MyHeritage DNA

The Power of CLUSTERS

Part of the AGS Saturday Series: ABCs of DNA

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AUTOSOMAL DNA = atDNA

- **Autosomal DNA measures thousands of SNPs in 22 of your non-sex Chromosomes.**

- **The test results are excellent for finding close kin by MATCHING with other kin who have also taken an atDNA test.**

- **It is accurate for about five generations, which equals third cousins or similar close kin.**

- **There are documented cases where test results have even matched a seventh cousin – but this is very very rare.**

- **atDNA test results have been very helpful for finding biological parents or children. See the Facebook site "DNA Detectives".**

AUTOSOMAL DNA = atDNA

- **These atDNA test results are currently available from five different laboratories:**
  - 23andme.com [USA]
  - ancestrydna.com [USA]
- familytreedna.com (Family Finder Test) [USA]
  - **myheritage.com [Israel]**
  - livingdna.com [England]

AUTOSOMAL DNA = atDNA

- **atDNA can NOT be used to trace your maternal or paternal lines back for over five generations.**

- **To do this for your paternal line, you must be tested for Y-DNA (males only), which also gives you your male DEEP ROOTS**

- **To do this for you maternal line, you must be tested for mtDNA. Both females & males can take this test, which also gives you your female DEEP ROOTS**

- **Y-DNA & mtDNA testing is only offered by Family Tree DNA = <<< familytreedna.com >>>**

- **The only testing companies offering Haplogroup results (= your DEEP ROOTS) along with your atDNA results are 23andme and LivingDNA**

AUTOSOMAL DNA = atDNA
& CLUSTERING

- **My Heritage is currently the only DNA testing company that provides a clustering tool to its customers.**

- **This is a unique free gift to genealogists.**

- **The other four companies provide atDNA data, but to get the clustering tool you have to transfer your results to a third party site like www.gedmatch.com**

POWER of CLUSTERING

- At **MyHeritage**, I currently have
  - (as of 15 October 2020)
- **15,460 Matches**
- **Clustering** is a very efficient method of analysis for these matches.
- These matches all exceed ??? cM

How to Find Your Clusters:
Under DNA, Select DNA Tools

Chromosome Browser

A tool for viewing shared DNA segments between you and multiple DNA Matches, which can help point to a common ancestor.

Explore

AutoClusters

An automatic tool that organizes your DNA Matches into clusters that likely descended from common ancestors.

Explore

Ethnicities Map

Discover the most common ethnicities in each country, and find out the top countries for each ethnicity, based on data from MyHeritage DNA users.
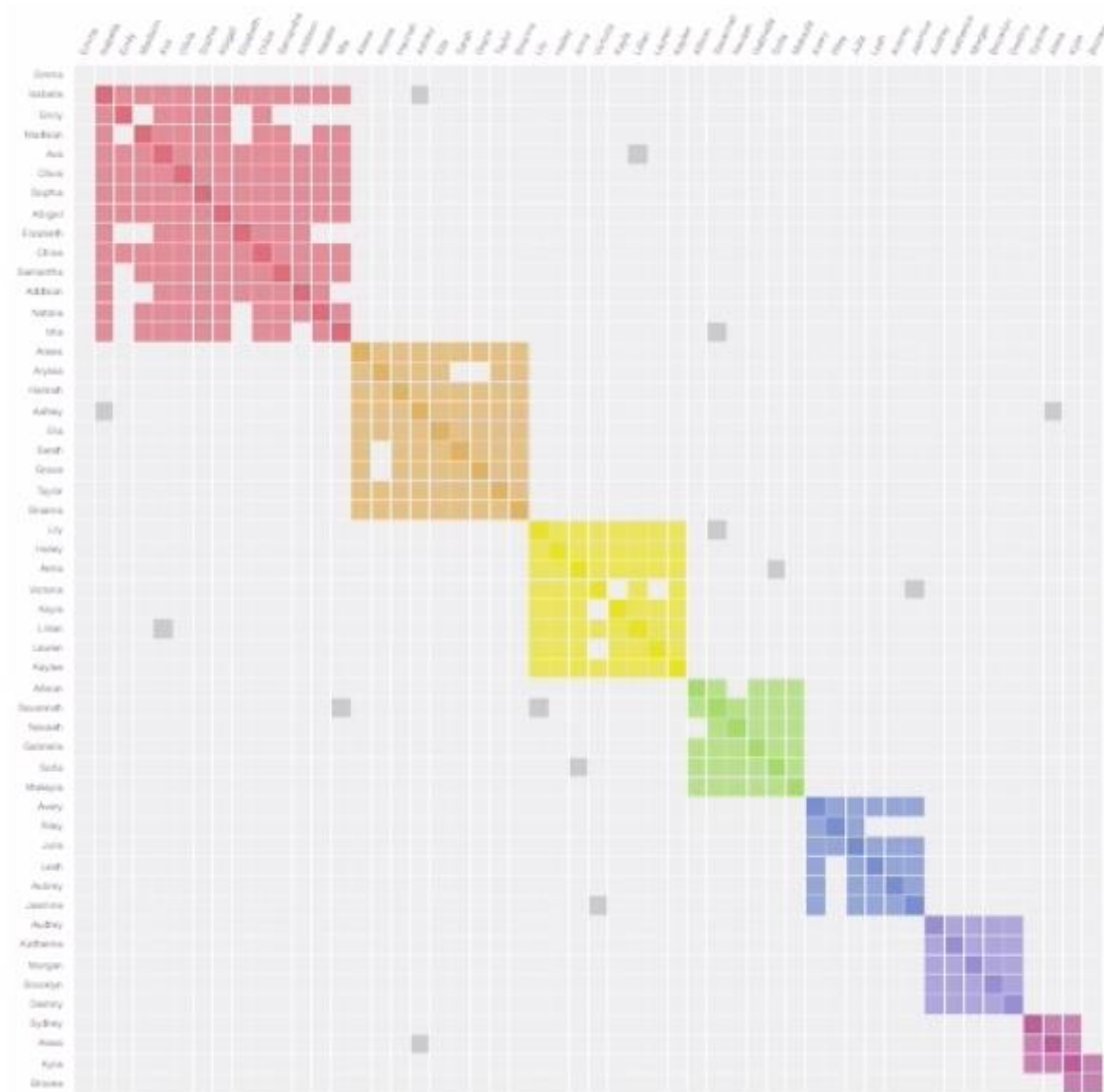
Explore

AutoClustering organizes your MyHeritage DNA Matches into shared match clusters that likely descended from common ancestors. Each of the colored cells represents an intersection between two of your matches, meaning that both individuals match you and each other.

These cells are grouped together physically and by color to create a powerful visual chart of your shared match clusters. Each color represents one shared match cluster. Members of a cluster match you and most or all of the other cluster members.

Generate

The AutoClustering feature on MyHeritage was developed in collaboration with Evert-Jan Blom.

Example of AutoClusters

HOW TO GENERATE YOUR OWN CLUSTERS!

- **Select GERERATE from the AutoClustering page.**
- **You will then get a message that it will take MyHeritage from one hour to one day to generate this important CLUSTER file.**
- **Your will receive an EMAIL with your CLUSTER RESULTS.**
- **In my case, I got my results in two hours.**
- **You receive three files, the CLUSTER Figure, a two-page PDF explanation & a CSV spreadsheet.**

MyHeritage DNA

Dear John Adam,

A zip file with your report of AutoClusters is attached. In it, you will find three files — an HTML file which contains a visual representation of the AutoCluster analysis, a CSV file which contains a spreadsheet version of the AutoCluster analysis, and a ReadMe PDF file.

Some files may be displayed incorrectly when opened directly from this email. For best results, view the files on a desktop device. To do this, save the zip file to your hard drive, extract the contents, and then open the files.

Please note that this file is intended for your personal use only. The attached file is no longer protected by MyHeritage security and privacy mechanisms, so please take additional measures to secure your data and avoid sharing it.

Best regards,

The MyHeritage team

If you have any questions, you're welcome to call us at: **1-844-994-1888** (Mon–Sat 24 hrs EST).

I have 22 CLUSTERS from 3 to 15 members each for a total of 107 MATCHES

Cluster 1: 15 members

Cluster 2: 12 members

Cluster 3: 9 members

Cluster 4: 7 members

Cluster 5: 6 members

Cluster 6: 5 members

Cluster 7: 4 members

Cluster 8: 4 members

Cluster 9: 4 members

Cluster 10: 4 members

Cluster 11: 4 members

Cluster 11: 4 members

Cluster 12: 3 members

Cluster 13: 3 members

Cluster 14: 3 members

Cluster 15: 3 members

Cluster 16: 3 members

Cluster 17: 3 members

Cluster 18: 3 members

Cluster 19: 3 members

Cluster 20: 3 members

Cluster 21: 3 members

Cluster 22: 3 members

Basis of CLUSTERING

- **Everyone listed in each of my 22 CLUSTERS must match me between 35 and 400 cM.**

- **These limits at MyHeritage are NOT adjustable.**

- **Each match listed must also match a minimum of one other of my matches in the same CLUSTER at 35 cM or above.**

- **In most cases, there is a different common ancestor for each of my 22 CLUSTERS.**

- **One of my tasks is to identify each of these 22 common ancestors as well as the other members of each CLUSTER & place them on my FAMILY TREE.**

MyHeritage Provides a Lot of Useful Info

- **If you hover your pointer over a single CLUSTER, a list of the names of your matches appear.**
Even better, below your CLUSTER diagram is a chart showing the member name within of each of your CLUSTERS along with:

- **Match cM   Longest cM   Segments   ICW Min #   Tree**

- **Thus you can tell how close each match is and whether or not they have a TREE that you can review.**

- **Your next (often hard) task is to determine if each CLUSTER is maternal or paternal and how each name fits in your family tree.**

- **I am just getting started on this task.**

Important Info Provided in the two-page PDF from MyHeritage titled: AutoCluster Analysis

- **An explanation of GREY CELLS on my CLUSTER Diagram**
- **35 cM Minimum & 400 cM Maximum for their CLUSTER Analysis**
- **That I have 22 CLUSTERS with 107 members**
- **That five matches were excluded "because they did not have any shared matches."**
- **That "116 matches met the inclusion criteria, but ended up in singleton clusters without other members & are therefore excluded from the analysis as well."**
- **The last two points were followed by a complete list of 5 & 116 names.**
- **Thus 228 of my matches met the criteria of being between 35 & 400 cM.**

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Ethnicities Map

Discover the most common ethnicities in each country, and find out the top countries for each ethnicity, based on data from MyHeritage DNA users.

Explore

The percentages represent the portion of MyHeritage DNA users in Ireland who have that ethnicity.

Irish, Scottish, and Welsh
85.7%

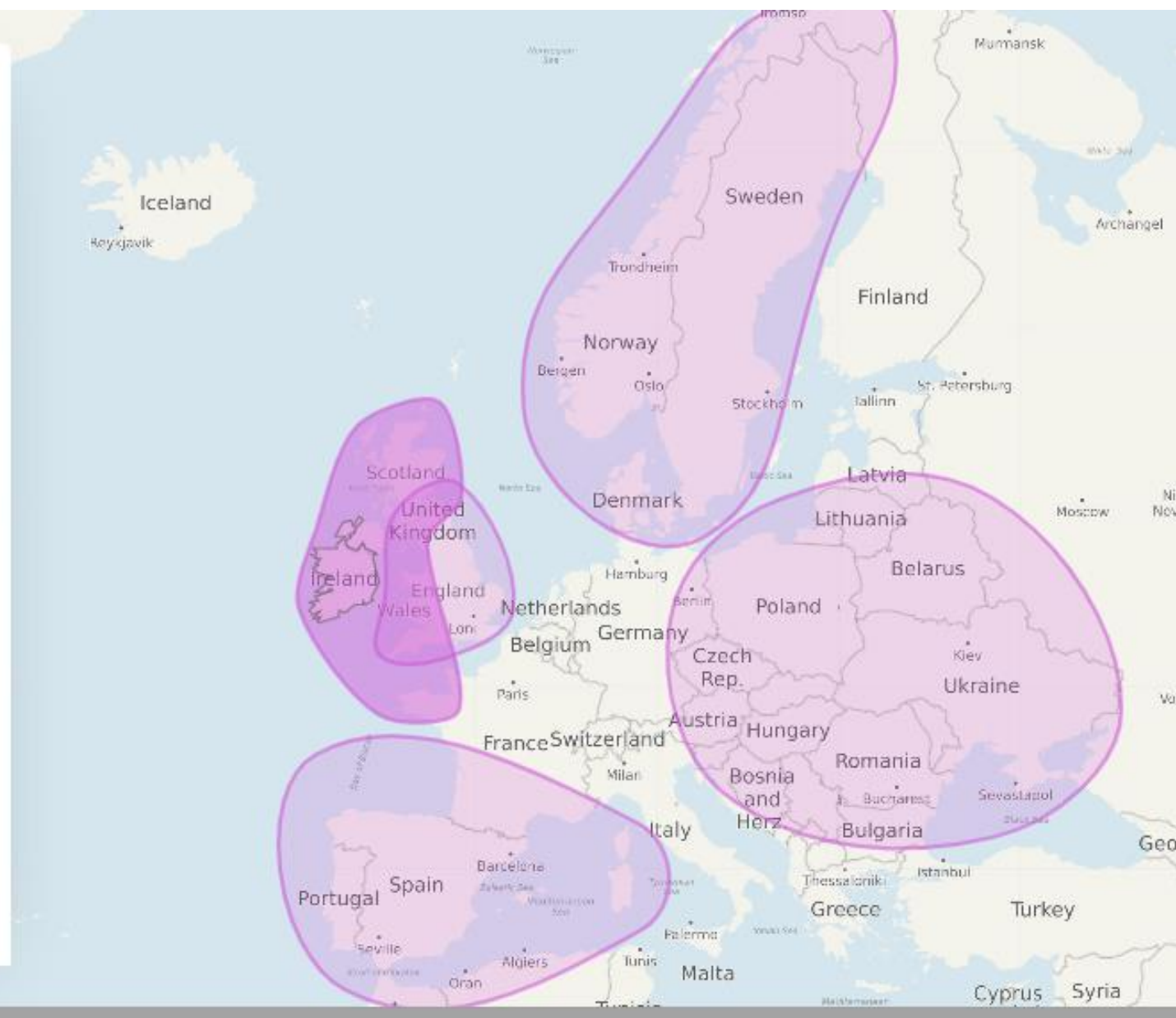**Scandinavian**
17.5%

English
17.4%

Iberian
13%

East European
11.8%

Show all ethnicities ∨

THE END Any Questions? Tune in Next Month