

Learn from the Pros: Reliability of DNA Tests by Diahana Southard (My DNA Guru)

The following article segment below is from my “DNA Guru, Diahana Southard. For more information from Diahana about this posting, go to <https://www.familytreemagazine.com/dna/results/how-reliable/> There’s also a second article in the May/June 2020 issue of **Familytreemagazine.com** for additional references.

Question: Remember there are two parts to your DNA testing. You receive information connecting you to locations, as well as DNA that connects you to people. We have to talk about these results differently.

Answer: Your location information comes in the form of your ethnicity results. Those pie charts and percentages are based on several including reference populations (who they are comparing you against) and lots of fancy math. In science we define reliable ethnicity results using two metrics: precision and recall. Precision measures the diversity of a genetically related group of people. So if we have a group from Ireland who are sharing DNA, do we also see people from England or France in that group? If the answer is yes, we have low precision, if the answer is no, then precision is high (high is better, in case you were wondering!).

Recall is when we look at a group of Irish people and we ask how often they are placed into the Irish category, as opposed to being siphoned off to Italy or England or Scandinavia. Think of recall like the call of a bird, that should only be answered by other birds of a feather.

Closing Comments

For more information, suggest you Google Search on “Diahana Southard” as she has a plethora of published articles on-line, downloadable pamphlets and video clips. She is a DNA expert well beyond my editorial description. For example at the 2020 RootsTech Conference in February, she presented 4 clinic presentations. And now you can better appreciate why she is my DNA guru!! There are several video clips available at <https://www.rootstech.org/videos/diahana-southard> to further understand my enthusiasm for Diahana’s DNA pursuits.

In future postings, I will introduce to some the best genealogists in the world by sharing their works with you.