QUAIL CREEK GENEALOGY CLUB EDUCATION COMMITTEE WORKSHOP "Using DNA Matches to Find Family Connections" February 23, 2023

1. CHOOSE A DNA TEST PROVIDER AND SUBMIT YOUR DNA SAMPLE FOR TESTING

The truth is that any one of the leading DNA companies will do a good job of providing you with reports and tools that can help you understand your family's genetic past. However, I'll give you a little info on some tests that you might consider when choosing a testing company for the primary purpose of finding connections that will further fill your Family Tree. (For the specific examples provided today, I am only using results from **autosomal DNA tests**: these tests analyze the 22 pairs of non-sex chromosomes, which include one from the mother & one from the father; they **provide you with information and matches from both sides of the family.**)

- AncestryDNA is probably the most well-known test their sample database by far is the largest with approx. 20 million testers; primarily from North America but test usage has also expanded into the United Kingdom. AncestryDNA's test is strictly an autosomal DNA test; They do not accept uploads of any other testing company's DNA test results so you'll have to use their test for ethnicity reports and matches of potential relatives from their database. Using your DNA sample, you can connect to your relatives who've also tested with Ancestry and use your ancestry report to help build your family tree. Ancestry DNA does allow you to download your raw DNA information which you could then upload to other testing companies that do accept uploads.
- 23andMe is another well-known company with a database of approx. 12 million testers. 23andMe tests autosomal DNA, X-chromosome DNA, Y-chromosome DNA, and mitochondrial DNA (mtDNA). Using these extra sources of DNA, 23andMe can determine your haplogroups, which can tell you about your maternal and paternal lines. They also estimate your Neanderthal DNA, and can provide better information if you have Native American ancestry. They do not accept uploads of any other testing company's DNA test results so you have to test with them to use their tools. Like Ancestry, 23andMe has a list of shared DNA matches listed as DNA Relatives. They have a chromosome browser tool to see what DNA segments you share with your matches. However, matches must be willing to share genomes with you in order for you to see what segments you share.
- MyHeritage is primarily a company based around building and researching your family tree. MyHeritage DNA test is most popular in European countries – like AncestryDNA, their test is strictly an autosomal test. They also have one of the largest database sizes, so test results have a higher statistical probability of being correct. The company provides tools for you to do in-depth ancestry research on your family history, help build your family tree, connect to your relatives in their database, and include a chromosome browser to review matching segments on the "Review DNA Match page".
- FamilyTreeDNA is best for those who are serious about genealogy and want a DNA analysis specific to one side of their family. In addition to their autosomal FTDNA test, for an additional cost you can purchase the Y-DNA or mtDNA tests, allowing you to get test results specific to your paternal and maternal lineage. FTDNA is the only DNA-analysis company to offer comprehensive DNA tests on these parts of your DNA. Essentially, this allows you to determine your father or mother's genetic makeup and find connections based on specific lines. Users can also upload many other companies' raw DNA data to find matches in the FTDNA "Family Finder" database.
- Living DNA is considered by many to be the best ancestry test for people with roots in the British Isles (Irish). Both YDNA and mtDNA are tested. You can also search LivingDNA's user database for family matches simply by uploading your raw DNA data from another DNA analysis site for free. LivingDNA test raw DNA data can also be downloaded from the site and uploaded into MyHeritage to find matches in the MyHeritage DNA database. They are now partnered with Find My Past.

Detailed comparison chart of companies and their available DNA tests: https://isogg.org/wiki/Autosomal_DNA_testing_comparison_chart

2. <u>RECEIVE AND REVIEW YOUR DNA RESULTS FOR MATCHES/POTENTIAL CONNECTIONS:</u>

Review family trees (if there are any). Don't just review "connected trees". Many users test DNA and have public trees but don't link their DNA to those trees.

Identify shared matches - **The Leeds Method** is a way of clustering matches developed by Dana Leeds that uses a spreadsheet to sort DNA matches into color groups based on shared ancestors. It often creates four groups of DNA matches based on four grandparent lines. (<u>https://www.danaleeds.com/the-leeds-method/</u>). Ancestry now breakdowns DNA results under your individual parents' family lines. They're useful but not always correct.

THE SHARED CM PROJECT: ETHNICITY/ANCESTRY (available at

<u>https://dnapainter.com/tools/sharedcmv4</u>) is one of the most commonly used tools for estimating relationships between people with shared DNA. It was last updated in March 2020.

• This tool is very helpful when trying to determine potential relationships with DNA matches.

<u>GEDmatch</u> (<u>https://app.gedmatch.com/login1.php</u>) is NOT a DNA testing company – it is a website with valuable tools where people who have tested compare DNA results and find matches with others who've testing using different companies – it basically expands the database of possible matches beyond a single testing company. It also breaks down and displays shared segments using a chromosome browser, provides triangulation and many other tools.

FACEBOOK GROUPS/PROJECTS: There are many Facebook groups available to aid in your research. Examples include groups/projects for those researching ancestors or descendants from/in geographical areas, surnames, DNA-related research, adopted members, etc.

ONLINE SEARCHES: Google is your friend (or Bing or whatever your favorite search engine might be) – online obituaries and newspapers can provide you with information on not only deceased relatives but also living relations. Using the information provided in a Google search (such as an obituary that lists deceased person's children, their spouses, grandchildren), I have many times search for Facebook accounts and been able to find and/or verify connections. (Of course, my personal recommendation would be that you set your own Facebook accounts with more secure privacy settings so others can't necessarily find your family members this way).

3. BUILD SEPARATE "PRIVATE" TREES TO EXPLORE POSSIBLE RELATIONSHIPS

4. CONTACT YOUR DNA MATCHES TO SHARE INFO AND VERIFY POTENTIAL CONNECTIONS:

Upon finding DNA matches, testing companies have messaging systems you can use to contact your potential relatives, attempt to determine actual relationships and possibly share information.

5. HANDS-ON PORTION OF WORKSHOP USING YOUR DNA MATCHES, RESEARCH, QUESTIONS

<u>NEXT QCGC GENERAL MEETING</u>: Presentation by board member, Mark Hester, who will share his surprising journey through his DNA testing and research with unexpected and life-changing results. **Mark your calendar for Wed, March 1, 2023 at 10:00 am – Kino Ocotillo/Mesquite Rm**

FOR MORE INFO ON THE CLUB: <u>https://QCgenealogy.com</u>