# **DNA Painter and Chromosome Mapping**

Pamela Guye Holland

Pamela.Holland@gmail.com

www.GenealogyByPamHolland.com

DNA Painter (<a href="https://dnapainter.com/">https://dnapainter.com/</a>) is a user-friendly online tool for chromosome mapping.

- Use your DNA test results to find out which ancestors gave you specific segments of your DNA.
- Allows tracing other DNA matches to same ancestors you have painted.
- To learn more visit <a href="https://dnapainter.com/help">https://dnapainter.com/help</a> or FAQs at <a href="https://dnapainter.com/help/faq">https://dnapainter.com/help/faq</a>.

## Where to get your DNA segment data:

- Instructions for finding segment data at different websites: https://dnapainter.com/help/matchdata
- FamilyTreeDNA: <a href="https://www.familytreedna.com/">https://www.familytreedna.com/</a>
  - Family Finder Matches
  - Select a match and then click on Compare Relationship
  - Click on Detailed Segment Data
  - Select all (Ctrl or Cmd A) and Copy to your clipboard (Ctrl or Cmd C)
- 23andMe: https://www.23andme.com/
  - Family & Friends > Advanced DNA Comparison
  - Select a match and click on Compare
  - Select all (Ctrl or Cmd A) and Copy to your clipboard (Ctrl or Cmd C)
- MyHeritage: https://www.myheritage.com/
  - o In your DNA matches click on Review DNA Match for the person you want
  - Scroll to the bottom of the page to find chromosome browser
  - Click on Advance Options
  - Click on Download shared DNA info
  - Open the file on your computer
  - Select all (Ctrl or Cmd A) and Copy to your clipboard (Ctrl or Cmd C)
- GEDmatch: https://www.gedmatch.com/
  - Run a One-to-one Autosomal DNA Comparison for your and the match's test kit
  - Select Position Only and then Submit
  - Select all (Ctrl or Cmd A) and Copy to your clipboard (Ctrl or Cmd C)
- AncestryDNA: <a href="http://dna.ancestry.com/">http://dna.ancestry.com/</a> You must transfer raw results to GEDmatch to access. Instructions, when you are logged in, are at <a href="https://app.gedmatch.com/UploadHelp.php">https://app.gedmatch.com/UploadHelp.php</a>

## To Create a new Chromosome Map

- Dashboard > Chromosome Maps > Create a new map
- Name and Save

## **How to Paint a Match**

- Dashboard > Chromosome Maps > select map to use
- See "Where to get your DNA segment data" above and it will be in your computer's clipboard.
- Select Paint a New Match.
- In pop up box, paste date from clipboard (Ctrl or Cmd V).
- Preview Segments.
- Looks OK? Click on Save these segment to your map.
- Add any other information or change color if you want then click Save Match.

## Tip

Do not add matches closer than 2<sup>nd</sup> cousins.

## Finding a GEDmatch tester on Ancestry

- Search in Ancestry match list by GEDmatch name.
- May not have same name as used on GEDmatch.
- Maybe used initials or nickname or alias.
- Look at shared matches with others you identified from same line.
- Look through list for matches with same amount of cMs in common. Usually, will be smaller on Ancestry due to how they report shared DNA.
- If a distant match, there may be too many to wade through.

### Look at GEDmatch for tester information

- Do a User Lookup search with the test kit number.
- Will learn email address associated with the test kit.
- Could contact by email.
- Will learn if a GEDCOM tree is linked to the test kit.
- If GEDCOM, search for same people in public Ancestry trees.
- Important: On Ancestry's list of matching persons from family trees, select "See more like this . . ." then "View all."
- Open trees and click on tree's owner to open their Ancestry profile.
- On Ancestry User Profile page, it will say if you are a DNA match or not.
- Run a GEDmatch One-to-Many DNA Comparison with their test kit number.
- Look at tester's close matches.
- Do any have a GEDCOM tree?
- Do any have the same email address?

#### **DNA Painter Trees**

- Will need a GEDCOM file or create manually.
- Your software program can create a GEDCOM or you can download one from your Ancestry Tree.
- Upload GEDCOM > select person > Import Ancestors
- Can view as Tree, Fan Chart, or Text.
- Can see X-DNA path.
- Can see tree completeness.

#### Tools:

- Shared Centimorgan (cM) tool at <a href="https://dnapainter.com/tools/sharedcmv4">https://dnapainter.com/tools/sharedcmv4</a> shows the probabilities for relationships based on the amount of cMs you share with a match.
- What are the Odds? at <a href="https://dnapainter.com/tools/probability">https://dnapainter.com/tools/probability</a> lets you test a hypothesis about how someone is related to you.

#### Resources:

- Videos, and articles about how to use DNA Painter: https://dnapainter.com/help/articles
- Roberta Estes Blog posts on DNA Painter: <a href="https://dna-explained.com/2019/10/14/dnapainter-instructions-and-resources/">https://dna-explained.com/2019/10/14/dnapainter-instructions-and-resources/</a>
- User group
  - o https://www.facebook.com/dnapainter/
- DNA Blogs
  - Blaine Bettinger: The Genetic Genealogist http://thegeneticgenealogist.com/
  - Roberta Estes: DNAeXplained Genetic Genealogy <a href="http://dnaexplained.com/">http://dnaexplained.com/</a>
  - Judy Russell: The Legal Genealogist http://www.legalgenealogist.com/category/dna/
  - Kitty cooper: Musings on genealogy and genetics http://blog.kittycooper.com/
  - Debbie Parker Wayne: Deb's Delvings <a href="http://debsdelvings.blogspot.com/">http://debsdelvings.blogspot.com/</a>