

Introduction to DNA Testing in Genealogy & Family History

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Introduction

- A brief history of genetic testing for genealogical purposes
- Conceptions confirmed and misconceptions debunked
- Responsible practices with genetic testing

A brief refresher of human genetics

- Human genome
- DNA
- Mitosis and meiosis

Introduction to the various DNA tests offered today

- Y Chromosome
- X Chromosome
- Mitochondrial
- Autosomal
- Factual

Companies offering genetic testing and their specific products

- Ancestry
- FamilyTreeDNA
- 23andMe
- MyHeritage
- Living DNA
- National Geographic

Y Chromosome testing (Y-DNA)

- Inheritance of the Y chromosome
- Y-SNP and Y-STR tests
- Y Haplogroups
- Using Y-DNA tests in genealogy
- Surname projects

X Chromosome testing (X-DNA)

- Inheritance of the X chromosome
- Using X-DNA tests in genealogy

Mitochondrial testing (mtDNA)

- Inheritance of mitochondrial DNA
- mtDNA haplogroups
- Heteroplasmic vs homoplasmic
- Using mtDNA tests in genealogy

Autosomal testing (atDNA)

- Inheritance of autosomal DNA
- Using atDNA tests in genealogy
- A short case study using atDNA

Ethnicity estimates and reports

- Introduction
- Examples
- Uses & Limitations

Brief introduction to advanced atDNA tools and analysis techniques

- Chromosome browsers
- In-Common-With tools