DNA Painter

DNA Painter Is a site that started as a new way to map your DNA chromosomes to specific ancestors based on your matches. It has become much more than that over the past couple years. In addition to chromosome maps, there are also tools for Shared CM, What Are The Odds (WATO), and a new auto-cluster mapping tool.

You can access Chromosome maps, Tools, and Ancestral Trees easily from the "Dashboard" page.

Chromosome Maps

According to the website the purpose of this tool is to "be able to identify which ancestors were the source of your DNA, with as much granularity as possible". This really helps in identifying unknown matches. If you can map an unknown match to a segment that you do know, then you know how you and the unknown match are related. Identifying patterns also can help you break through brick walls or make contact with matches who may help you do that.

A single profile is free – you just need an email address to sign up.

After signing up, start with creating a profile
- Start with yourself
- Name the profile
- Save & start painting!

It begins with a blank chromosome map

Add information from 23andme, FTDNA, MyHeritage, and Gedmatch. Ancestry doesn't provide specific chromosome segment data information for matches so they can't be used for this. You can load your raw data from Ancestry into FTNDA or MyHeritage for a minimal cost and get segment data for your matches from them.

When mapping a match, you associate a segment with a specific ancestor(s). You may need to associate an ancestor with a couple rather than a single person.

You can color code groups, (ancestors) turn groups on/off, expand the chromosomes to see maternal and paternal sides.

Under settings, you can import 23&me ancestry composition, import maternal/paternal info from FamilyTree DNA, share the data, download a picture of the data, and generate segment or match reports. Under settings you can also take a tour of the page.

If you run into issues, look for the ? The creator, Jonny Perl has done a great job at making sure instructions/help is available throughout the site.

Tools and WATO

There are 13 total tools currently available under the tools menu. This gives an overview of the most commonly used tools. For more information on all the tools see https://dnapainter.com/tools

What Are The Odds (WATO) v2?

> This tool allows you to estimate how someone is related to a group of people with a known common ancestor. You need a match that you don't know how you are related and a group of people that also match that person that you do know how they are related to each other. The tool guides you through creating a family tree for the people you do know and then based on the shared CM for the unknown person estimates odds in how you are related. You can now create a family tree easily by uploading a GEDCOM.

Shared CM Tool

> If you know how many centimorgans (CMs) you share with someone this tool gives you relationship probabilities based on the shared CM. You'll also see a chart to see how you might be related based on shared CM. Simply enter the # of shared CM in the box and see what the probabilities are.

AutoCluster Tool

> This tool allows you to map your cluster matches to a chromosome map. This tool makes it easier to see how the clusters fit on a chromosome map. If you know how you're related to a match in a cluster then you can identify that match and cluster more easily on the chromosome map which can help you break through brick walls.

Ancestral Trees

This tool is a great way to visualize your ancestors and plot potential genetic relationships.
Upload a GEDCOM to start.
Mark ancestors that you've confirmed a genetic relation to based on other matches. Click on a person and select "Mark as a genetic ancestor". You can also edit the person or delete them.
When you edit a person, you can add notes as well. You can add names of matches here.
Change palette coloring as you'd like.
Use the DNA filters to see your X-DNA line, your mitochondrial DNA Line or all the ancestors you've confirmed as genetic relatives.
You can now view the tree in a tree, fan, or text format. You can also color code your tree based on dimensions such as "Age at Death", or "Western Zodiac Sign". You can create your own dimension based on data in your family tree.

If you get lost go back to your dashboard and scroll down. You can click on a link to the help section.

There are a number of YouTube video that provide excellent instruction for using the tool.

Help Resources

DNA Painter Help Page: https://dnapainter.com/help

Jonny Perl: An introduction to DNA Painter:
https://familytreewebinars.com/download.php?webinar_id=955

Blaine Bettinger: Mapping your Chromosome with DNA Painter:
https://www.youtube.com/watch?time_continue=1&v=wyjcJxywTZI

Ashley Bens: DNA Painter Demonstration: https://vimeo.com/283126987

Jarrett Ross: What Are the Odds Tutorial
https://www.youtube.com/watch?v=ppQfwZHHqNk