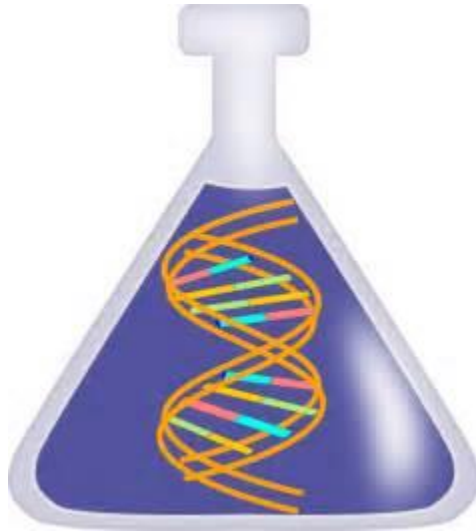


# Autosomal DNA

## Finding Family



**What is DNA and where is it found?** Deoxyribonucleic acid is a molecule that carries most of the genetic instructions used in development, functioning and reproduction of all known living organisms and many viruses. It's found in the nucleus of every cell in your body and in every chromosome.

We have 46 chromosomes, 23 pairs. **22 of those are autosomal** (non-sex specific).

We inherit **50% of our parents DNA**. That's 23 chromosomes from each parent. Our siblings may have inherited different parts of our parents DNA.

### **How can Autosomal (atDNA) help with my family history?**

You can determine or confirm your connection to a particular ancestor. You can learn about your ethnic background and can find new cousins.

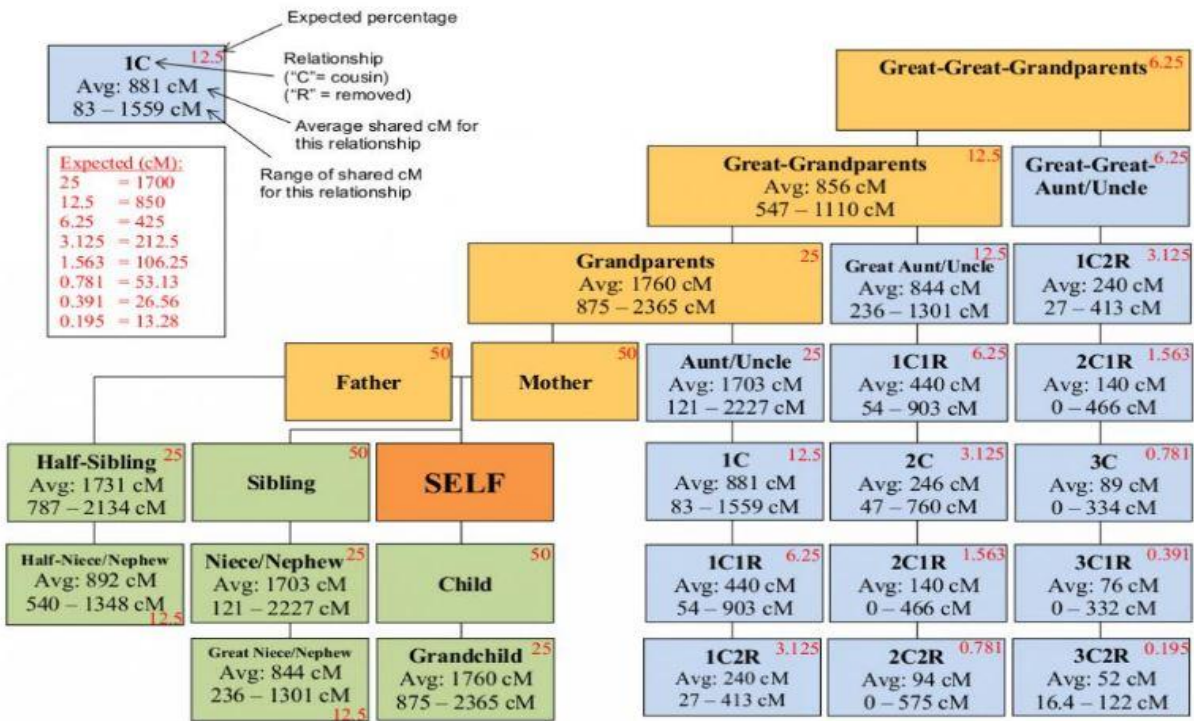
Most people test for their ethnic origins which is actually the most unreliable part of the test. It's accurate at the continental level but can vary at the country level.

**Why DNA can't answer all your questions.** You share smaller amounts of an ancestors DNA with each successive generation. See chart on next page:

# Shared Cm chart:

From Blaine Bettinger's The Genetic Genealogist's blog:

<http://thegeneticgenealogist.com/2015/05/29/visualizing-data-from-the-shared-cm-project/>



### **Three major companies offer Autosomal Testing:**

*Ancestry.com* - has the largest database and you can order the test without being a member but it works best with a subscription. Contact with matches is through the Ancestry site.

*Familytreedna.com* - No subscription is required. You pay for the test once and have access to the site. They also are the only company that does YDNA tests and MtDNA tests. You can transfer your test results from other companies to FTDNA for a small fee. Contact with matches is directly through email.

*23andme.com* - In addition to AtDNA, they will determine your MtDNA. They also offer a medical test. Biggest problem with them is getting people to return your requests for sharing information.

*MyHeritage.com* - is newer to the DNA testing market. You can buy their test or transfer for free from other companies. Like Ancestry.com, it works best with a subscription but you don't have to have one to view test results.

*Gedmatch.com* - No matter which company you test with, you should upload your data to Gedmatch. That way you can compare your results with people from all the testing companies and you also get a lot more tools to analyze your data.

### **Resources for additional information:**

#### **International Society of Genetic Genealogy**

<https://isogg.org/>

*Glossary* (from Isogg)

[https://isogg.org/wiki/Genetics\\_Glossary](https://isogg.org/wiki/Genetics_Glossary)

*Blogs to follow:*

Genetic Genealogy Blogs on the Isogg website. [https://isogg.org/wiki/Genetic\\_genealogy\\_blogs](https://isogg.org/wiki/Genetic_genealogy_blogs)

*Two of my favorites:*

Richard Hill, The DNA Testing Advisor

<http://www.dna-testing-adviser.com/dna-testing-blog.html>

Roberta Estes- dna-explained.com

Ethnicity Testing: <https://dna-explained.com/2016/02/10/ethnicity-testing-a-conundrum/>

Ethnicity and Physical Features are NOT Accurate Predictors of Parentage or Heritage  
<https://dna-explained.com/2017/07/02/ethnicity-and-physical-features-are-not-accurate-predictors-of-parentage-or-heritage/>

*Books:*

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

Griffith, Bill. A Stranger in my Genes.

Hill, Richard. Finding Family, My search for roots and the secrets in my DNA.

Southard, Diahan. Autosomal DNA for the Genealogist, Quick Reference Guide.

*Webinars:*

Ancestry Academy <https://www.ancestry.com/academy/courses/recommended>

FTDNA Learning Center <https://www.familytreedna.com/learn/ftdna/webinars/>