

## http://ancestraldata.com/presentations/scgs/michael.cooley@humboldt.edu

## CENTIMORGANS LISTED IN AVERAGES RATHER THAN RANGES

Total cM

	Total cM	Predicted Relationship
100%	3400.00	Identical twins
50%	3400.00	Parent/child
50%	2550.00	Full siblings
25%	1700.00	Grandparent/grandchild, aunt-or- uncle/niece-or-nephew, half-siblings
25%	1593.75	Double first cousins
12.5%	850.00	First cousins, great-grandparent/great-grandchild, great-uncle or aunt/great-nephew or niece, half-uncle or aunt/half-nephew or niece
6.25%	425.00	First cousins once removed, half first cousins, great-great-grandparent/great-great-great-grandchild, great-great-aunt/uncle, half great-aunt/uncle
6.25%	425.00	Double second cousins

3.125%	212.50	Second cousins, first cousins twice removed, half first cousin once removed, half great-great-aunt/uncle, great-great-great-grandparent/great-great-great-grandchild	
1.563%	106.25	Second cousins once removed, half second cousins, first cousin three times removed, half first cousin twice removed	
0.781%	53.13	Third cousins, second cousins twice removed	
0.391%	26.56	Third cousins once removed	
0.195%	13.28	Fourth cousins, third cousins twice removed	
0.0977%	6.64	Fourth cousins once removed. third cousins three times removed	
0.0488%	3.32	Fifth cousins	

**Predicted Relationship** 

Source: International Society of Genetic Genealogists

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NOTE: NatGeo stopped taking orders in May 2019.

Test	Ancestors "tested for"	Benefits	Company
Y Chromosome Short Tandem Repeats (STRs)	The "father-line" (father's, father's, father, etc.)	Good for matching your father-line with other testers with accuracy to about <b>fifteen generations</b> . Good for general groupings of haplotypes.	FTDNA
Y Chromosome Single Nucleotide Polymorphisms (SNPs)	ditto	Provides genetic information about the father-line to thousands, even tens of thousands of years.	(23andMe) FTDNA <del>NatGeo</del>
Mitochondrial DNA	The "mother-line" (mother's, mother's, mother, etc.)	Provides genetic information about the mother-line to thousands, even tens of thousands, of years.	(23andMe) FTDNA <del>NatGeo</del>
FULL SEQUENCE Mitochondrial DNA	ditto	Matches can identify people possibly related within <b>five generations</b> .	FTDNA
Autosomal DNA	A large sampling of many ancestors that are still represented in your DNA. (About 3% of your total genome is tested.)	<ul> <li>Close genealogy to about five generations</li> <li>Broad sampling and general interpretation of ethnic origins</li> </ul>	23andMe FTDNA Ancestry.com

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Test	23andMe	FTDNA	Ancestry.com	National Geographic Genographic Project
auDNA	\$99 / \$199	\$79 (FF)	\$99	<del>Minimal</del> <del>results</del>
Y Haplogroup	(low resolution)	Included with Y products	No	<del>\$99.95</del>
mtDNA	(low resolution)	ow resolution) \$199 (full)		<del>Included</del>
X	Included	Included with FF	No?	<del>Included</del>
Y-STR	No	12 markers: \$59 37 markers: \$169 67 markers: \$268 111 markers: \$359	No	<del>No</del>
Big Y	No	\$449-\$649	No	No
SNP Packs	No	\$99-\$119	No	No
Individual SNPs	No	\$39	No	<del>No</del>
auDNA Transfer	No	Free (minimal)	No	<del>No</del>
Medical markers	Yes	Additional Fee	No	<del>No</del>
Matching	Yes	Yes	Limited for non-member customers	<del>No</del>
Database	Matches only	Public	Private	<del>Private</del>

"FF" is "Family Finder"

Also check YSEQ.net