

# YDNA AND AUTOSOMAL DNA: A CASE STUDY

Diahan Southard - Your DNA Guide  
Author of DNA Quick Guides and Video Tutorials  
www.yourDNAguide.com  
guide@yourDNAguide.com

As genetic genealogy becomes an acceptable way to approach your genealogical research, more and more people are reporting their successes with this kind of research. However, as with other areas in our life, we tend to over-represent the extremes in the experience (the very very good or the very very bad) and there isn't really much said about the average experience.

In this session we will discuss the situation on one family and their typical, and not-so-typical experiences with DNA testing by exploring the expectations and results of this DNA testing idea.

*Introducing the Cornwells:* Mike and Val live in California where Mike is retired and Val owns a dog training business. Even though we will be talking about Mike's results, it is actually Val who is the genealogist.

## ONE

**Expectation:** Autosomal DNA Testing Can Help Verify and Extend your Family Tree

**Result:** You get a long list of people who are your genetic cousins, but many either do not post pedigree charts, or have very shallow charts, or who just don't seem to connect to you in any way.

**To Do:** Your initial step in your autosomal DNA testing experience is the same as it is in traditional genealogy: It all starts with you.

### START WITH THESE TWO STEPS:

1. Make a list of the surnames and locations that appear in your family tree, according to generation. For example, for your grandparents you should have at least four surnames (one for each of them) and the locations where they were born and where they lived (especially during their 20's and 30's).
2. Go into your DNA test results with a research goal in mind.

**The Cornwells:** They did attack their DNA test results with the goal of understanding more about Mike's Cornwell line. They searched through their results for other Cornwells, but had no luck. They even had a second cousin show up, but couldn't even figure out how they were related to him!

## TWO

**Expectation:** Your Admixture results can confirm origins or provide clues as to the ancestral

origins of your ancestors.

**Result:** Except in a few cases, admixture results are like a coffee table book: Nice to look at, but usually lacking in useful genealogical information.

**To Do:** Learn about the cans and can notes of the ethnicity results, and enjoy the journey.

**The Cornwells:** It was the admixture tests that actually turned them off to DNA testing all together. Mike's brother's ethnicity results were so different than his own, that they just threw up their hands and decided this DNA stuff was for the birds.

## THREE

**Expectation:** The relationship ranges given can be used as a guide to understand how to find a common ancestor.

**Result:** The relationship ranges are very very general, and you have to take a few things into account before you can truly understand what they are telling you.

**To Do:** Understand what the relationship range given by the testing company really means. This involves trying to understand the generation of the person tested in relationship to others that are in the database. For example, if you are in your 60's, and the person tested is also, then the two of you could be in the same generation. But if the person tested is in their 30's, it is likely that you are looking at a once removed type of situation.

You can also use the total amount of shared DNA to help guide you in determining your relationship to others. See [www.yourDNAguide.com.scp](http://www.yourDNAguide.com.scp).

**The Cornwells:** Didn't realize the actual relationships of individuals who were tested because of the ambiguity in labeling of close relationships.

## FOUR

**Expectation:** A 37 Marker YDNA test should be enough to determine a paternal line relationship.

**Result:** Sometimes while you do have several YDNA matches at the 37 marker level, none are exact, and there isn't a clear surname pattern among your close matches.

**To Do:** Upgrade to the 67 marker level to provide more distinction between you and others who were tested.

**The Cornwells:** The Cornwells did upgrade to 67 markers, but were still unable to see a very clear connection between themselves and others who were tested. But on a whim, they decided to have Vincent, Mike's brother tested. Vincent did not show up on Mike's match list.

## FIVE

**Expectation:** You can try to find out about a particular ancestor by searching through your match list for surnames and locations relevant to that ancestor. I call this the *Ancestor Approach*.

**Result:** You will end up with lists of matches that need to be tracked and coordinated. You can do this using Excel, as outlined in my *Organizing Your DNA Matches* quick sheet. You can download

the template for the Excel spreadsheet I use from [www.yourDNAguide.com/resources](http://www.yourDNAguide.com/resources).

**To Do:** Track anyone who you can tell is related to each other, noting their common ancestor and how many generations separate them from each other. Again, you can use Excel, or just a piece of paper and a pencil.

**The Cornwells:** Tried this approach while looking for Cornwells in Mike's autosomal DNA matches. They weren't able to find what they were looking for.

## SIX

**Expectation:** Start with your closest genetic match and try to determine your relationship. I call this the *Match Approach*.

**Result:** Usually results are mixed here. For most, identifying a connection to a second cousin is usually straightforward. Third cousins can also often be identified. Fourth cousins are much more difficult.

**To Do:** Evaluate your genetic relationship, keeping in mind your age and the age of the person tested. Identify the most likely generation based on this information. Record the surnames and locations of ancestors on that line and begin research with the most likely couple. Use the *Shared Matches* or *In Common With* tools to help.

**The Cornwells:** Brenda went back to Mike's second cousin match. She identified the likely generation in which they shared a common ancestor. She recognized some of the names from earlier explorations through the match list. She was able to use a combination of genetic and genealogical tools to help her identify a possible connection with Mike.

## SEVEN

**Expectation:** DNA testing should be another way to connect and enrich your family tree, to encourage more generations to be involved in family history, and to connect with cousins on a new level.

**Result:** There is no telling what you will find in a DNA test. Some of the information might be exhilarating, while other findings may be devastating.

**To Do:** Be considerate of others and their rights and feelings as you embark on your own DNA journey. There are many outcomes to consider, so be prepared for whatever may come.

**The Cornwells:** For Mike and Val, this was an overall sweet experience. Not all family members accepted the results with open arms, but they feel that the information learned was worth the emotional roller coaster.