

DIGGING DOWN TO YOUR ROOTS

Genetic Genealogy

By Anne Toole

For many people, tracing lineage is a continuing mystery; every root that is uncovered leads to more branches deep down – the more you dig, the more you find. In decades past, the search often required countless hours at libraries, a knack for reading and interpreting documents and a keen ability to connect dots across mountains of information, hoping that your sources were correct. With technological advances, DNA testing for genetic purposes – known as genetic genealogy – has morphed into a pay-to-play novelty that connects people around the world through science and incorporates a variety of other hereditary tidbits like possible health conditions and diet predisposition. There are many options available to the public, but which one is right for you? And are you prepared to face any surprising results?

As big as the world is, it can seem very small when you look at how connected the human population really is. Every previous generation doubles the number of ancestors; one person has two parents, who have a total of four parents, who have a total of eight parents and so on. Ten generations

down the line, a person is related to more than 1,000 people, not even counting siblings and their offspring.

When you consider that one generation is approximately 30 years – the International Society of Genetic Genealogy varies this number depending on whether a person is male or female and gauges different time periods when families

began at much younger ages – being related to a thousand-plus people over the span of three centuries is eye-opening.

As genetic genealogy has evolved, participation has increased exponentially, and, in 2017, more people used direct-to-consumer tests than in all other years combined.

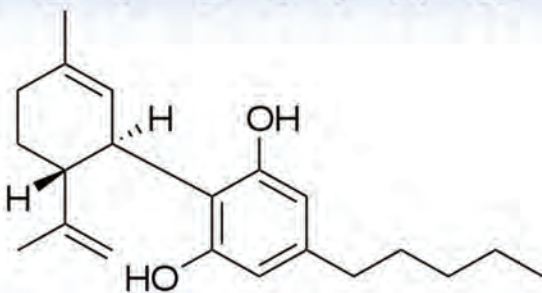
There are dozens of companies offering a wide selection of information based on DNA test kits, including the popular AncestryDNA and 23andMe. Both involve a simple at-home test kit sent through the mail. AncestryDNA focuses on connecting

people to others who have taken the test and potentially share common genes. With the

largest database of participants, it outweighs the competition in terms of the amount of potential relatives to discover. It also provides percentage estimates of ethnicity and

As big as the world is, it can seem very small when you look at how connected the human population really is. Every previous generation doubles the number of ancestors; one person has two parents, who have a total of four parents, who have a total of eight parents and so on. Ten generations down the line, a person is related to more than 1,000 people, not even counting siblings and their offspring.

CBD Carolinas



Healthful Encapsulations

A refreshingly simple approach to Cannabidiol supplementation.

Learn more at CBDCarolinas.com

Clean CBD

Pure Isolate Capsules
by CBD Carolinas

Superior Absorption
Precision Dosing
Minimal Ingredients

Refined from whole plant U.S. hemp to remove impurities which can cause unpleasant taste, stomach upset, and spoilage.

Laboratory Manufactured in South Carolina

Professionally formulated by a Biochemist with extensive experience in Cannabinoid chemistry and compounding.

0.00% THC. 100% Vegan.

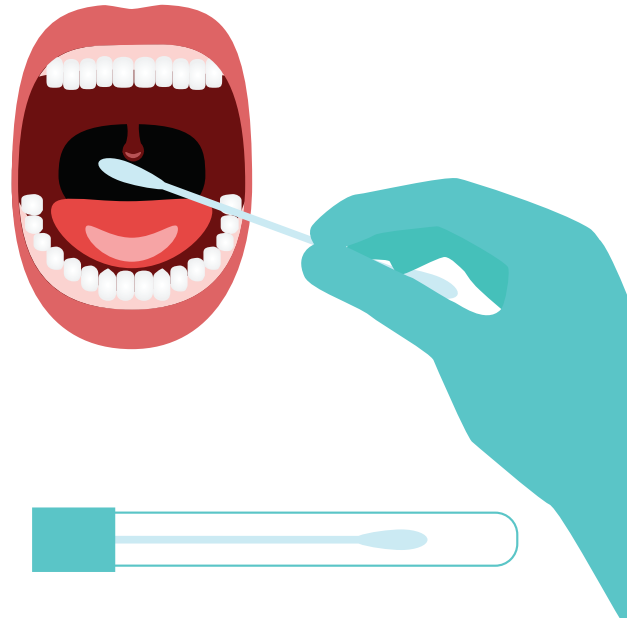
a list of countries or areas your lineage most likely hailed from. Varying membership levels allow users access to even more information – great for genealogists on the hunt for historical documents or wishing to connect with newfound family members overseas.

23andMe’s health and ancestry package connects relatives who share DNA and informs participants of an array of genealogical and health issues that a person may be likely to have based on their DNA. These health risk reports can indicate a possible risk of diseases like Alzheimer’s and Parkinson’s, a possibility of hereditary hearing loss, lactose intolerance or even traits like bald spots and whether you were born with a sweet tooth or preference for salty snacks.

Dr. Shashidhar Pai, a pediatric geneticist with the Medical University of South Carolina, stressed that while these home test kits are fun, any medical information they provide is purely reflective of a possible predisposition and should not be used as a medical diagnosis.

“People think it’s a fun thing to do because they want to know where they are from, but these companies are forbidden from claiming they are making medical diagnoses or predictions,” Dr. Pai explained. “They can tell you that you could be at risk, but that’s a vague statement with no legal or medical force behind it.”

Dr. Pai and his staff perform DNA-based testing based on a patient’s history or physical symptoms.



“If there is a family history of diseases like breast or colon cancer, heart disease or diabetes, then there is a possibility a gene in your family predisposes you to the disease,” he said. “If a person’s doctor suspects this, then we test them and give them an answer that is useful.”

Regenerative Stem Cell Therapy

Advanced Medical Breakthrough!

Do you suffer from...

- Low Back Pain
- Neck Pain
- Knee Pain
- Shoulder Pain
- Joint Pain
- Osteoarthritis

CALL TODAY!

Discover a Life FREE of Pain!



Get relief without costly & painful surgery!

Treatment is now available locally and can effectively reduce and even eliminate your pain *without surgery or addictive medications.*



2 Carriage Ln.,
Charleston, SC 29407

843.571.3100


This revolutionary treatment option can CHANGE YOUR LIFE!

Regenerative treatments can repair tissues in your body that are damaged due to age, disease and defects. You will learn about options that have the power to go to these damaged areas and rebuild the area.

Though the ability to connect with long-lost family members or learning of possible medical traits can be exciting, opening the door to these opportunities is not without pitfalls. Genetic privacy and the risks of sharing your DNA information with companies and third parties – and often not understanding that you are doing so – is a big concern from a legal standpoint.

Apart from the potential privacy repercussions is the real risk of finding something unexpected in your family tree – at that point, the information not only involves you but someone else who may or may not want to know about the connection.

In some cases, the revelation of being related to a co-worker or having a half-sibling or an unknown parent becomes an uplifting discovery with happy-teared reunions. In other cases, being blindsided with a surprise half-sibling or adopted parent can uncover painful secrets some relatives wish were left buried in the past.

If you choose to dig further into your roots, do your research to find a trustworthy company that can provide the information you are looking for, and be prepared for whatever answers you may find. 



DNA By the Numbers

1/3 OF AMERICANS

cannot name any of their great-grandparents.

(Omnibus Survey, MarketTools)

22 PERCENT OF AMERICANS

don't know what either of their grandfathers do/did for a living.

(Omnibus Survey, MarketTools)

Approximately
5 MILLION AMERICANS

alive today were adopted.

(University of Oregon Adoption History Project)

Only **4 IN 10 AMERICANS** know both of their grandmothers' maiden names.

(Omnibus Survey, MarketTools)

27 PERCENT OF AMERICANS

don't know where their family lived before coming to America.

(Omnibus Survey, MarketTools)

Ancestry® hosts more than

11 BILLION ancestral profiles.

(Ancestry®)

