

Handout for June 20, 2020
Skagit Valley Genealogical Society
DNA and Genealogy

Definitions

Chromosomes: 23 pairs in humans that contain our genes

Genome: Your entire DNA

DNA: Deoxyribonucleic Acid; contains 4 base pairs -Adenine, Thymine, Guanine, Cytosine. In various combinations these determine your genome

Mitochondria DNA (mtDNA): The bodies in a cell but outside the nucleus. They provide the energy for cells to do their work. They contain some DNA.

Y-Chromosome: in males only

X-Chromosome: Women have two of these; men only have one in combination with a Y-Chromosome

MRCA: Most Recent Common Ancestor that you share with a match

Centi-Morgans (cM): a centiMorgan is a measurement of how likely a segment of DNA is to recombine from one generation to the next. The important thing to remember: The larger the number of shared cMs, the closer the relationship to a DNA match.

DNA Testing Sites

Ancestry.com	Autosomal testing only
23andme.com	Autosomal only
FamilyTreeDNA.com	Y-DNA, mtDNA and Autosomal
MyHeritage.com	Autosomal only

Many others for specific testing, e.g., African Ancestors

Blogs and Wikis

The Genetic Genealogist	thegeneticgenealogist.com
Family Search Wiki	familysearch.org/wiki
The International Society of Genetic Genealogists	www.isogg.com
DNA Explained	https://dna-explained.com

More information

Reference Groups

See: Ancestry.com

<https://www.ancestry.com/corporate/sites/default/files/AncestryDNA-Matching-White-Paper.pdf>

MyHeritage: <https://faq.myheritage.com/en/article/which-ethnicities-does-myheritage-compare-my-dna-with>

23andme: <https://customercare.23andme.com/hc/en-us/articles/212169298-23andMe-Reference-Populations-Regions>
FamilyTreeDNA: <https://learn.familytreedna.com/family-finder-autosomal-testing/myorigins-family-finder-autosomal-testing/myorigins-population-clusters/>

Books on DNA

The Journey of Man: A Genetic Odyssey, Spencer Wells

Pandora's Seed, Spencer Wells

Deep Ancestry: Inside the Genographic Project

Saxons, Vikings, and Celts, Bryan Sykes

The Seven Daughters of Eve, Bryan Sykes

Trace Your Roots with DNA, Megan Smolenyak Smolenyak

The Family Tree Guide to DNA Testing and Genetic Genealogy, Blaine T. Bettinger

Genetic Genealogy in Practice, Bettinger and Debbie Parker Wayne. Simple explanations, lots of graphics and work sheets.

Your DNA Guide, Diahn Southard

The Double Helix, James Watson

Websites and other useful information

Records online

General **indicates paid site*

Cyndi's List www.Cyndislist.com

Ancestry* www.ancestry.com

Fold3* www.Fold3.com

Newspapers.com* www.newspapers.com

Find my past* www.findmypast.com

My Heritage* www.Myheritage.com

Family Search www.familysearch.org

Google books <https://books.google.com/>
www.Archives.com*

Free internet books www.archives.org

National Archives and Records Administration www.archives.gov

List of books in libraries or digital books www.worldcat.org

Rootsweb www.rootsweb.com

DNAPainter.com

GEDMatch.com