Ancestry DNA Tips & Tools By Martin Brady 19 August 2023

Reasons to choose Ancestry DNA as your DNA testing company.

- 1. They have the largest database of DNA test takers.
- 2. They don't accept transfers from other DNA testing companies, so you have to test with them in order to access their huge database.
- 3. They have very good educational materials.
- 4. They have some very useful tools.

Downsides to Ancestry DNA.

- 1. They do not provide a chromosome browser. So, you can't see which segments of which chromosomes you share with DNA matches unless you both upload your DNA to GEDmatch (or some other company like MyHeritage or FTDNA).
- 2. They allow very limited access for 3rd party tools like Clustering.

Educational materials.

There are numerous articles explaining various aspects of DNA testing in the Support Center. These are usually short, easily understandable articles. If you want in depth discussions, you can read the White Papers in the Support Center. For some helpful videos on various DNA topics, you can go to Ancestry Academy in the Extras drop down menu.

Setting Up Your DNA Test Results

From the "DNA" dropdown menu on the home page, go to the "Your DNA Result Summary" page and access "Settings". There you can enter your demographics and link your DNA results to a tree. It is very important to link your DNA results to a tree to get the maximum benefit from the DNA tools. You can also decide what information you will share with DNA matches, but keep in mind that you don't get to see your matches information if you don't share the same information with them. You can also give people the ability to view your DNA matches and other features. Lastly, you can find instructions for downloading your DNA results in Settings.

Ethnicity

In "DNA Story," you can view your ethnicity estimate information. For more information on this feature view the AGS talk from May 2022 on the AGS website.

DNA Matches

From the "Your DNA Results Summary" page you can access your DNA matches. You have a changing group of 8 DNA match photos in this area and I like to click on their photos and see what I can find out about them. For example, I look for their trees (linked and unlinked), their shared matches and their personal notes such as their story and where they are from. I don't waste a lot of time on those matches that don't have a tree or don't share any matches with me. Some DNA matches share a lot of DNA and have some interesting details in their tree, but not enough to assign a relationship. So, I sometimes create a Quick & Dirty (Q&D) Tree for them to see if I can "flesh out" their tree and make a connection. Since these Q&D trees are experimental, it is important to make them private and unsearchable so that tentative information you put in the tree is not erroneously saved by another Ancestry researcher.

There are many filters for viewing your DNA matches. You can view all your matches or only those on your mother's (or father's) side. You can view matches by ancestor (i.e., like Thru Lines) or by location (are they in New Zealand or France). You can look at those matches that have not been viewed before.

Or you can look at those matches that share or potentially share a common ancestor with you along with the potential line of descent. You can view matches for which you have created notes or put in groups (such as descended from a 2X great grandparent). You can look at those matches that have a public linked tree or an unlinked tree. You can view matches that share DNA within a specific centimorgan range.

You can tag your DNA matches in your tree with tags such as "Hypothesis" or "DNA match." You can put your DNA matches into groups. I have put DNA matches into groups with colored dots according to which 2X great grandparents we share. You can then filter your DNA matches by those groups. You can filter your DNA matches by surnames in their trees or used in their name on Ancestry. You can sort matches by shared locations in their tree. I sometimes look for which matches have a Pittsburgh connection or Galway connection. You can sort your DNA matches by "Close to distant" or "Newest to oldest." You can connect a DNA match to a place in your tree to make them easier to find. You can edit their relationship (i.e., 1st cousin on paternal side, 2C1R on maternal side, etc.).

Thru Lines is a way to look at DNA matches that potentially share an ancestor. These are not "True Lines" as they must be verified by the researcher first. This is simply a tool to point you in a direction for further research.

Humans can share DNA for several reasons. We share a lot of DNA simply because we are human or we share the same ethnicity. This is called Identity by State (IBS). We are usually looking for DNA that we share because we share a particular ancestor. This is called Identity by Descent (IBD). Ancestry uses an algorithm called "Timber" to remove those shared bits of DNA that they don't believe are IBD. So, the amount of shared DNA on Ancestry may be lower for a particular DNA match than on another DNA testing company (such as MyHeritage or FTDNA). Not all matches are affected by this filter. It is worth noting however, that often filters remove a certain amount of the value they are trying not to remove. When you remove noise, you often remove at least some signal.

Side View

Side view is a relatively new feature of Ancestry DNA. The technique uses DNA segments that you share with a DNA match. By comparing a lot of DNA matches to your DNA results and because there are a lot of overlapping DNA segments, Ancestry can tell which DNA matches are on parent 1's side and which matches are on parent 2's side. They don't know which parent (mom or dad) is parent 1 and which is parent 2 unless you label them as such. By knowing what DNA goes with parent 1 vs parent 2, they can use that information for comparing the linked DNA to various ethnicities as well.

Another recent feature of Ancestry DNA is the chromosome painter. Related to Side View, this takes that same linked DNA segment data and applies it to the appropriate chromosome. So, you can look at which ethnicity is from parent 1 (or 2) by chromosome.

Traits

The last thing we can talk about is using DNA to discover your traits. Many traits are linked to DNA, but most are not linked in a one-to-one fashion. In other words, a particular DNA profile may be associated with an increased likelihood of expressing a particular trait, but that doesn't mean that the trait **will** be expressed. The list of traits influenced by DNA is on the Ancestry website. You can also download your results and consult websites like SNPedia or Promethease to see if you possess mutations that influence certain traits.