

Editor's note: Here is a landscape version of the handouts by Jim Rader. This version puts all links on one line, which makes the live links work without copying and pasting after converting to .pdf format.

What Can a Genealogist Use from DNA Test Results?

By Jim Rader, jim@rader.org www.rader.org

For an overview of the role of the Y-chromosome, and not necessarily limited to human kind, view this Wikipedia page: http://en.wikipedia.org/wiki/Y_chromosome

1. Now have a glance at another Wikipedia page, this time one which explains the basics of genealogical DNA testing — including Y-chromosome tests: http://en.wikipedia.org/wiki/Genealogical_DNA_test
2. Family Tree DNA run a tool to estimate this genetic distance within the project space of a Y-chromosome project. You can find out about the TMRCA calculation on the FTDNA website where it is part of the timeframe estimating help offered within the TiP programme. Read about the FTDNA-TiP tool at: www.familytreedna.com/faq-tip.aspx.
3. Y-Utility: Y-DNA Comparison Utility, FTDNA Mode which is found at: www.mymcgee.com/tools/yutility.html?mode=ftdna_mode
4. Review the information on haplogroups at http://en.wikipedia.org/wiki/Human_Y-chromosome_DNA_haplogroups).
5. For a list of marker values look at: http://en.wikipedia.org/wiki/List_of_DYS_markers and www.genebase.com/in/dnaMarkerDetail.php
6. Online databases of results You may find these resources useful when checking your own results: YHRD at www.yhrd.org Ysearch at www.ysearch.org
7. The Y-Chromosome Phylogenetic Tree
8. http://ycc.biosci.arizona.edu/new_binary_polymorphism/supplementary_data/Y-Chromosome_Phylogenetic_Tree.pdf

Close Ancestry Testing

9. Here's what FTDNA says— the following is taken from the FAQ page on the Family Finder test at In section number 26: www.familytreedna.com/faq/answers/default.aspx?faqid=17
10. <https://customer.care.23andme.com/entries/21263538-what-is-the-chance-that-someone-on-my-relative-finder-list-is-not-related-to-me>
11. <https://customer.care.23andme.com/entries/21262576-relative-finder-says-we-are-third-cousins-but-i-know-our-relationship-must-be-more-distant-how-can-t>
12. <https://customer.care.23andme.com/entries/21231981-how-accurate-is-the-degree-of-relatedness-predicted-by-relative-finder>
13. The average percent DNA shared for different types of cousins <https://customer.care.23andme.com/entries/21231991-what-is-the-average-percent-dna-shared-for-different-types-of-cousins>
14. The Rules of Genetic Inheritance www.genetic-inference.co.uk/blog/2009/11/how-many-ancestors-share-our-dna/
15. Genetic Genealogy - DNA and Your Research (815). a useful introduction to the follow-up course Genetic Genealogy, Managing a Surname DNA Project (816) <http://www.pharostutors.com/coursesmainsd.php>
16. Bennett Greenspan and Rabbi Jonathan Bernis, http://www.itbn.org/index/detail/lib/Networks/sublib/TBN/ec/VsYWNINTrw98zu18Se-C_nktOBEq4fVY

DNA What are the new tests and how can you Interpret your results?

by Jim Rader

1. **National Geographic Geno 2.0** – <https://genographic.nationalgeographic.com> a SNP test, a comprehensive analysis to identify thousands of genetic markers on your mitochondrial DNA, which is passed down each generation from mother to child, to reveal your direct maternal deep ancestry. In the case of men, we will also examine markers on the Y chromosome, which is passed down from father to son, to reveal your direct paternal deep ancestry. In addition, for all participants, we analyze a collection of more than 130,000 other ancestry-informative markers from across your entire genome to reveal the regional affiliations of your ancestry, offering insights into your ancestors who are not on a direct maternal or paternal line.
<https://genographic.nationalgeographic.com/news/>
2. **African Ancestry** - <http://www.africanancestry.com> **specific present-day African country of origin** - **mtDNA** test and/or **YSTR** test exclusive African Lineage Database is the largest and most comprehensive resource of African lineages available today. It includes lineages from 30 countries and over 200 ethnic groups. Paternal lineages: 16,098 samples Maternal lineages: 14,211 samples The data is a compilation of published sources, research collaborations and primary research. The populations sampled are based on direction from historians, anthropologists, linguists and other geneticists.
3. **AncestryDNA** <http://dna.ancestry.com/aboutDNA.aspx>
The new test looks at a massive amount of your DNA, over 700,000 locations, and compares it to other DNA samples from around the world. By detecting similarities, we can trace back generations to connect you to the lands your ancestors once called home.
Jewish Family Finder <http://www.jewishvoice.org/media/television-show/jewish-family-finder.html>
4. **FamilytreeDNA Family Finder** <http://www.familytreedna.com/family-finder-compare.aspx>
5. **advanced how to Interpret your results**
Genetic Genealogy - DNA and Your Research (815). a useful introduction to the follow-up course Genetic Genealogy, Managing a Surname DNA Project (816) <http://www.pharostutors.com/coursesmainsd.php>
Y-Utility: Y-DNA Comparison Utility, FTDNA Mode which is found at: www.mymcgee.com/tools/yutility.html?mode=ftdna_mode