GSSCC - - DNA Special Interest group - - handout Tuesday, March 1, 2022

Using AncestryDNA - - autosomal DNA results

Note - - This handout was prepared by a person who subscribes to Ancestry.com, as well as having tested with AncestryDNA. The home page may look different for AncestryDNA users who do not also subscribe to Ancestry.com.

Whether or not you subscribe to Ancestry.com, you can - - and should - - link a tree to your Ancestry DNA results. This will enable Ancestry's DNA tools to work for you. Make sure the tree is linked; an unlinked tree does nothing to aid you in analyzing your DNA matches. Note: You can only link one tree to your DNA results.

The top of the DNA homepage indicates how your DNA results will be shown to your matches. In my case, my DNA results show my ID as the first part of my e-mail address. You can choose to label your DNA results using your full name, your initials, or an alias. You can also attach a profile photo to your DNA results.

If you are in the process of submitting a DNA kit to Ancestry, you should be sure to activate your test before you mail it back to Ancestry, to make sure that your kit will be assigned to you once it is received. See button in upper left corner of the DNA home page that reads, "Activate a Test."

In the upper right corner of the home page, the "Settings" button will show the name of the test-taker, the name of the tree linked to the test, as well as your display, sharing and notification preferences. At the bottom of the settings page is a link to download your DNA data if you decide to export your Ancestry DNA data to another DNA site.

If you manage the DNA kits for other people, you can use the "View Another Test" button, also found in the upper right corner of the home page, to toggle to another person whose DNA kit you manage. If you are on the DNA Matches page, the link to "View Another Test" is in the upper left.

<u>Discover Your DNA Story</u> - - From the home page, click on "Discover Your DNA Story" at the bottom of the large DNA Story button to review your ethnicity estimate. Your ethnicity estimate will be on the upper right-hand side of the page, with a map in the middle of the page showing the regions with which your DNA is affiliated. Click the link "How do we calculate this?" to see a brief explanation of how Ancestry defines your ethnicity estimate. From the explanation box, you can also click on the links for "Reference panel" and "Learn more about our science" which will take you to further explanations and a short video, respectively.

You may notice that your ethnicity estimate bears little resemblance to the array of genealogical documents you have compiled about your ancestors. The estimate and the map show where your DNA was in the distant past. Be aware that Ancestry periodically revises everyone's ethnicity estimate, and sometimes, the changes are quite dramatic. As more people test, and as Ancestry identifies more reference populations against which kits are compared, the company continues to refine everyone's ethnicity estimates. Your DNA doesn't change; only Ancestry's analysis of your DNA changes as the company refines its algorithms. Bear in mind that, according to the comparison chart of DNA companies at ISOGG, Ancestry consistently overestimates the Central European and Scandinavian ancestral components for people whose ancestors were from the British Isles, while the ancestral component from the British Isles is overestimated for people whose ancestors were from continental Europe.

Farther down the same page is the section entitled "DNA Communities," with a map showing where your DNA has been more recently, probably within the past 300 years or so. This is the section that will help with your research! According to ISOGG, the DNA Community feature indicates which populations or ethnic groups that have existed within the past 150 to 400 years have contributed at least 4% of your autosomal DNA.

Colored regions on the DNA Communities map show distinct DNA groups in different colors. The same colors correspond to the named regions in the list of DNA communities on the right side of the page. When you click on one of the named regions, you see a list of DNA matches with connections to the same DNA community. You can scroll down through a timeline to see brief historical paragraphs at each notch in the timeline, and the names of people in your linked tree who are connected to that time and place. Note that the people in your tree who are connected to a time and place on the DNA communities timeline are not necessarily ancestors who all share the same DNA. As you navigate along the timeline, the map shows links back to the land of origin.

<u>DNA Matches</u> - - DNA matches are the meat of the matter! From the home page, click on "View All DNA Matches" at the bottom of the large central DNA Matches button to see the list of your DNA matches. DNA matches are listed in descending order, beginning with the highest amount of shared DNA as the default. You can use the "sort" link in the upper right corner to change the view to show the most recent matches. At the very top of the list, you can click on "map" to see where your DNA matches live. Zoom in to enlarge the map.

<u>Filters</u> - - There are a number filters across the top of the DNA match list, including Unviewed, Common Ancestors, Messaged, Notes, Trees, Shared DNA, and Groups. Unviewed matches are matches you have not looked at yet, and are denoted with a small blue dot. Common Ancestor matches are DNA matches whose trees show that they have an ancestor or ancestral couple in common with people in your tree. The words "common ancestor" show to the right of any DNA match with whom your tree shares a common

ancestor. Note - - you need to have a linked tree in order for Ancestry to show common ancestors. The designation of common ancestors for your DNA match is a clue, but not a guarantee, that you connect to your DNA match by that ancestral line.

The Messaged tab sorts the match list into those matches whom you have messaged. Notes brings up all the DNA matches to whom you have attached notes. Trees brings up a brief menu, from which you can select matches with public trees, matches with private trees, or matches with unlinked trees. Shared Matches brings up choices for bringing up a specific level of shared DNA. The default is to show the entire list. You can choose to see only close matches, defined as matches who show 20 cM of shared DNA or more. You can also set a custom cM range to see a list of matches within that range. This useful if you want to look at matches in the 4th cousin range, for example. Note - - you can combine filters; for example, you could look only at unviewed close DNA matches. Or matches with ancestors in common from Nova Scotia.

<u>Groups</u> - - This is a very useful tool. As you begin to identify how some of your closer DNA matches connect to you, you can arrange them into groups, using Ancestry's colored dot system. Use the "Create custom group" link to bring up the template for naming your group and assigning a colored dot to that group. When you want to pull up a list of DNA matches just from a single group, you click on that group and press the "apply" button. You can group your matches in various ways. See below for an explanation of Diahan Southard's suggested matching method. Use the star to tag matches who appear especially useful.

<u>Diahan Southard's DNA grouping method</u> - - DNA guru, Diahan Southard, recommends assigning Ancestry's colored dots by ancestral couple, beginning with your eight great-grandparents, or sixteen great, great-grandparents. Assign the dots, even if you do not yet know the names of your great-grandparents or great, great-grandparents. She further recommends using the colors in the blue/green portion of the spectrum for paternal ancestral couples, and colors in the red/yellow portion of the spectrum for maternal ancestral couples. That way, you can tell at a glance if your group is a paternal or maternal DNA group. As you begin to identify how your DNA matches connect to you, you can connect them to your tree. Then by looking at your groups of unknown matches (and you will have groups of unknown matches who all match each other, but it is not clear how they match you), you can more easily zero in on which ancestral couple, or ancestral individual might be the connection to one of your unknown groups.

<u>Search</u> - - Click on the "Search" link on the upper right side, next to the "Sort" link, to search for names of DNA matches, search for surnames in matches' trees, or search for birth location in matches' trees. The hit list will include surname and place names even from private trees. You can combine search elements; for example, search for the surname Gilson in County Mayo, Ireland. When searching for DNA matches by name, if you are searching for a match with a common last name, including the match's first name to narrow the hit list.

DNA Match Analysis - - When you click on a DNA match's name, it brings up that person's DNA profile page. If the match has ancestors in common with you, the name(s) of the shared ancestor(s) will show on the left. The ancestors in common will also be boxed with a green outline on the match's public tree. If your matches have surnames in their trees that are also in your tree, the surname will show in green. This does not mean that it is the same family line; it merely means that you and your match share a surname in your respective trees. If the match has a public linked tree, that tree will be shown. Be sure to review the match's tree to look for clues about how that person might match to you. If the tree is fairly extensive, click on "expand tree," and on the next screen, click on "view full tree." If you find clues on the match's tree, consider saving a screen shot of the relevant portion of that person's tree. Also add a note to the DNA match's profile to detail your analysis of the match. The default view for each match is the tree view. Click on "Ethnicity" to see a comparison of your ethnicity estimate with the estimate for your DNA match.

<u>Shared Matches</u> - - Shared matches is one of the most powerful tools in the Ancestry toolbox. Click on the "Shared Matches" link to the right of the "Ethnicity" link to bring up a list of shared DNA matches to the match you are viewing. These shared matches match to you and also to your primary match, which enables you to assign the shared matches to the same group as your primary match. Click "add/edit groups" to assign your primary match and each shared match to the same group.

Notes - - Click on the notes icon to attach a note to your DNA match. As you analyze more and more DNA matches, attaching notes to your matches becomes an absolute necessity. Use the note to summarize the name of the group, whether the match is maternal or paternal, and the specific level of cousinship, if determined. You may also want to include other information in the note, such as how the match descends from one of your known ancestral couples. Sometimes, you will find that a DNA match shares more than one group. You can add a match to more than one group. Sometimes, especially with more distant matches, you will see that the match only matches you and no one else. You can draft a standard phrase to copy and paste into the notes field for those matches.

<u>DNA Match Profile</u> - - Under the name of your DNA match, the amount of shared DNA, listed in Centimorgans (cM), and percentage of shared DNA is shown, along with the number of shared DNA segments. Note - - A greater number of shared DNA segments does not indicate a closer match; in fact, given two matches with the same number of cM of shared DNA, the match with fewer (but longer) shared segments will be the closer match. On the profile view, there is also a message button to use for sending a message to your DNA match. If you have previously identified a specific degree of kinship for your DNA match; e.g., "2nd cousin, father's side," that information will also be shown.

By clicking on the DNA match's name, you can see if there is additional information in their personal profile. The personal profile view may show an age bracket and geographic location for your match, as well as a list of their research interests. The personal profile page

will show when they joined AncestryDNA and how often they visit the site. The profile may also include the match's level of genealogical expertise, and their willingness to help other researchers with such tasks as taking photos or finding records. The match's ethnicity estimate is shown in large scenic graphics, along with the name(s) of any trees they have posted. Look at all their trees, including unlinked trees, even though your DNA connection may be through only one tree. Note the names of your DNA match's trees - - the tree names may hold clues. Don't neglect the list of photos your match may have uploaded to their tree(s). Photos are found in the "Photo Gallery" section of the personal profile view. Click on "View all" to see all the photos and documents your match has collected; you may find something that you can attach to your tree. Note - - No content about living people is shown.

<u>ThruLines</u> - - ThruLines uses Ancestry trees to suggest how you may be related to your DNA matches through common ancestors. You need to have a linked tree in order to receive ThruLines hints. Consider ThruLines as a list of clues as to how you could be related to your DNA matches. Since AncestryDNA does not provide a chromosome browser, you cannot be guaranteed that the ThruLines hints are valid, especially since ThruLines hints are based on people's trees, and we all know that trees can contain mistakes. ThruLines, though, is a powerful tool for exploring clues to DNA connection between you and your matches.

The number of DNA matches linked to ThruLines ancestors increases as you go back farther in time. When the ThruLines ancestor is shown in a white box with a solid border and blue (for males) or pink (for females) icons with your ancestor's name in the box, that indicates that you have that ancestor in your linked tree. If your DNA match has an ancestor in their tree that you have not yet added to your tree, the ancestor's name will be inside a box with a dotted line, a green icon, and the words "potential ancestor." Warning: not all ThruLines suggestions are correct! So treat these clues the same way you would any other genealogical information which is not yet proven.

Evaluating ThruLines Matches - - When you click on one of your ancestors in ThruLines, it brings up a descendancy chart showing how your matches may be connected to that particular ancestor. By clicking on one of your matches, you are taken to their profile page, where you can look at their tree to see if their research looks valid. Once you are satisfied that your match is valid, ThruLines enables you conveniently to add your DNA match to your tree, because the intervening generations are named (unless your match has parents or grandparents who are still living. In that case, you will see only placeholders for those living generations, not names.) The lines of descent between your common ancestor and your DNA matches make clear exactly how they connect to your ancestor and, therefore, to you.

<u>Tags</u> - - Once you have added a DNA match to your tree, including the preceding generations between your match and your ancestor, you can tag the match and the match's DNA line in your tree. In the profile for your match on your tree (not on your DNA matches page), click on the tag icon to add that person as a "DNA match." You can also create custom tags; I made one that reads "DNA line" which I attach to the parent and grandparent of my DNA

match, so I can tell at a glance which children of my ancestral couple lead to DNA matches. I recommend that you also add a note to your DNA match in your tree, explaining how much DNA you share and any other relevant information. Notes are private and can only be seen by you. Comments, on the other hand, are public and can be seen by anyone who looks at your public Ancestry tree.

Relationship Assignment - - When you are in your DNA match list, if you have determined precisely how you and your match are related, you can click on the "Yes" button on the right side of your match's name on the list, which brings up a menu of choices to assign the exact degree of cousinship, and label the match as maternal or paternal. Once your match is assigned to the maternal or paternal side of your tree, a second menu asks you to select the precise cousin description. The most likely relationships are at the top of the list, but you can click on "Show more possible relationships" until you get to the relationship that describes your match. Ancestry asks you to confirm your selection.

Next, click on your match's name to bring up the DNA profile page. Then click on the little round white tree icon next to your match's name on the profile page. That brings up a space for you to enter the name of your match in your tree. Note: If you have more than one tree, make sure you are in the correct tree! You can then click on "View in tree," which will take you directly to a screen that shows your match in the pedigree chart. Taking this extra step will also result in more ThruLines connections.

DNA matches who you have connected to your tree and who have been assigned a relationship will show a solid blue tree icon next to the DNA match's name on your DNA match list. They will also show a solid blue button on the right to "View match." DNA matches you have not yet used this tool to connect to your tree have no tree icon in the match list view, and to the right are the words, "Do you recognize them?" with white buttons to say "Yes," and "Learn more." You can use the "Yes" button to add the match. The "Learn more" button merely takes you to the DNA match's profile page.

<u>Conclusion</u> - - As you begin to use the tools at Ancestry, you will gain mastery of them and will be able to organize your DNA matches into useful groups. Using a combined array of tools will help you to better analyze your DNA matches at Ancestry and, one hopes, ultimately extend your tree.