

IN THEIR OWN WORDS

DNA Tests Find Branches but Few Roots *Continued*

Bennett Greenspan, founder and president of Family Tree DNA, said his company sometimes has to tell clients just the opposite. "We'll have people who may think that they have a certain type of ancestry and we'll tell them based on the test they are not," he said. "I can only tell them what the tests show, nothing more. And sometimes it's not what they want to hear."

Nixon explains that the tests can analyze either mitochondrial DNA, which is passed on only by females to their male and female offspring, or the Y chromosome, which is passed on only to males. He reviews the practices of several different companies and the mixed experiences of different customers. He then continues: Even some early proponents of DNA testing for ancestry have doubts about how useful the tests are.

Bert Ely, a geneticist at the University of South Carolina, was a cofounder of the African American DNA Roots Project in 2000, hoping to use DNA tests as a way to find connections between African Americans and ethnic groups in Africa.

"I originally thought that the mitochondrial DNA test might be a good way for African Americans to trace their country of origin," Mr. Ely said. "Now I'm coming to the opposite conclusion."

[Mr. Ely] matched the DNA sequences of 170 African Americans against those of 3,725 people living in Africa.

He found that most African Americans had genetic similarities to numerous ethnic groups in Africa, making it impossible to match African Americans with a single ethnic group, as some companies assert they can do.

Mr. Ely also published a paper in which he tried to determine whether the country of origin of native Africans could be found by using mitochondrial DNA tests. Several of the Africans in the study matched multiple ethnic groups. For example, DNA results for a person from Ghana provided genetic matches with people in 20 African countries. . . .

It's not that the tests are wrong, scientists say. Most companies use the same statistical methods and, in some cases, the same labs to extract DNA from samples. But even the largest databases have only a few thousand records in them, and some areas and populations are sampled more than others. Most companies get data from information published in publicly available research papers; few collect samples themselves. Scientists emphasize that much of this data was gathered for other purposes and was never intended to be used for personal genealogical testing.

For their part, testing companies say they continually update their databases to get a larger number of samples.

As part of the reporting for this article, I [Mr. Nixon] decided to submit my own samples for a mitochondrial DNA test. *Roots* had left an impression on me. . . . Like most African Americans, I longed to know where I came from. Could tests tell me? . . .

At a 2007 reunion for descendants of slaves of James Madison, Dr. Bruce Jackson, director of the African American DNA Roots Project at the University of Massachusetts, collects a DNA sample from Dr. Gladys Marie Fry of Washington, DC.

