

# Genetic Genealogy

and how it is used in finding adoptees' birth parents

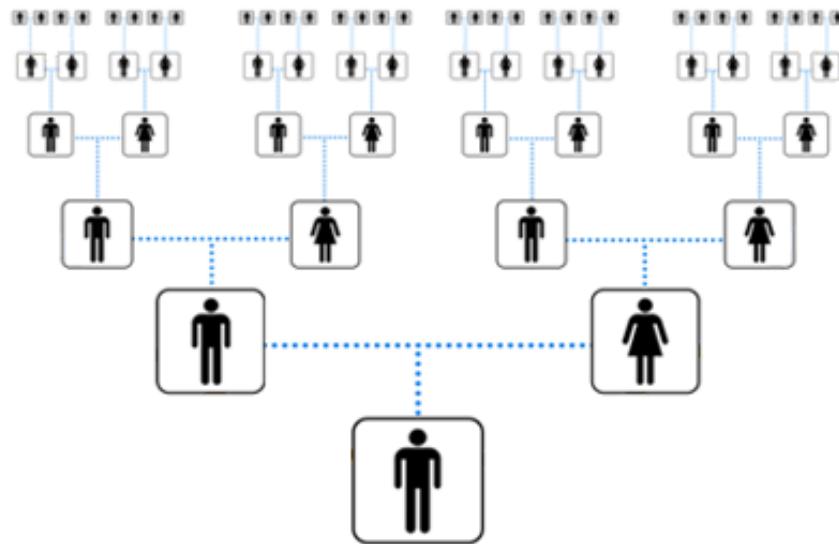


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# What is genealogy?

Genealogy is the study of families and the tracing of their continuous lineage and is used to determine the line of descent from our ancestors to ourselves.



# What are Genetics?

Genetics is the study of heredity and the variation of inherited characteristics through our genes.



# Genetics + Genealogy = Genetic Genealogy

Genetic genealogy is the use of DNA testing, traditional genealogical, and historical records to infer relationships between individuals.



"You're the mother and those are your children? — I'd like to see a DNA test."

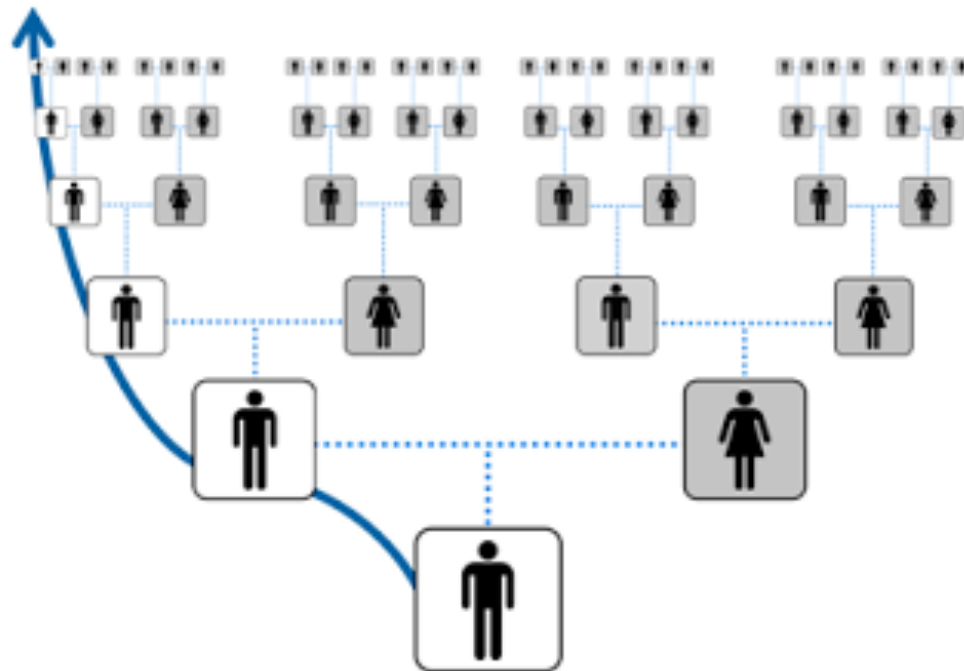
# DNA Testing Types

There are three types of DNA testing used in genetic genealogy.

- Y-DNA testing
- mtDNA testing
- Autosomal DNA testing

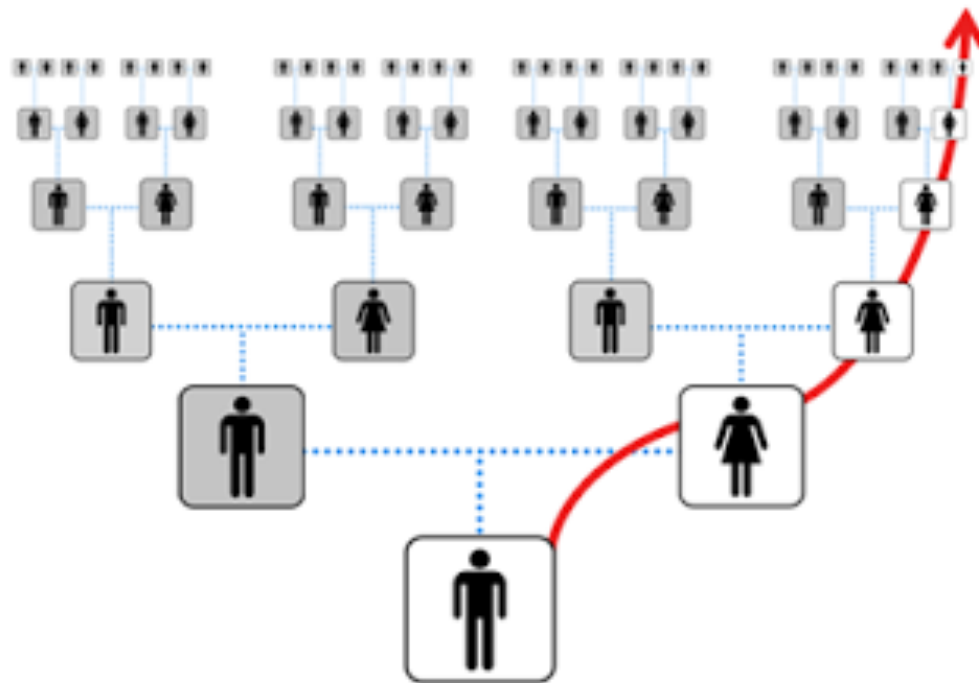


# Y-DNA testing



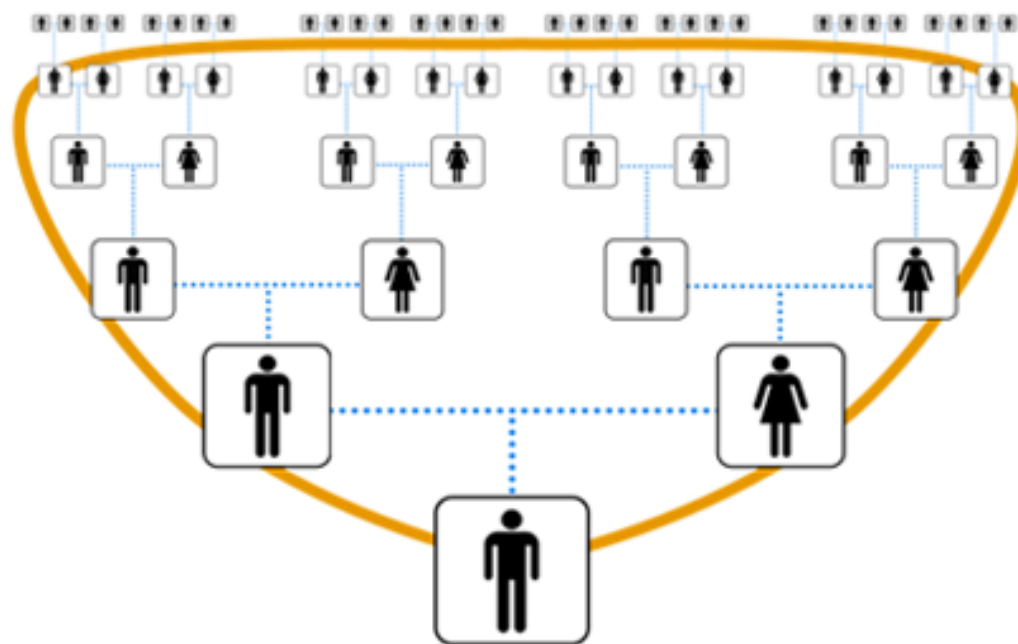
Y-DNA testing is used to learn about the paternal line of ancestry. This test is only available for males. Women do not carry the Y-chromosome.

# mtDNA testing



mtDNA or mitochondrial DNA testing is used to learn about the maternal line of ancestry. This test is available for both male and females.

# Autosomal DNA testing



Autosomal DNA testing is used to learn about inherited genes from both parents and includes random contributions from their parents, grandparents, and so on. This test is available for both male and females.



# Autosomal DNA testing and Adoptees



# Autosomal DNA Results



Cousins &  
Close Relatives



Cousins &  
Close Relatives



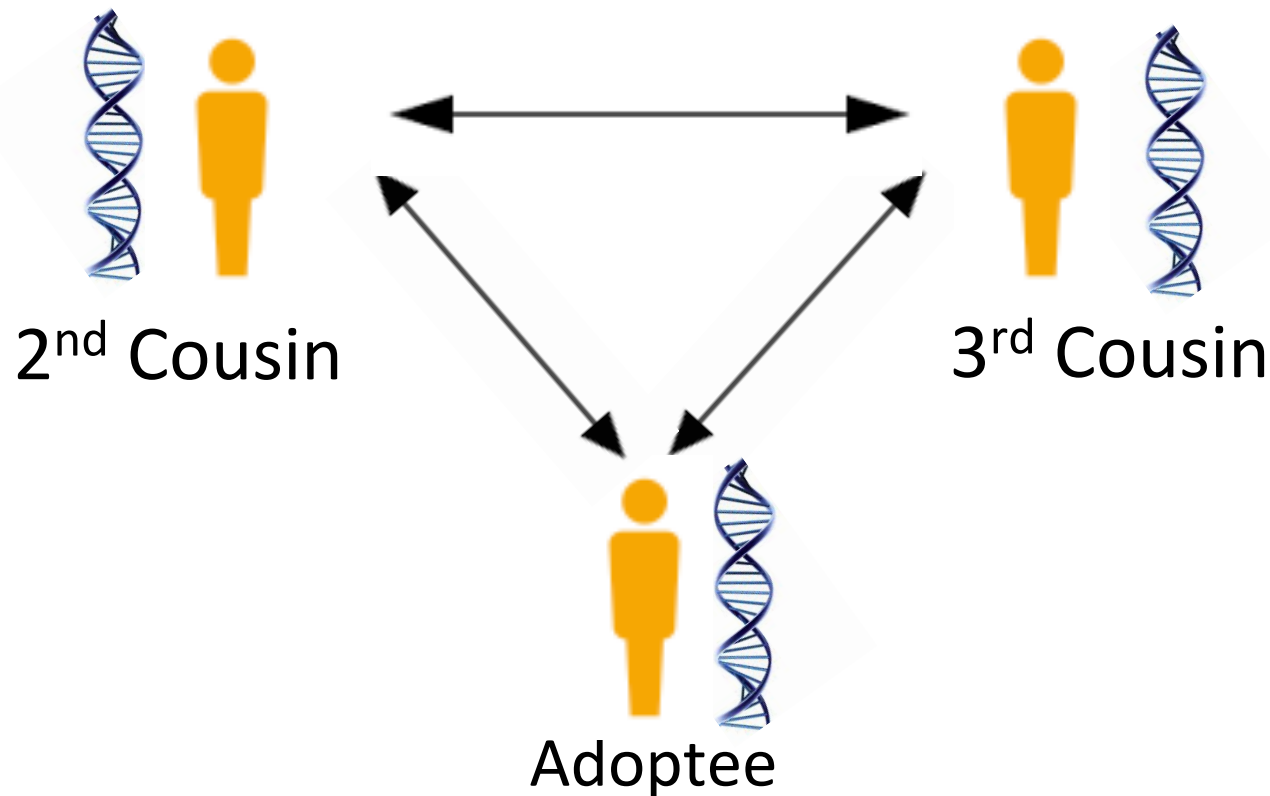
Cousins &  
Close Relatives

# Autosomal DNA Results



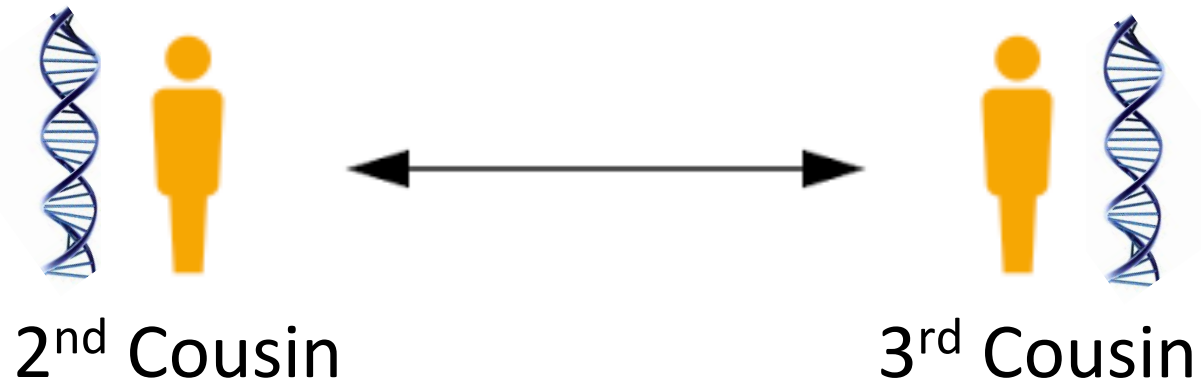
So now what??

# Triangulation

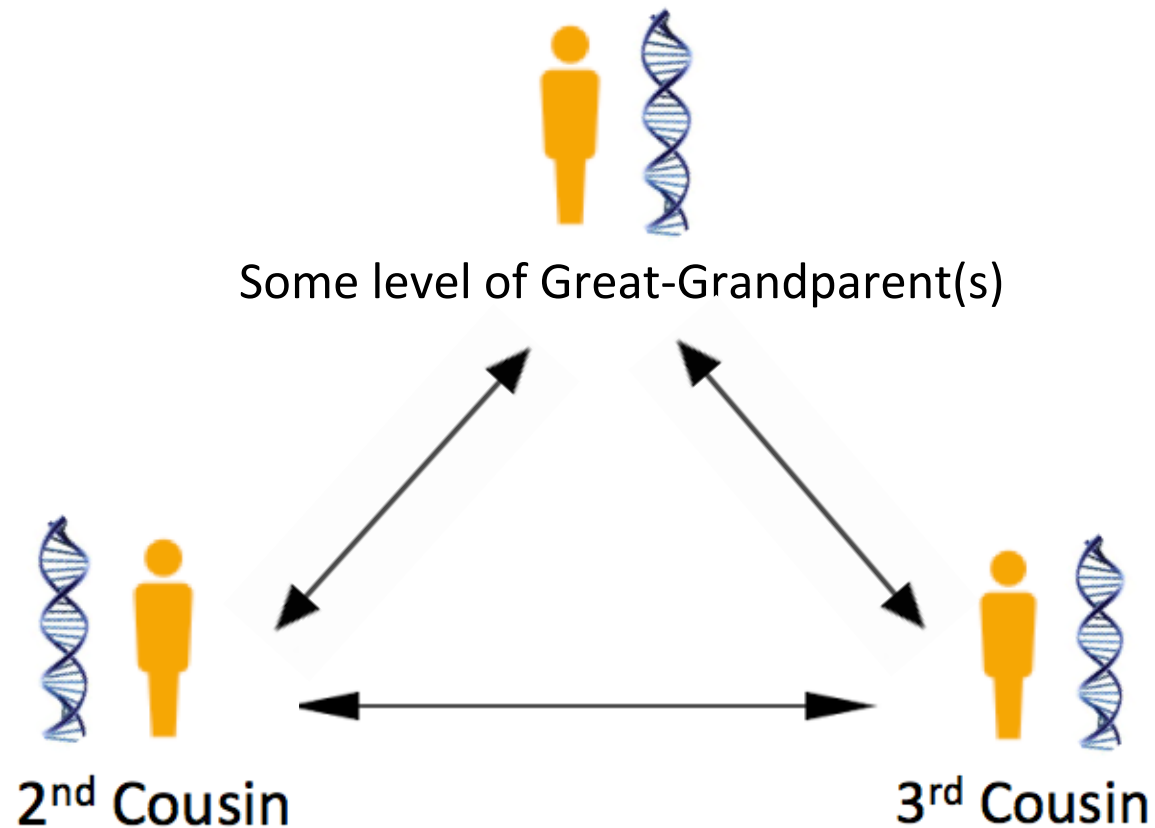


The best way to discover who your ancestors are is to find two cousins of YOURS who are also cousins to EACH OTHER. This is what is known as "triangulation." Cousins of yours who are NOT related to one another are likely from a different branch of your family tree, which does not create a triangulation.

What do these two cousins have in common with each other?



## Most Recent Common Ancestors (MRCAs)



Cousins share what is known as their “most recent common ancestor” or MRCA. Usually the MRCA is a set of common grandparents or great-grandparents they have in common.

# Most Recent Common Ancestors (MRCAs)



Some level of Great-Grandparent(s)



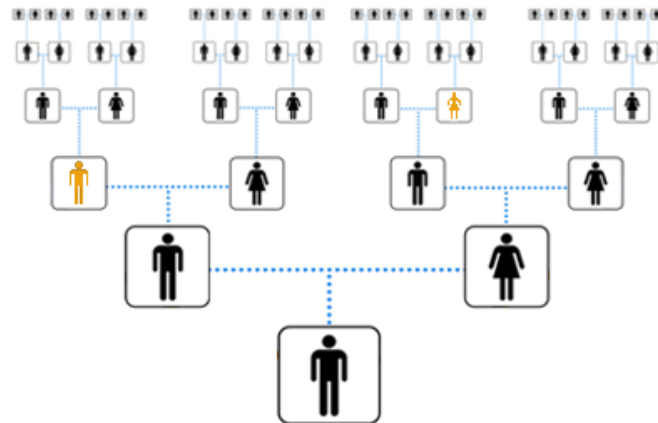
Adoptee

Your genetically linked cousins' MRCA is very likely the same person (or couple) from whom you directly descend.

Tip: Your genetically linked cousins and you likely descend via different offspring of the same common ancestors.

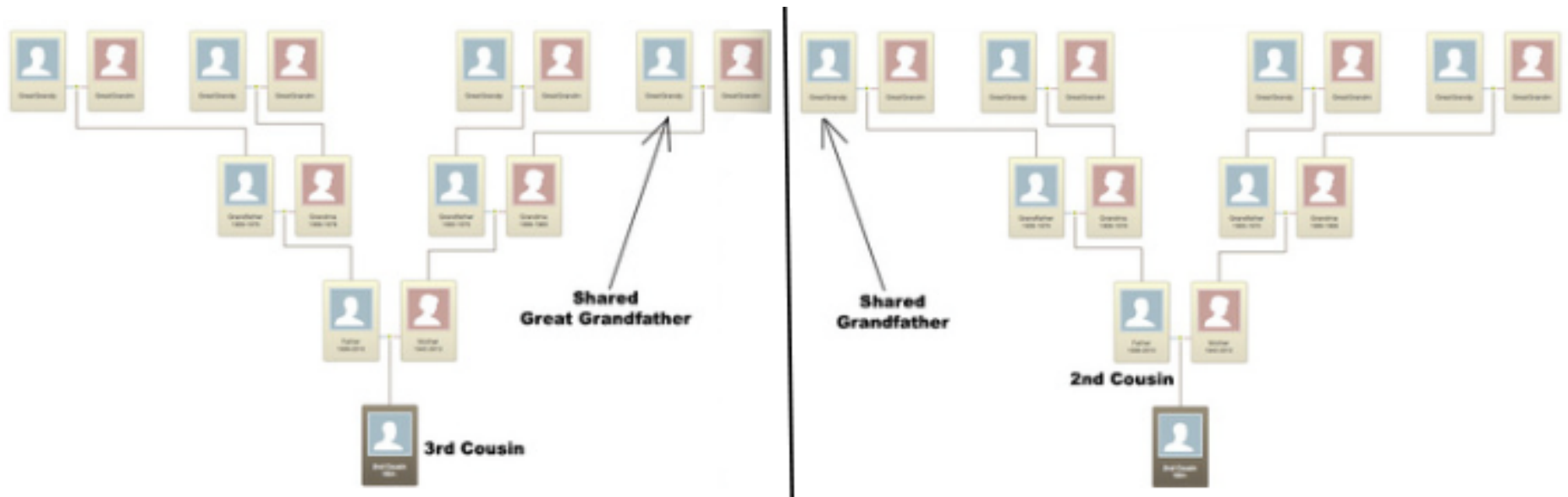
# Cousins and their willingness to share their family trees

- Without access to our genetically linked cousins' family trees, it is difficult to find the most recent common ancestor.
- If the cousins are unwilling to share their ancestry trees, the adoptee must either hire a genealogist to build a tree based on the genetically linked cousins or be willing to try and build a tree themselves.





# Most Recent Common Ancestor (MRCA)



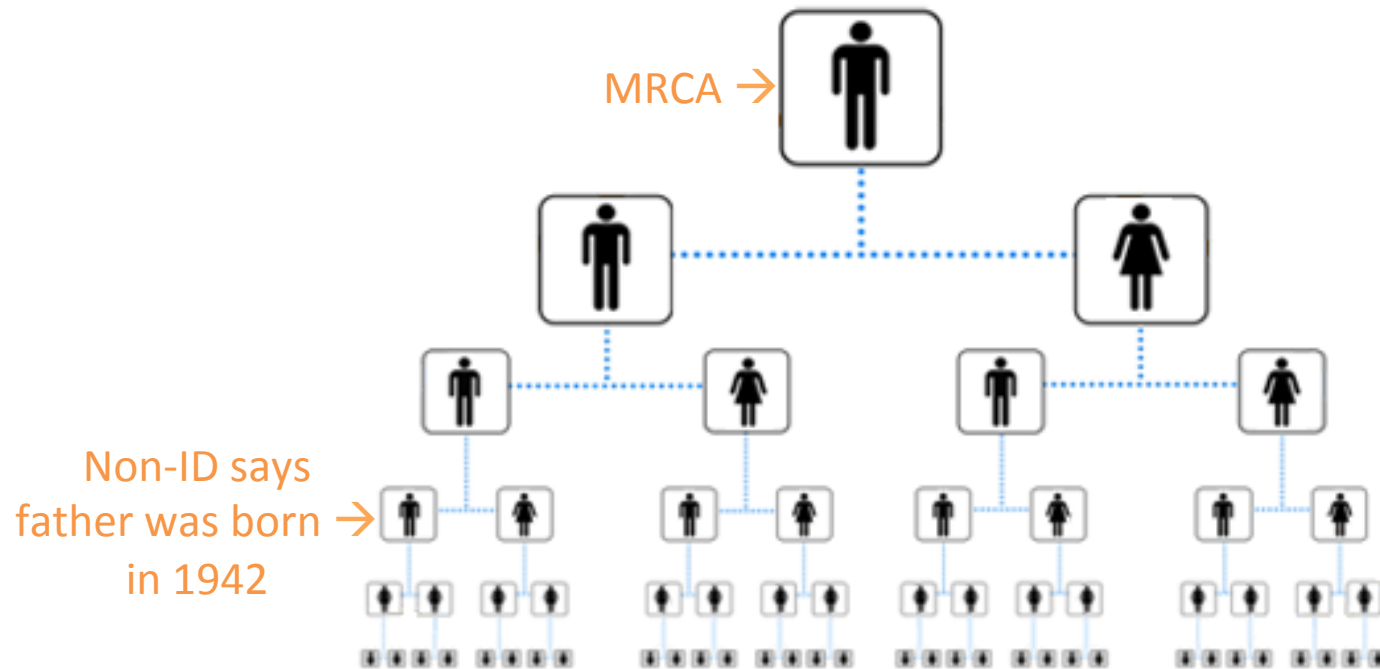
In the example above, two separate trees from two genetically linked cousins are set side by side. The **third-cousin** has a great grandfather who has the same name, birth, and date of death as the **second-cousins'** grandfather.

# Adoptee Non-ID

- Almost all states in the US allow adoptees to request non-identifying (non-ID) information about their birth parents from Social Services.
- The non-ID was gathered and written by a social worker appointed by a state agency prior to the adoption.
- There are some cases where the birth parent deliberately falsified the information they provided to the social worker.
- Receiving your birth parents' non-ID can take between two (2) months and five (5) years depending on the state.



# Non-ID + MRCA



If you combine the information from the non-ID with the information of the most recent common ancestor, there is a chance that a maternal or paternal match may be revealed through circumstantial evidence.

# Autosomal / Paternity Tests

- The only way to be 100% sure that someone you believe may be your birth parent is for both of you to participate in a DNA test. We suggest doing this through the same company.





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**MRCA**

**+** **Non-ID** = **Truth**

Not all searches result in reunions....however they CAN result in learning ones heritage and perhaps medical history. Some adoptees find their birth parents died years ago and their half-siblings don't want to know them, etc. A small percentage of adoptees contact their birth mother who talks to them briefly and refuses further contact.