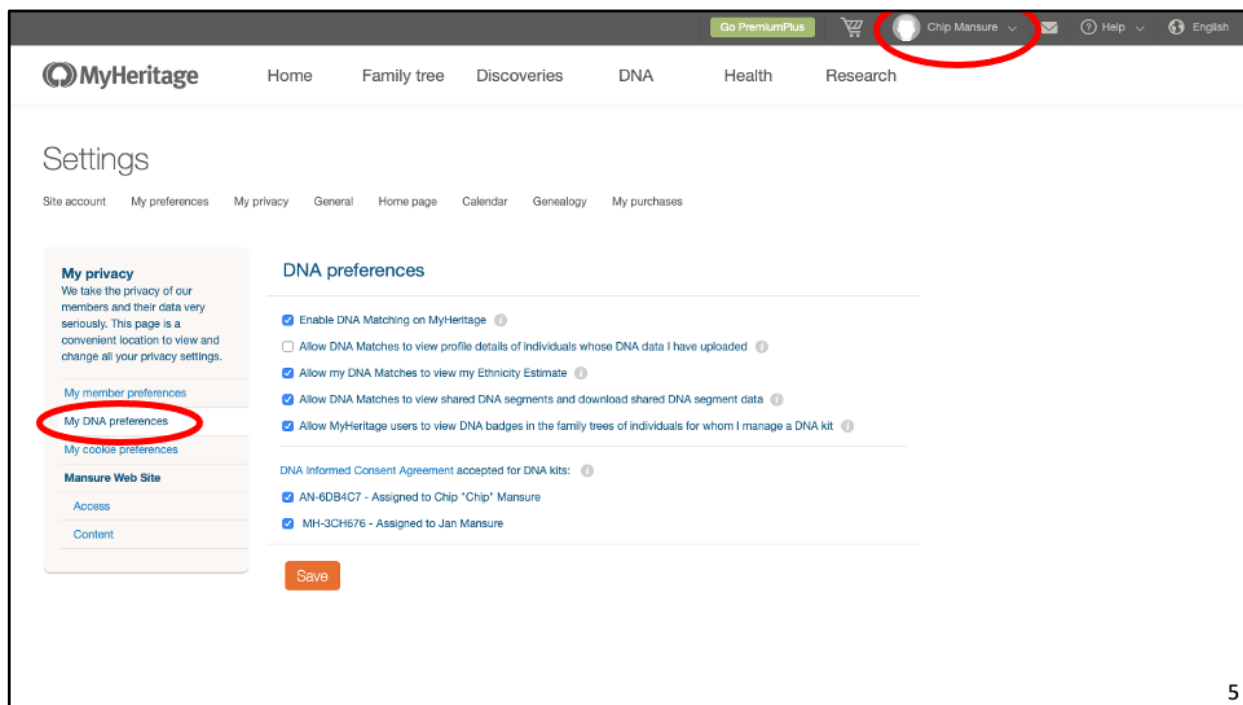
Dropping down on your name at the top allows you to navigate through Settings to My Privacy and My DNA Preferences.

The default settings should allow you to share your DNA with matches.

[A DNA badge is the symbol on your tree of people you have linked to a DNA kit.]

Choosing DNA matches from the DNA dropdown brings you to this page.

MyHeritage tells you if your match has a tree if there are common surnames and places. I've marked these with the black arrows.

An important feature is the note icon.   On this page the note icons are pink because I have already saved notes. If you have not saved a note, the icon is gray.

Notes

3C1R. In my tree. In DNA Painter. 10/15/20

Sarah "Jennie" was the sister of John Abner. John Abner was my Great-Great Grandfather. Small world! Cindy

Close   Save notes
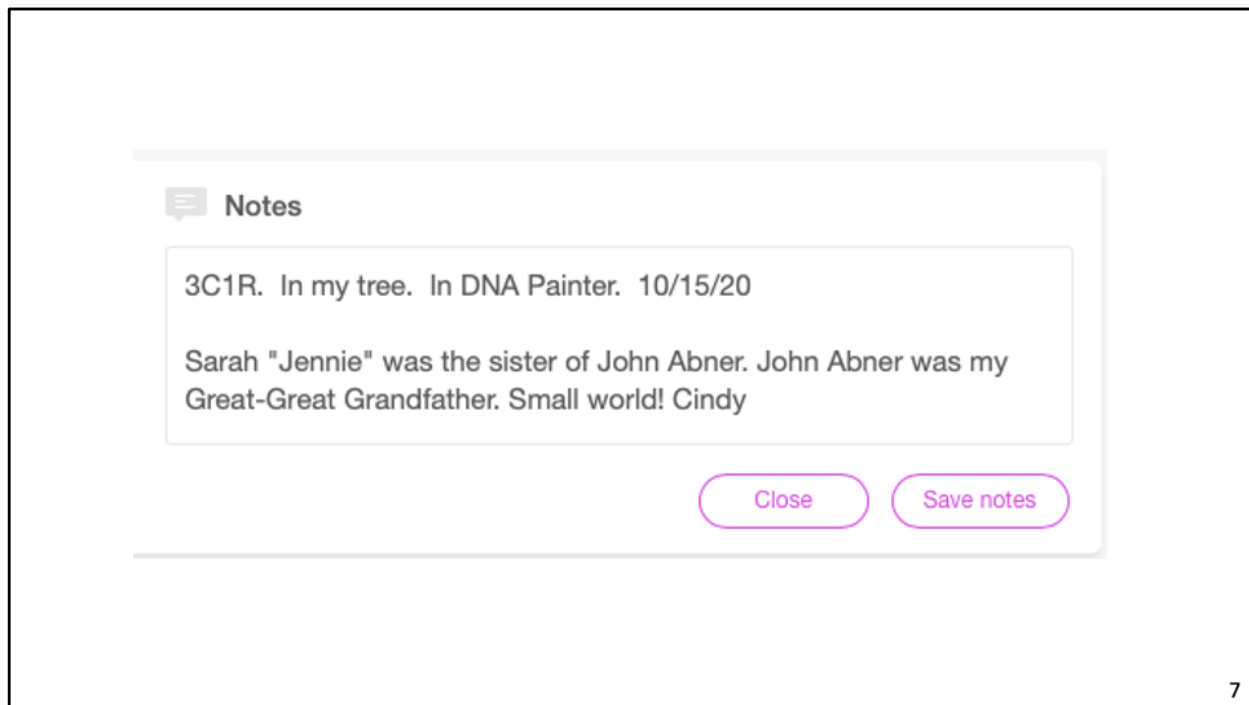
Clicking on the note icon brings up this dialogue where you can record your progress and other useful information.

For this match there was no tree, but I received a reply allowing me to determine our MRCA and relationship. I'll had copied my message to Cindy here and then replaced it with Cindy's reply.

I add the date of my most recent update.

The information here helps to keep me from repeating the same research and provides guidance for branching out to other shared matches.
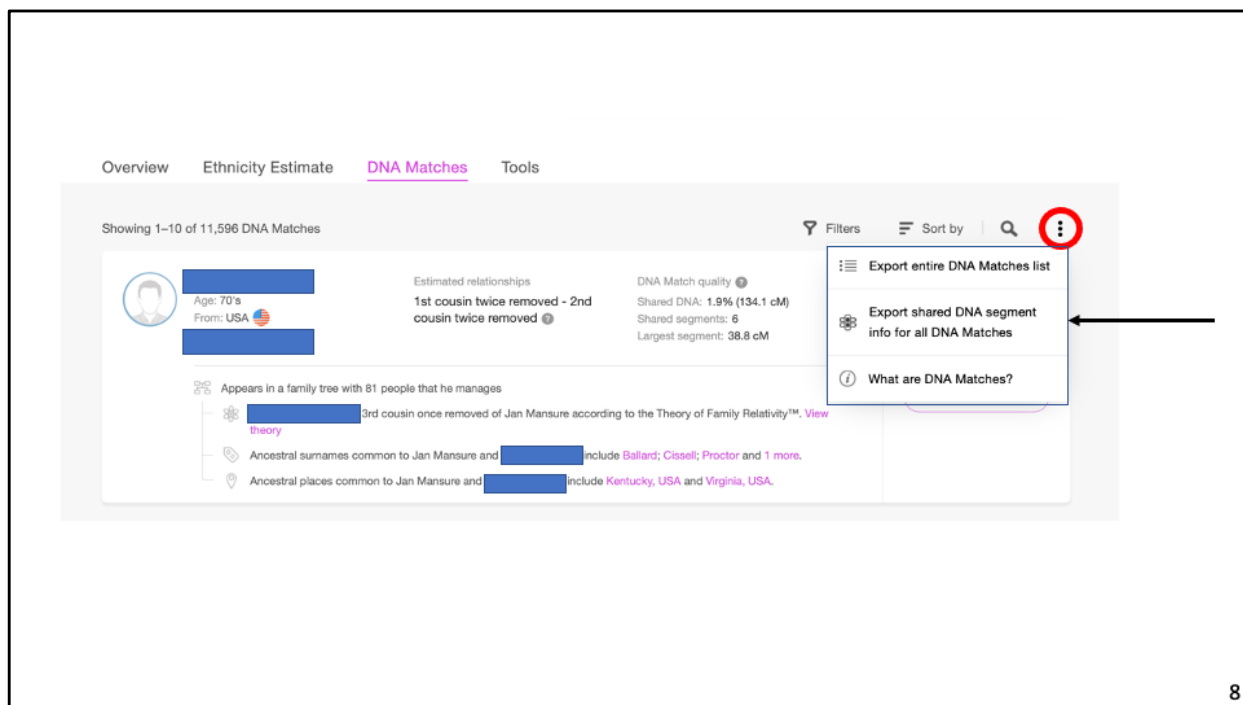
Above your first DNA match, to the right of where you see icons for Filters, Sort By, and Search are 3 dots – the red circle.

I have clicked on these dots bringing up this dialogue where you find links to
Export your entire DNA match list and
Export shared DNA segment data for all your matches.

Similarly, 3 dots on your Manage DNA Kits page pops up a dialogue for downloading your raw DNA data. By downloading your raw DNA you can transfer it to GEDmatch or FTDNA.

Answers to questions like where do I go to download my raw DNA data can be found by Googling.
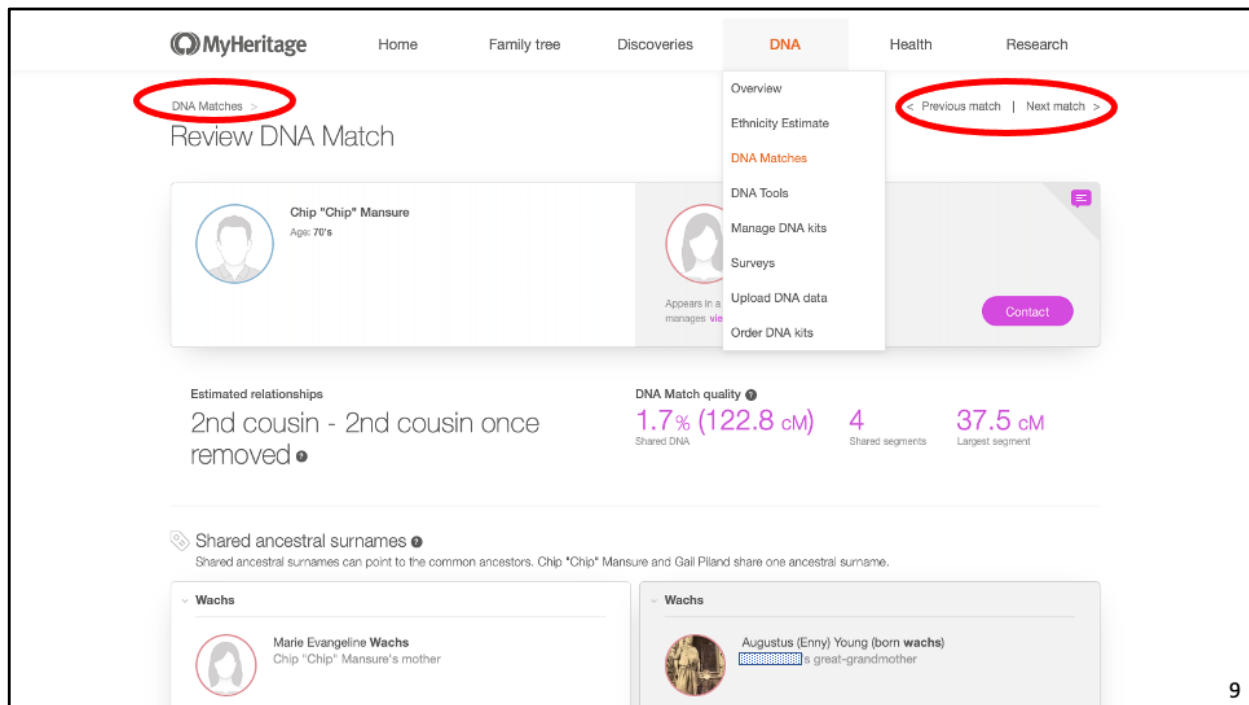
There are times when you want to go back to your pervious match or your list of matches.

Rather than starting over with the DNA drop down, there are links at the top of the page which will take you directly there.

These links are particularly helpful of you are managing more than one kit.
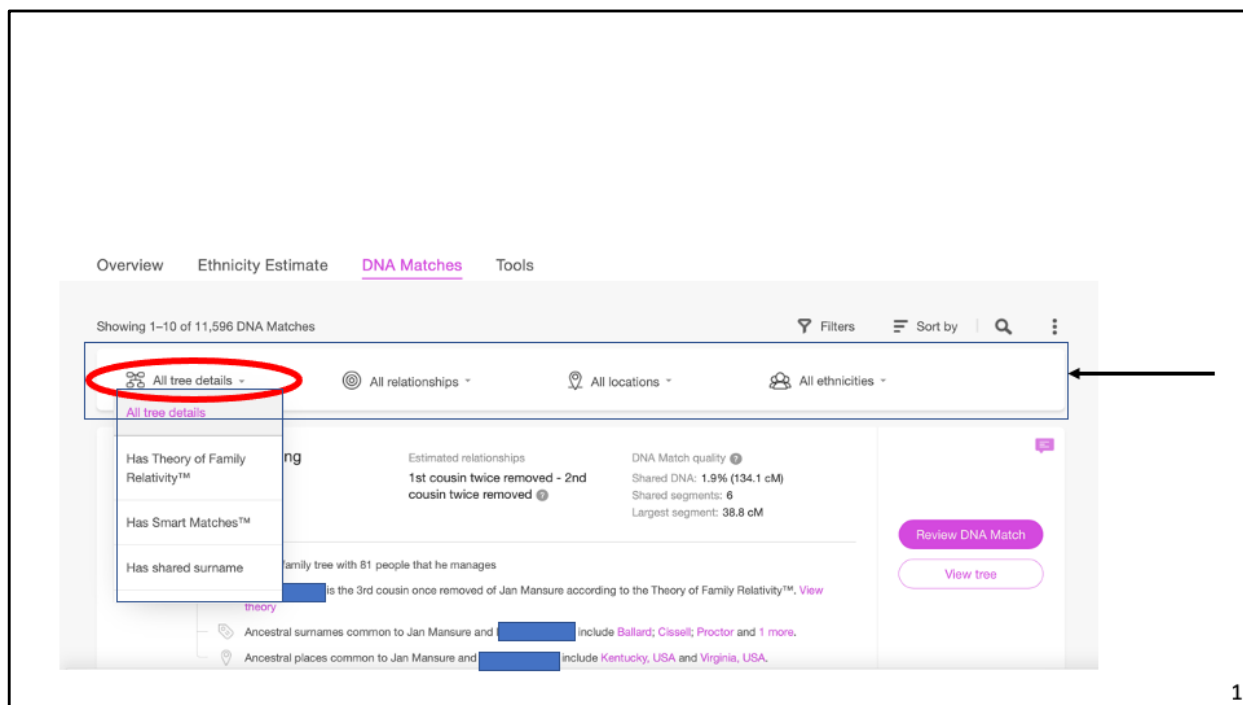
Clicking on filters above your top DNA match opens up your filter options.

I have also clicked on the far-left option:
All tree details to display the filtering options:
Has Theory of Family Relativity,
Has Smart Matches, and
Has shared surname.

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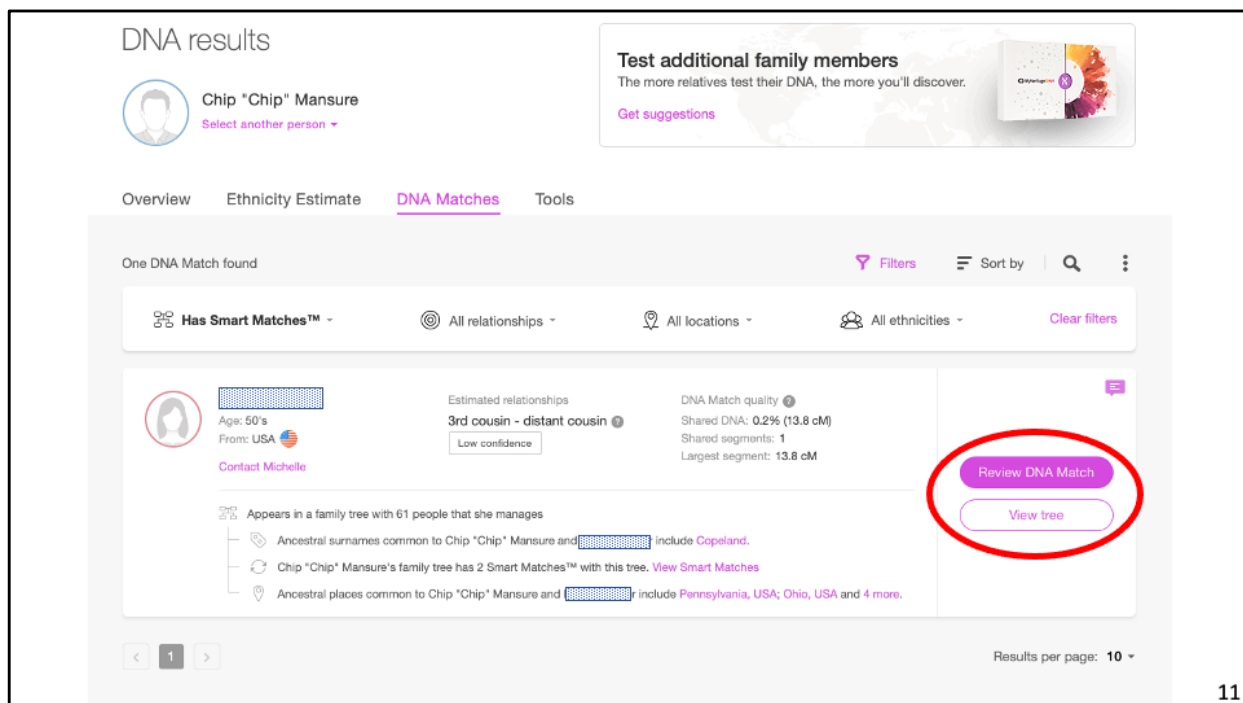
Choosing Smart Matches (if you have any) is a good place to start since you want to focus on DNA matches with paper trails to your MRCA.

From your smart match you have two basic choices: Review DNA Match and View Tree.

I like the Review DNA Match because it includes the tree and more.
The Review DNA Match page includes information on your match, shared surnames, shared places, shared DNA matches, your matches' tree, shared ethnicities, and a chromosome browser.

All too much to display with a few screen shots or discuss today.
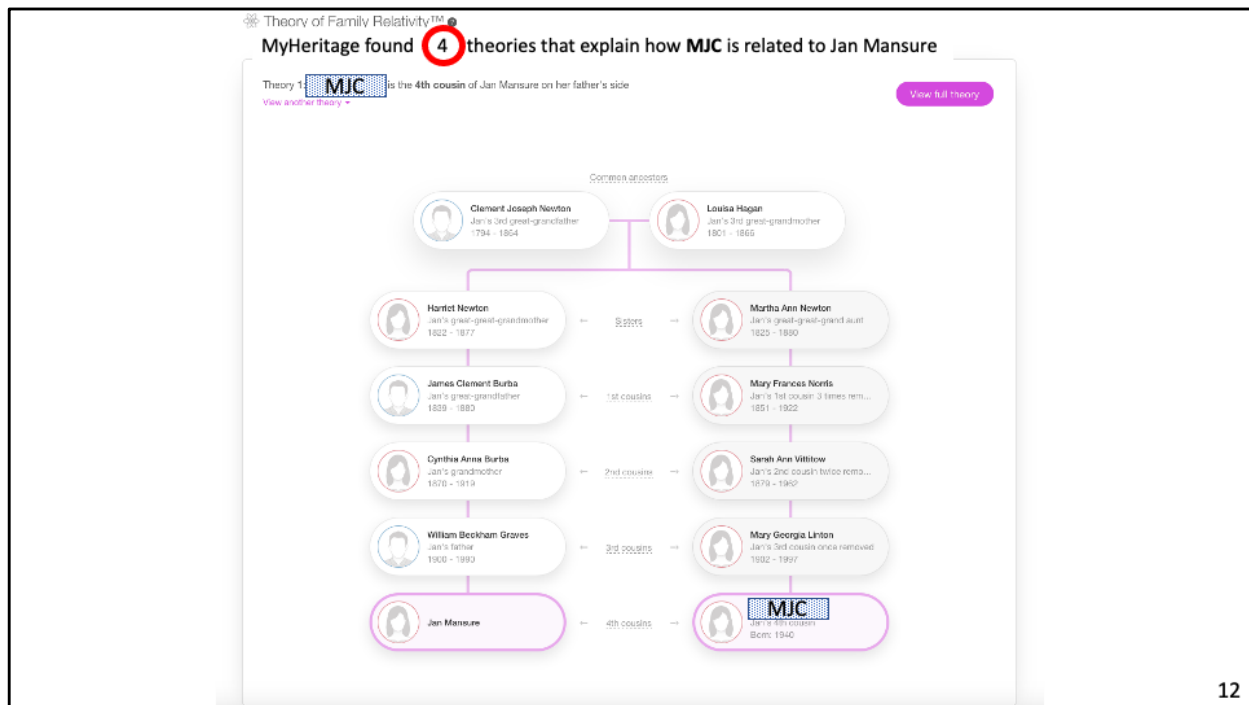
Sometimes when you click on Review DNA Match, MyHeritage provides you with a theory of how you are related to your match. If you want to focus on matches that have theories, you can filter to see only matches with theories.

A theory may be supported by multiple evidence paths from you to your match. For this particular match, MyHeritage says there are 4 theories – the red circle. That is MyHeritage hypothesizes 4 different MRCA. However examining the theories I discovered there are only 3 sets of MRCA. Two of them are the same couple with name variations. It is important to check out the theories carefully verifying each step. My heritage builds theories using member trees on MyHeritage, FamilySearch, and Wiki trees. I have found theories totally wrong due to starting with bad information. You have the best chance of having good theories when your tree on MyHeritage includes the MRCA and children.

When there are multiple theories you may inherit DNA from more than one set of MRCA, The MCRA for which you inherit DNA may be none of those theorized by MyHeritage.

The first of MyHeritage's theories is that my wife and **MJC** have MRCA Clement

Newton & Louisa Hagan.

Endogamy

- The practice of marrying within the same ethnic, cultural, social, religious or tribal group. Endogamy can cause relatives to share more DNA than expected given the relationship.

Pedigree collapse

- …reproduction between two individuals who knowingly or unknowingly share an ancestor causes the family tree of their offspring to be smaller than it would otherwise be.
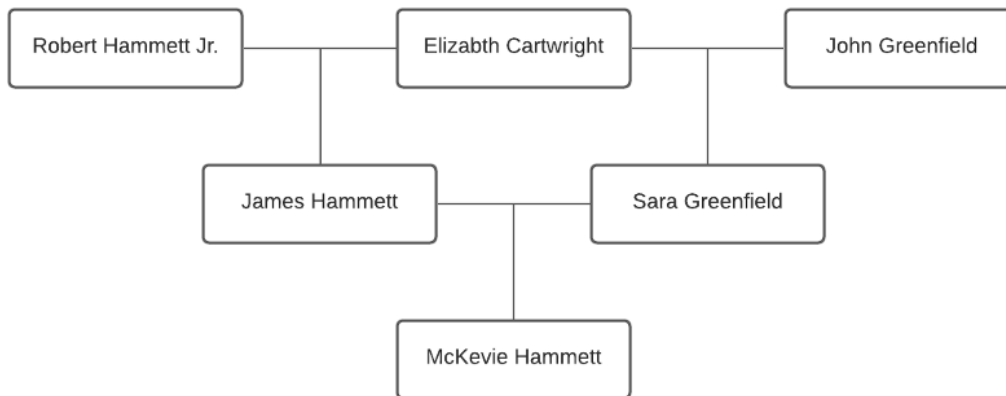
Homozgyosity

- … where an individual inherits identical forms of a particular gene from each parent.

ISOGG Wiki

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How can my wife have 3 potential MRCAs with this match? Endogamy.

Endogamy, Pedigree collapse, & Homozgyosity Example

For example, up the lines from my wife and **MJC,** James Hammett married his half-sister Sara Greenfield.

Thus, McKevie has 3 not 4 grandparents and would be expected to inherit about 50% of his DNA from Elizabeth not about 25%. Thus McKevie is an example of endogamy, pedigree collapse and probably homozgyosity.

Why would I want to sort out such messy DNA inheritance? The ancestry tree handed down by my wife's family has her great-great-grandfather born before his parents. To find the right 4th cousins to solve this mystery, we need start parsing her father's family. To do that we need to examine DNA at the segment level.

To work at the segment level MyHeritage is a great resource since it provides you segment data, matches trees, and MRCA theories.

That's my plug for My Heritage.

Scrolling down from the theory through **MJC's** information you come to Shared DNA Matches.

All the people listed vertically down the page share DNA with both my wife and **MJC**.

The symbol to the right – red circle -- of **DR** tell us that my wife, **MJC**, and **DR** have a segment of DNA that triangulates. I say triangulate because both **MJC** and **DR** are on my wife's mother's side.

DR is a known 4C whose paper trail to Jan I have checked out.

Clicking on the icon brings up a chromosome browser.

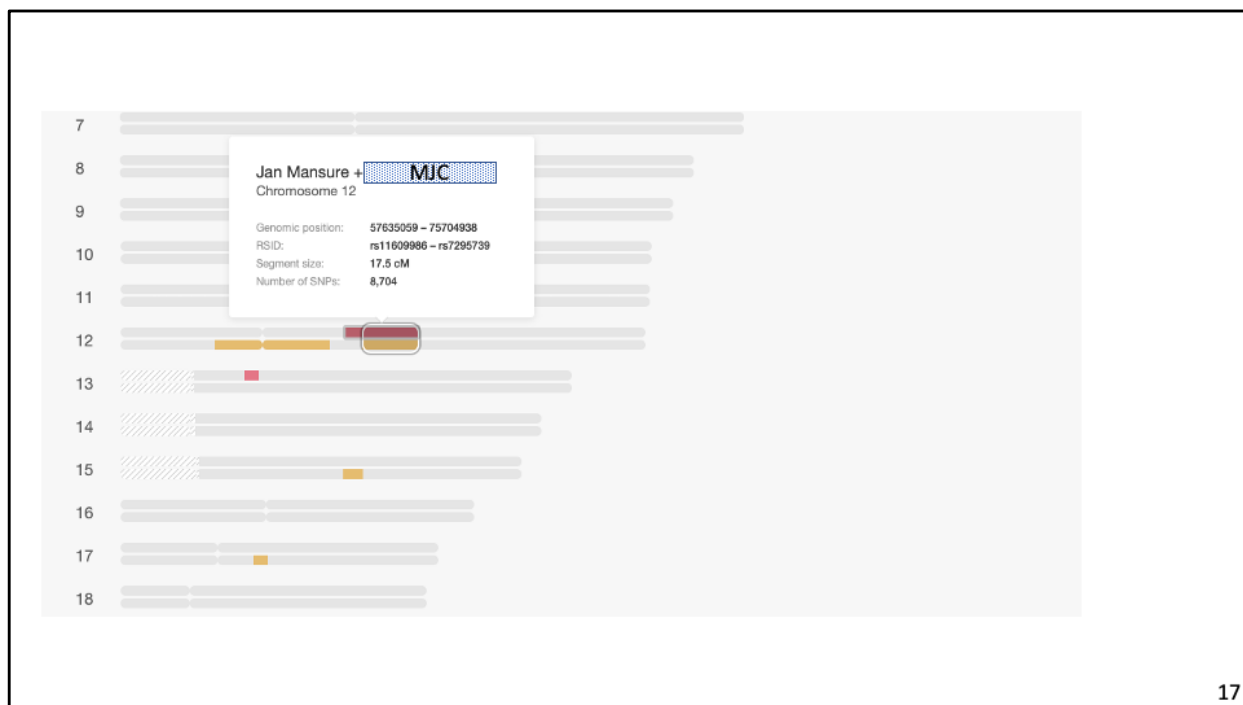Jan Mansure and all of the selected DNA Matches share **one triangulated segment**
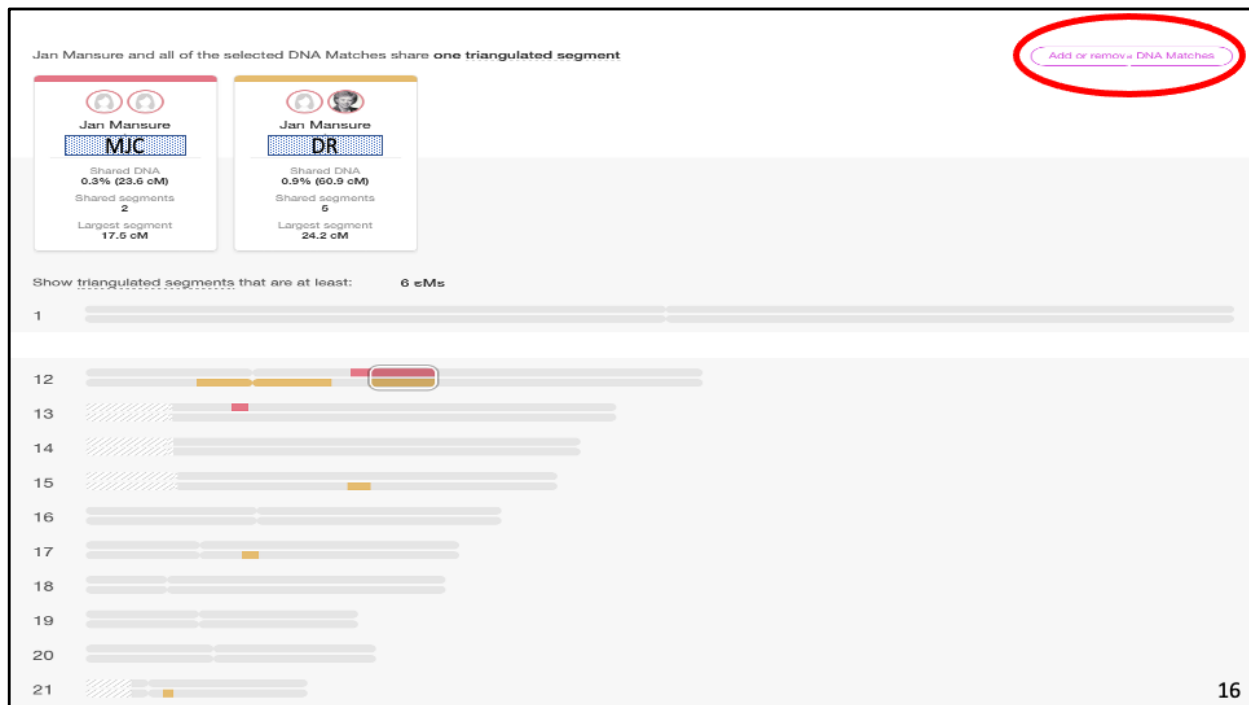
The circle around the overlapping DNA segments is MyHeritage way of marking triangulation.

If you want to add other people to the chromosome browser there is a link at the upper right -- the red oval.

The segments below chromosome 12 are less than 10 cM and so could be by chance.

Clicking on a segment brings up dialogue with the information about the segment. In this case my wife and **MJC** share 17.5 cM with 8,704 SNPs. The overlap with **DR** 15.3 cM.

The issues to be resolved is that **MJC'**s and **DR**'s paper trails need to converge on the same MRCA for this segment.

In the case of **DR** there are two segments and so it is possible that my wife and **DR** have more than one set of DNA MRCA.

In addition to checking the paper trails down from the MRCA to the match, I try working "quick and dirty" branches back up to see if I can find additional MRCA.

This is what I found.
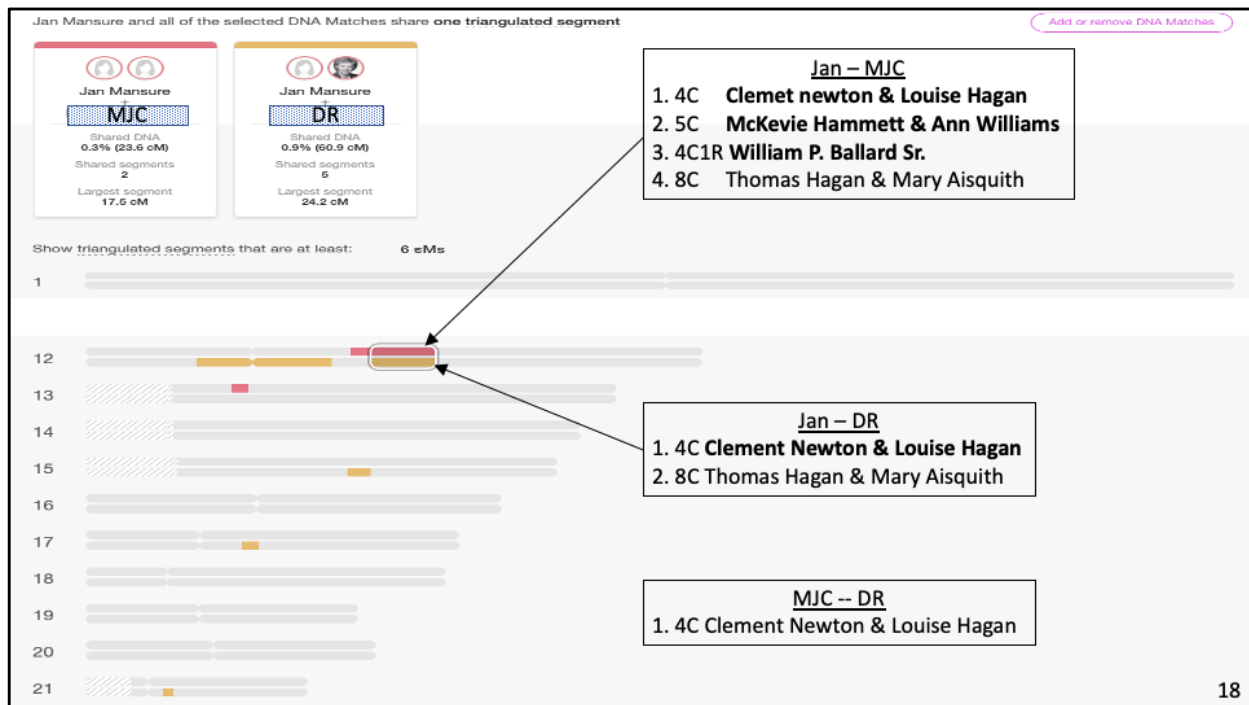
The bold MRCA are those theorized by MyHeritage.

The 4C Clement & Louise MCRA for my wife and **MJC** is not necessarily more likely than the 5C McKevie & Ann MCRA because Mckevie's endogamy.

Also, there is the 8C the common ancestors Thomas & Mary. I found them trough my own research. 8C is a long way back but with endogamy you never know. When I examined my tree to look for MRCA between **MJC** and **DR** I found only Clement & Louise.

Thus the best hypothesis for the MRCA of the segment that my wife, **MJC**, and **DR** triangulate   on is Clement & Louise.

If I find other matches to my wife that share this segment parsed properly, they should also have Clement & Louise as their MRCA.

At this point I go back and the note for MJC to record what we have hypothesized.

While we have been able to hypothesize an answer to who is the most likely MCRA to this triangulated segment using only MyHeritage, I recommend you export your work to DNA Painter. That way you have a permanent record.

Below the browser you will find the segment data or the advanced options link (red oval) to download the segment data.

To resolve MRCA you may need, in addition to MyHeritage, match data form other sites. Combining your matches can be done at DNA Painter.

Resources

MyHeritage
- https://blog.myheritage.com/2019/09/introducing-myheritage-education/
- https://education.myheritage.com/webinar/introducing-myheritage-dna/

Endogamy
- Woodbury P. Endogamy and DNA. Guest blog post on *Kitty Cooper's Blog*, 25 February 2017.
- Advanced Genetic Genealogy: Techniques and Case Studies (chapter 6)
- Bartlett J. Endogamy 1. *Segmentology blog*, 2 December 2015.

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Here are some resources for working with MyHeritage and the issue of endogamy. I will post these to the chat.

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in learning to use MyHeritage*

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