

Genetic Genealogy - Getting Started

This resource page provides a structured guide to getting started with genetic genealogy, organized by topic to help you navigate from basic concepts to advanced analysis.

Foundational Basics and Terminology

- [DNA Basics: An Introduction to DNA and Genealogy - FamilySearch](#) This comprehensive guide introduces the fundamental concepts of DNA, explaining that it is the genetic code defining biological characteristics inherited from parents. It provides an overview of the four main types of DNA used in research—autosomal, Y-DNA, mitochondrial, and X-DNA—and how each helps identify ancestors within different timeframes. It also details what to expect from your results, including ethnicity estimates and match lists, and highlights major testing companies and third-party tools.
- [DNA Testing for Beginners - Your DNA Guide - Diahan Southard](#) Designed specifically for those who haven't yet taken a test, this source explains why DNA is valuable for family history, such as connecting with birth relatives and building family trees. It offers practical advice on choosing the right autosomal DNA test based on factors like the testing company's database size and the type of kit (spit vs. swab). Additionally, it provides essential emotional and privacy considerations for beginners before they commit to testing.
- [A Genetic Genealogy Glossary – The DNA Geek](#) This comprehensive, evolving resource is designed to help researchers bridge the gap between science and genealogy. The glossary provides clear definitions for essential terminology, ranging from basic biological units like nucleotides and chromosomes to complex genealogical concepts such as centiMorgans, endogamy, and triangulation. It also includes detailed entries for major testing companies like AncestryDNA, 23andMe, and FamilyTreeDNA, as well as specialized analytical tools including GEDmatch and DNA Painter. As a dynamic "work in progress," the glossary remains an interactive educational tool where readers are encouraged to suggest new terms or corrections to enhance the community's collective knowledge.

Understanding DNA Tests and Platforms

- [Autosomal DNA, Y-DNA and mitochondrial DNA tests: what... | Living DNA](#) This article clarifies the scientific differences between the three primary types of DNA tests. It explains that autosomal testing looks at 22 pairs of chromosomes inherited from both parents to provide a broad view of ancestry over 5-7 generations. In contrast, Y-DNA and mitochondrial DNA (mtDNA) tests focus on

the paternal and maternal lines, respectively, tracking ancient haplogroups that date back tens of thousands of years.

- [The Tool Order for Beginners - GEDmatch](#) For users who upload their raw data to the GEDmatch platform, this resource recommends a specific sequence for using its tools to avoid feeling overwhelmed. It suggests starting with the "Are your parents related?" tool to identify potential inheritance complexities, followed by the "One-to-Many" match list to find close relatives. Finally, it explains how to use "People who match both or one of two kits" to group matches into maternal or paternal categories.
- [Resources to Get You Started With Genetic Genealogy](#) This resource from the New York Genealogical and Biographical Society serves as a starting point for researchers, providing a guide for finding various educational materials and tools to assist in the initial stages of a DNA-based family history journey.

Analyzing and Organizing Your Matches

- [Organizing DNA Matches | Leeds Method - Your DNA Guide - Diahan Southard](#) This tutorial provides a step-by-step guide to the Leeds Method, a visual system for clustering DNA matches using color-coding. By focusing on matches between 90 and 400 cM, the method helps users group their relatives into four distinct clusters that typically represent their four great-grandparent couples. This organization is crucial for identifying which branch of a family tree a specific match belongs to.
- [Shared cM Project | How Am I Related to My DNA Matches? - Your DNA Guide](#) This guide explains how to use the amount of shared DNA—measured in centiMorgans (cM)—to predict your genealogical relationship to a match. It introduces the Shared cM Project, a collaborative data collection effort by Blaine Bettinger that provides charts showing the likely relationships for different cM values. The source also points to interactive tools like DNA Painter that calculate the statistical probability of various relationships.