

GSSCC - - DNA SIG handout
Exploring Living DNA
by Gail Burk - - June, 2023

Introduction

Living DNA is a U.K.-based company that specializes in DNA testing and analysis whose head office is in Frome, England, with facilities in the U.S. and Denmark. Living DNA's service provides deep ancestry details from all around the world. In 2019, Living DNA was reported to provide, for each DNA sample tested, recent (defined as "less than 80,00 years") ethnic breakdown for 80 regions in the world with the U.K. broken down into 21 regions. They also provided insight into female and paternal (for males) heritage going back about 200,000 years, showing migration patterns out of Africa. The typical Living DNA results provide you with your genetic ancestry going back approximately 10 generations.

Testing through Living DNA only provides matches within their database; and the Living DNA database is relatively small compared to other DNA companies - - as of June, 2021, they had about 300,000 users. People can transfer their raw DNA data from other sites to Living DNA for free. If you want to see your maternal and paternal haplogroups, however, you have to purchase Living DNA's kit.

Navigation of the Living DNA site

Start with the Help menu - - The Help link is found on the lower left side of the home page. At the Help page, you can access buttons to learn about Precision Health; Before You Buy; To Get You Started; Using Your Kit; Your Results; Exploring the Science (which is about how to participate in research). The Help menu also includes information about terms and conditions, and privacy issues. Discussion of health-related aspects of Living DNA is omitted in this handout in order to focus on the genealogy aspects of the company.

Before You Buy - - There are 17 articles total in the "Before You Buy" category. A few of the most useful links are "Which regions we compare your ancestry with," which names the reference populations Living DNA uses; "What does my ancestry kit include," which explains your ancestry report showing the regions and, where available, sub-regions your ancestors are from over the past 1000 years and your extended ancestry including determination of a haplogroup exploring the migration paths your ancestors took out of Africa 80,000 years ago, and access to

Living DNA's family matching service. Also see, "How does the testing process work," which provides a brief description of the logistics of submitting a DNA kit at Living DNA.

To Get You Started - - There are 16 articles total in the "To Get You Started" category. Most of the links in this category deal with the logistics of dealing with error messages, how to create an account, and how to manage other people's kits. The links in this section do not deal at all with how to navigate the Living DNA site, or how to utilize your DNA results.

Using Your Kit - - There are 9 articles total in the "Using Your Kit" section. The articles in this category deal with how to submit your saliva sample. The links in this section do not deal at all with how to navigate the site or how to use your DNA results.

Your Results - - There are 6 subcategories within this section. These subcategories include "Understanding Your Motherline and Fatherline Results;" "Family Ancestry Results;" "Family Networks;" and "Account Management." Finally! We get to sections that actually discuss how to use your results. Additional subcategories deal with "Neanderthal and Denisovan Upgrade;" and "Viking Upgrade," which require purchase; although annoyingly, Living DNA does not tell you in these subcategories how much the Neanderthal and Viking Upgrades cost. By visiting the Living DNA "Store," you learn that the Neanderthal and Viking Upgrades currently cost \$20.00 each (U.S. dollars, not British pounds).

Understanding Your Motherline and Fatherline Results - - This subcategory includes a brief overview of how maternal and paternal DNA is inherited; and explains your migration map and also your coverage map where your DNA haplotype is most commonly found today. This section also explains that your deep ancestry results may change over time as Living DNA conducts updates in its analysis, although Living DNA does not routinely update every sample on a regular basis.

Family Ancestry Results - - This subcategory includes a detailed analysis of African DNA and a granular breakdown of African regions associated with various discrete genetic populations. This subcategory also explains how to opt into "shared maps," which enables you to view your match's autosomal map. Of

course, your match must opt into shared maps, and most matches have not opted into maps. This subsection also explains how to access your full ancestry report if you have transferred your DNA data to Living DNA from another company. The full ancestry report requires purchase of the “Recent Ancestry Upgrade” for the current price of £29.00 (British pounds, not U.S. dollars).

Family Networks - - This subcategory tells you, most importantly, how to opt into Family Networks. This subsection also includes discussion about how to sort your DNA matches by amount of shared DNA, by date of match, or alphabetically; how to send and receive messages; a discussion of the accuracy of matches; how to interpret the Family Matching Overview; a detailed exploration of relationship predictions, which Living DNA breaks down into a series of degree relationships. This explanation of relationship predictions is worth reading so that you understand why your third-to-fifth cousins are all lumped into a list called “8th degree matches.”

Profile link - - Your profile on the Dashboard page is the first thing you will see after logging into your account at Living DNA. Scroll down to see your maternal and paternal haplogroup, and to access a link to your ethnicity estimate. The rest of the profile page consists of various “shopping” links. If you manage the DNA kits for other people, you can go to the Profile link at the top of the left-hand panel and click on “change profile” to select one of the kits you manage. The Dashboard link is the default link upon logging in.

Ancestry link - - In the left-hand panel you will find the Ancestry link, right under the Dashboard link. The Ancestry page displays your ethnicity estimate, with particular detail shown for users with U.K. ancestry. By clicking on any of the ethnicities listed on your report, you see an enlarged map of that region, and you can read a thumbnail history of that ancestral region. Darker areas on the map show where your DNA is most prevalent. Regions for the U.K. get much more detailed treatment in the thumbnail histories than do other regions. Some other regions have shockingly abbreviated thumbnails; e.g., France and Germany.

Relatives link - - On the left side, under the Ancestry link, is the Relatives link. This takes you to your DNA match list. The default setting is that your matches are listed in descending order from the match who shares the most DNA with you, and ranked by degree of matching. By clicking on the small “i” within a circle in

the right-hand corner beside each matching degree level, you can read a brief description of that degree of matching.

Each person on your match list is shown by name or screen name, with a small round flag icon to indicate the country of residence. If you don't recognize the flag, hover over the flag icon to see the name of the country. Each match displays shared DNA in both cMs and as a percentage, with a predicted relationship range. The number of shared matches with each person on your list is shown on the right.

Each person on your match list also displays a bronze, silver, or gold trophy icon, which corresponds to how "active" Living DNA has determined your matches are at the Living DNA site. A gold trophy ("very active") seems to indicate anyone who has logged on a few times a year. A silver trophy ("active") seems to indicate anyone who has logged on once a year. A bronze trophy is for matches who have a pulse. A little briefcase icon indicates matches whose accounts are managed by someone else. Note - - people in the shared matches list also display all the same icons. Very occasionally, a match will have a profile photo.

Click on the match's name to see the same details about your match as you see in the list view, and scroll down to see the names of people in your shared matches list.

Things you can skip - - Don't bother clicking on the left-hand links for Wellbeing, Viking, or Neanderthal, unless you have purchased those upgrades. If you want to read a bit about Vikings, Neanderthals, and Denisovans, you can go to the Help menu and click on those sections to read a general overview about those populations.

Pros and Cons

Some things to like about Living DNA - - Living DNA provides, by far, the highest number of reference populations for people with British, Welsh, Scottish and Irish ancestors compared to other companies. If you have British ancestry, you will receive a very detailed ethnicity estimate of where in the British Isles your DNA ancestors were concentrated.

Many of your matches at Living DNA have only tested at this company, which means you will be able to add these new matches to your list of relatives to

research. You will find many more matches among residents of the U.K. and Australia at Living DNA than at other companies. But, since they have only tested at Living DNA, you may have a hard time figuring out how you are connected to these matches. And if you are not a recent immigrant from the British Isles, your matches will not be close matches.

Some things not to like about Living DNA - - Living DNA has no trees attached to DNA matches. Living DNA does not indicate the gender of your DNA matches and they do not indicate an age range for your matches. Living DNA too often lists the same DNA match more than once, and often lists the shared matches with your match more than once. These duplicate entries make it look like you have more matches than you actually have.

Most of your matches at Living DNA will have relatively few shared matches - - which is not much to work with. You will have many fewer DNA matches total at Living DNA than at other companies, because they have a relatively small overall database. There are no grouping tools (colored dots, etc.) at Living DNA, although there is a notes feature.

The biggest pain (and biggest time-suck) at Living DNA is the need to constantly use other DNA sites to try and figure out how your Living DNA matches connect to you - - and mostly not succeeding, because the Living DNA match list provides so little information about each match, and Living DNA lacks analytical tools.

Sources

<https://my.livingdna.com/dashboard> (Living DNA site, after log-in as member; there is very little information available on Living DNA's home page without log-in)

https://en.wikipedia.org/wiki/Living_DNA#:~:text=Living%20DNA%20is%20a%20UK,analysis%20and%20using%20linked%20DNA. (Wikipedia)