

ANCESTRY.COM'S GENETIC COMMUNITIES AND WHAT THEY CAN DO FOR YOU



What is a Genetic Community?

- A Genetic Community is a group of Ancestry members who have had DNA tests done,

AND

- Their DNA tests show it's likely they all descend from a group of common ancestors.
- They may or may not live in the same area their common ancestors lived in.

These common ancestors had similar DNA, and their descendants in the Genetic Community inherited similar DNA from the ancestors.

- **Why did the common ancestors have similar DNA?**

- They may have lived in an area where they were isolated geographically from other groups of people with whom they might have intermarried.

OR

- They may have been part of a religious group or ethnic group that only married others of the same religion or ethnicity.
- Over several generations, as the ancestors married within their geographic, religious or ethnic group, no new and different DNA was introduced, so their DNA grew similar.

HOW DOES ANCESTRY FORM GENETIC COMMUNITIES?

Ancestry looks at a network of DNA connections they build using millions of AncestryDNA members in their database.



WHEN ANCESTRY BUILDS A GENETIC COMMUNITY...

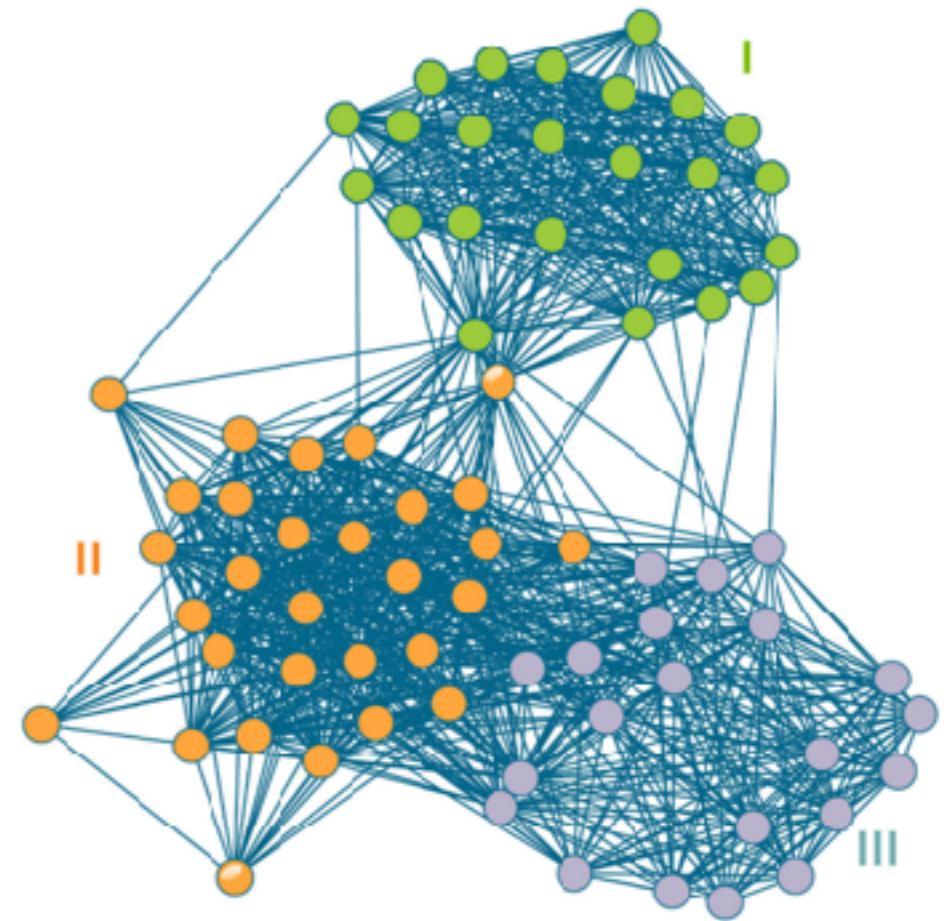
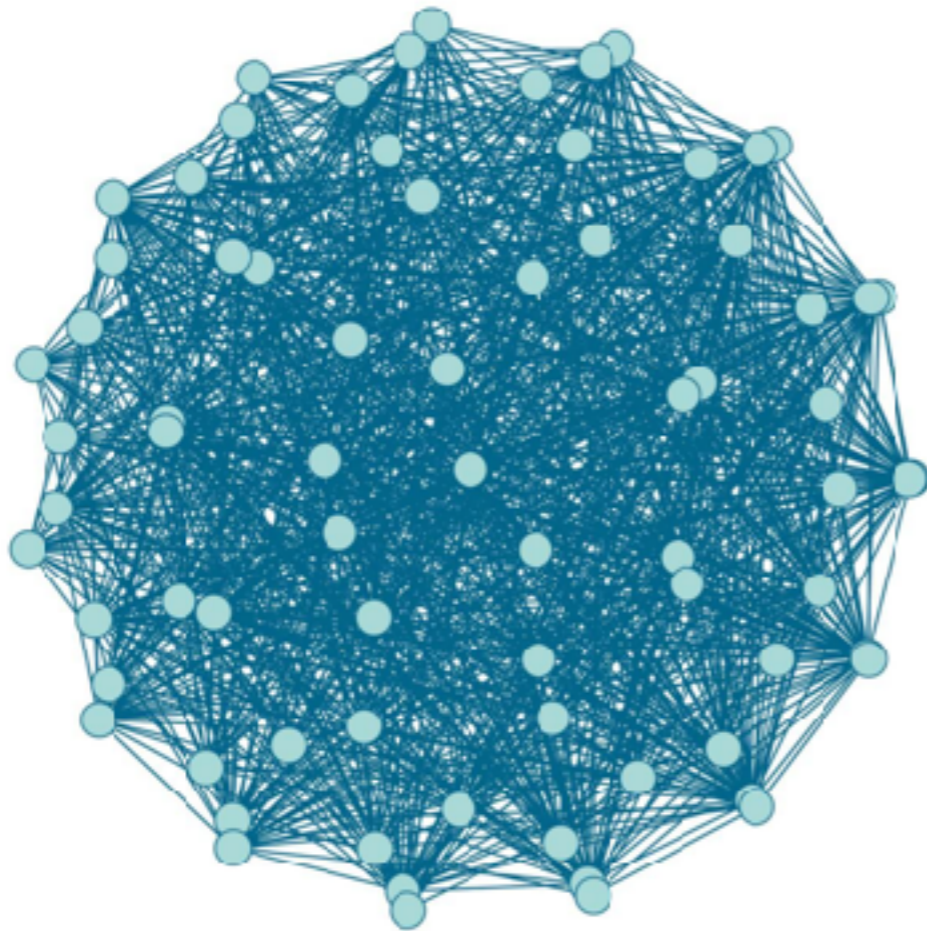
They use millions of AncestryDNA members with billions of DNA relationships between them.

They find groups of people in the network that have more DNA matches to each other than to people in other parts of the network.

These groups are Genetic Communities.

They use a popular network analysis method called community detection to discover them.

HERE ARE TWO VIEWS OF WHAT A GENETIC COMMUNITY MIGHT LOOK LIKE



FAMILY TREES COME INTO PLAY IN FORMING GENETIC COMMUNITIES

Ancestry uses information from family trees AncestryDNA members have linked to their test results to learn about the historical forces that may have brought their ancestors together.

Genetic Communities reflect fairly recent common ancestry, so Ancestry looks for patterns in ethnicity and tree data to help identify times, locations, or groups that members of Genetic Communities might have in common in their past.

Ancestry's ability to discover the story behind a Genetic Community depends on the family trees members have linked to their AncestryDNA test results.

As the AncestryDNA database grows and more people link their results to well-researched family trees, Ancestry's ability to identify more Genetic Communities should grow as well.

What is the difference between Genetic Communities and ethnicity estimates?

Genetic Communities™ are groups of AncestryDNA members who are connected because they share fairly recent ancestors who came from the same region or culture. They may have had different ethnic backgrounds.

Ethnicity estimates show your ancestry going back hundreds to thousands of years ago. Ethnicity is calculated by comparing your DNA to the DNA of a carefully selected reference panel made up of people who have long-standing, documented roots in a specific area.

Both use your DNA to help you learn more about where you're from and the people of the world you're connected to.

Will I get Genetic Communities for all the places my family is from?

Probably not. Ancestry assigns you to Genetic Communities™ based on your DNA matches, and you'll only connect to the Genetic Communities where you have a strong DNA relationship.

So, the more generations that separate you from the ancestors of one of Ancestry's Genetic Communities, the less likely it is that you'll connect.

If both parents are descended from the same population, you are more likely to connect to the Genetic Community representing that population. If only one grandparent is from a particular population, you are unlikely to connect to a Genetic Community that represents that population.

As the database grows, Ancestry will be able to add more Genetic Communities worldwide.

Who are the other people in my Genetic Communities?

Members of Genetic Communities™ are living descendants of a group of common ancestors from whom they all inherited DNA, even if they no longer live in the same area where those ancestors lived.

Because Genetic Communities are based on a connection to a group of common ancestors, people in the Genetic Community often share common history, like migration paths or ancestors who experienced the same event or lived in the same place.

Consider your own family's history. Can you identify forces that kept people together (e.g., geography, culture, or politics)?

WHAT ARE ANCESTRY'S GENETIC COMMUNITIES?

- Europe: 6 regions, 31 sub-regions
- North America: 3 regions, 11 sub-regions
- South & Central America: 3 regions, 10 sub-regions
- Asia: 2 regions, 2 sub-regions
- More genetic communities may be added in the future as more data becomes available.