Dealing With A DNA "Island"
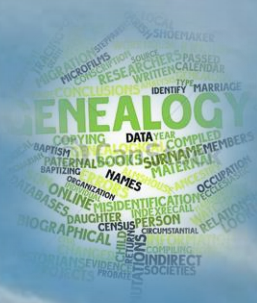
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All slides and handouts can be found at:
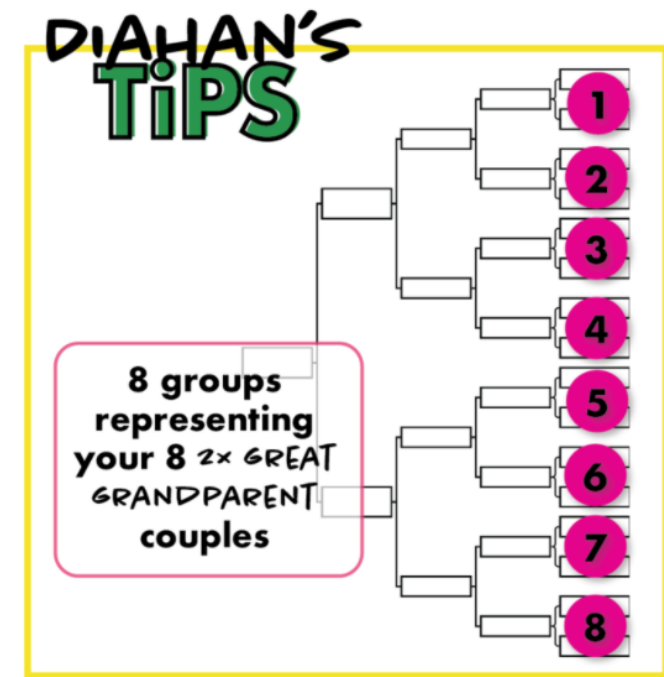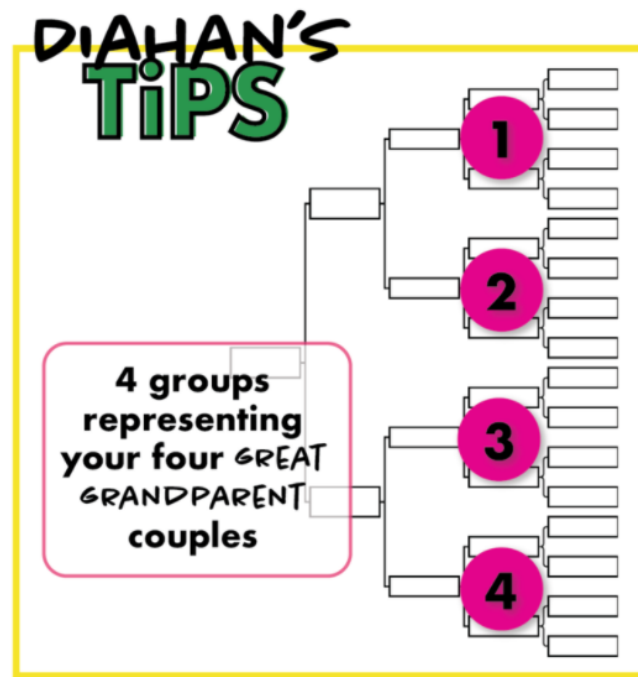http://www.familytreeaz.com/Presentations/

What is a "DNA Island"?

- We may be familiar with Genetic Networks (one of several terms I've seen to describe the same phenomenon):
 - Groups of DNA matches that all share the same ancestor(s)

Let's start with a simple exercise. Think about your two sets of biological grandparents: one from mom and one from dad. So as long as these grandparents aren't related to each other, we could split your match list into TWO genetic networks: one representing each the two grandparent couples.

Likewise, we could divide your match list into FOUR groups, one for each of your four great grandparent couples. Do you see where am going with this?

DiAHAN'S TiPS

4 groups representing your four GREAT GRANDPARENT couples

1 2 3 4

DiAHAN'S TiPS

8 groups representing your 8 2x GREAT GRANDPARENT couples

1 2 3 4 5 6 7 8

What is a "DNA Island"?

- Putting the two concepts together yields what I call a "DNA Island"
- A Genetic Network of DNA matches that clearly all share the same common ancestor(s) but yet are unable to be tied into your family tree
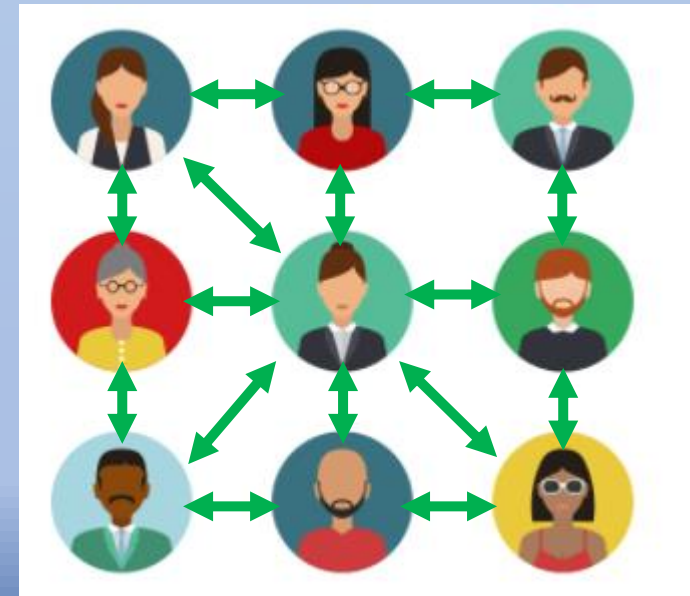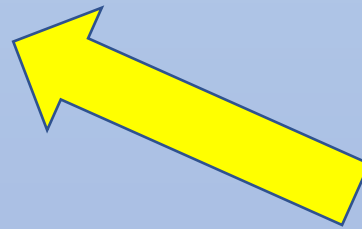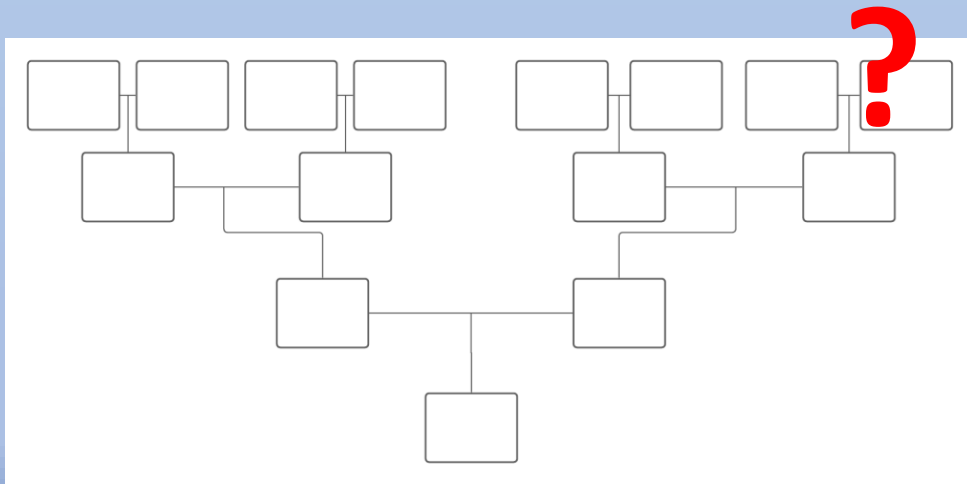
My Testing Situation

- My father passed away in 1979 so DNA was not an option; I tested my mother who passed away in 2015

- As a proxy I tested a paternal uncle as well as some 1st, 2nd, and 3rd cousins
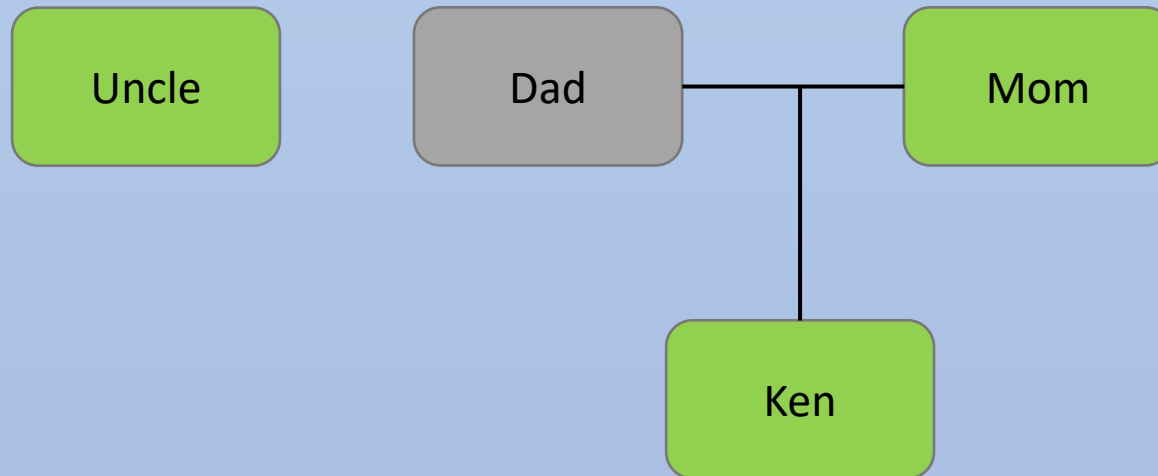
Best Option is to Test BOTH Parents!

- Keep in mind that while you get 1 full set of chromosomes from each parent that is not the case for using an Aunt or Uncle

- So, in this instance, it's possible to have a DNA match that matches neither my mother nor my uncle

Filter

Enter the total number of cM for your match here:

3500   reset

or enter %

Then any relationships that fit will stand out below

Click here for a shareable link to the cM amount above

Most distant common ancestors
Assuming no pedigree collapse or endogamy, and that you're related in just one way, the **furthest** back you might need to go to find common ancestors for a match of 3500cM is **Parent level**

Relationship probabilities (based on stats from The DNA Geek)

100%   *Parent   Child*

Filter

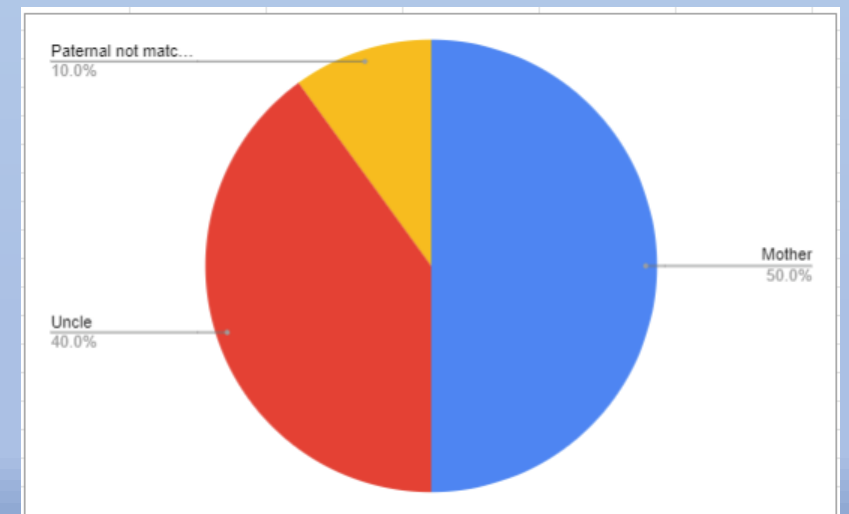Enter the total number of cM for your match here:

1800   reset

or enter %

Then any relationships that fit will stand out below

Click here for a shareable link to the cM amount above

Most distant common ancestors
Assuming no pedigree collapse or endogamy, and that you're related in just one way, the **furthest** back you might need to go to find common ancestors for a match of 1800cM is **Grandparent level.**
The connection may be closer. Also, depending on your family, this match could be a close younger generation relative, such as the descendant of your sibling.

Relationship probabilities (based on stats from The DNA Geek)

100%   *Grandparent   Aunt / Uncle   Half Sibling*
               Niece / Nephew   Grandchild

~ 0%   *** Sibling*

Paternal not matc...
10.0%

Mother
50.0%

Uncle
40.0%

https://dnapainter.com/tools/sharedcmv4

My "DNA Island"

- 25 matches on Ancestry with the surname "Shipp" in their tree
  - Range from as low as 8 cM to 27 cMs with 7 above 20 cMs

Selecting the Top "Shipp" Match (24 cMs)

- Looking at shared matches for that top Shipp match yielded 26 shared matches (20 cMs+)
  - NOTE: There was also a 27 cM match in this genetic network but did not have a Shipp in a public tree
- The only one of those matches showing a known common ancestor is my brother who obviously shares DNA on both paternal and maternal side
- NO shared DNA indicated on Ancestry to either my mother's kit or my uncle's kit

No Strong or even Moderate Matches

- Best match was only 25 cMs

< 1% shared DNA: 24 cM across 1 segments

Message

● ●⊕ Add/edit groups

📄 John Shipp (VanBuren AR), Sharp, Bill...

Trees   Ethnicity   **Shared Matches**

Filter by: ● Unviewed   🍃 Common ancestors   ✉ Messaged   📄 Notes   ⋅⊏ Trees ⌄   Groups ⌄   🔍 Sea

Full Sibling

Brother
2,491 cM | 44% - 51% shared DNA
Mother's side

⋅⊏ Public linked tree
2,334 People
🍃 Common ancestor

View match

📄 Brother. 2491/63.

Distant Family

Richard

4th – 6th Cousin
25 cM | < 1% shared DNA

✕ No Trees

View match

Brother
2,491 cM | 44% - 51% shared DNA
Mother's side

4th – 6th Cousin
25 cM | < 1% shared DNA

What I Am Left With

- Probably 100+ of DNA matches in the 20 to 27 cM range

- Estimating perhaps 200+ matches total that are in this genetic network

- Many have the same Shipp family in their trees so I know that common ancestry line --- I just don't know where to connect it

Check the Mother and Uncle Kits for "Shipp"

- Uncle's kit has 2 20+ cM matches with the surname "Shipp"
  - The 22 cM match was not in my match list
  - However, a 20 cM match WAS in my match list

Check the Mother and Uncle Kits for "Shipp"

- Mother's kit has 75 matches with Shipp surname in trees

- Strongest (34 cMs) is a match I've confirmed to be the uncle of a famous person from KY; tree has 60,000+ people and has a Shipp line in VA (note: I do not match this person)

Next Steps – Spreadsheet Methodology

1. Start with all DNA matches to my kit with Shipp surname
2. For the closest matches, examine the shared matches (looking particularly for repeated matches)
3. Construct a tentative Shipp Genetic Network (use Ancestry's tag groups to delineate)
4. Export those matches to a spreadsheet
5. Test each match for both the mother's kit and the uncle's kit and annotate in the spreadsheet
6. (ASIDE) Construct a Q&D family tree based on the family that frequently was in the matches tree

A Challenge Without a Chromosome Browser

- Family Tree DNA, My Heritage, 23andMe, and GEDmatch all have chromosome browsers

- Unfortunately Ancestry does not have one
  - No way to determine what chromosome(s) the matches are on

- It seems that most of these matches share across just one segment

You and [blurred] **Shipp**

4th – 6th Cousin

< 1% shared DNA: 24 cM across 1 segments

Put Match Results in a Spreadsheet

- Use the best 35 matches and added manually
- 31 out of 35 matched mom
- 2 out of 35 matched uncle
- Now it becomes clear the Shipp match is on the maternal side
- Notice the common occurrence where ~24 cMs in my kit is ~14 cMs in mom's kit
- Many trees showing the same family line

|		Match Strengths in centiMorgans			
#	Kit Name	Ken's	Joan's	Ernie's	Tree Info
1	S	27	12	0	13: John Johnson Shipp, 1900-1970 Van Buren AR
2	A	24	12	0	16: Henry Shipp, 1862-1911, Van Buren AR
3	R	25	15	0	
4	N	25	0	22	
5	L	25	15	0	
6	d	25	14	0	5: no Shipp
7	M	24	14	0	1267: no Shipp
8	B	24	14	0	6774: no Shipp
9	J	24	14	0	12 (u): Richard L Shipp 1902-1978 Van Buren AR
10	b	24	15	0	(p) private
11	m	24	14	0	10 (u): no Shipp
12	G	24	15	0	16: Henry Shipp 1862-1911, Van Buren AR
13	C	24	14	0	96: no Shipp
14	L	24	23	0	2011 (p)
15	ja	24	14	0	5 (u): no Shipp
16	C	23	15	0	35 (u): George William Shipp 1893-1949 Van Buren AR
17	M	23	14	0	3 (u): no Shipp
18	T	23	17	0	754: no Shipp
19	B	23	13	0	
20	D	23	14	0	35: no Shipp
21	L	22	12	0	351: no Shipp
22	M	22	13	0	4291: Henry Shipp 1862-1911, Van Buren AR
23	P	22	14	0	7: Rose Lou Ella Shipp 1900-, Conway AR
24	T	21	14	0	10: no Shipp
25	M	21	13	0	
26	A	21	13	0	8: all private
27	D	21	14	0	1 (u): worthless tree
28	P	21	0	0	6 (u): no Shipp
29	A	21	13	0	
30	J	21	0	0	4291 (u): Henry Shipp 1862-1911
31	h	21	10	0	3 (u): useless tree
32	G	21	14	0	29: no Shipp
34	G	22	0	20	100: Rebecca Lula Shipp 1832-1867, Cobb GA
36	B	18	18	0	994: James William Shipp 1804-1881, VA

Using the Various Trees of Matches, Construct a "Quick & Dirty" Tree

- Tree from one of the 24 cM matches, in this case the test taker has the Shipp surname

- So, I will construct a quick & dirty tree for Henry Shipp
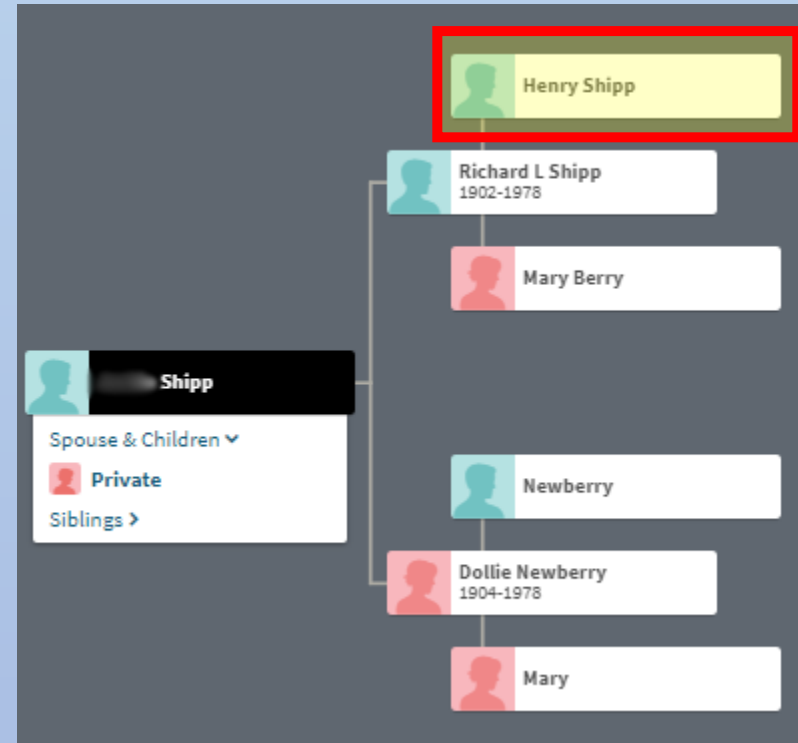
Build a Tree for that common family line

- As always for quick & dirty trees, keep it private and unsearchable

- Search the DNA matches for some of these other surnames:

  Ransom, Moon, Brooks, Gadberry, Umn
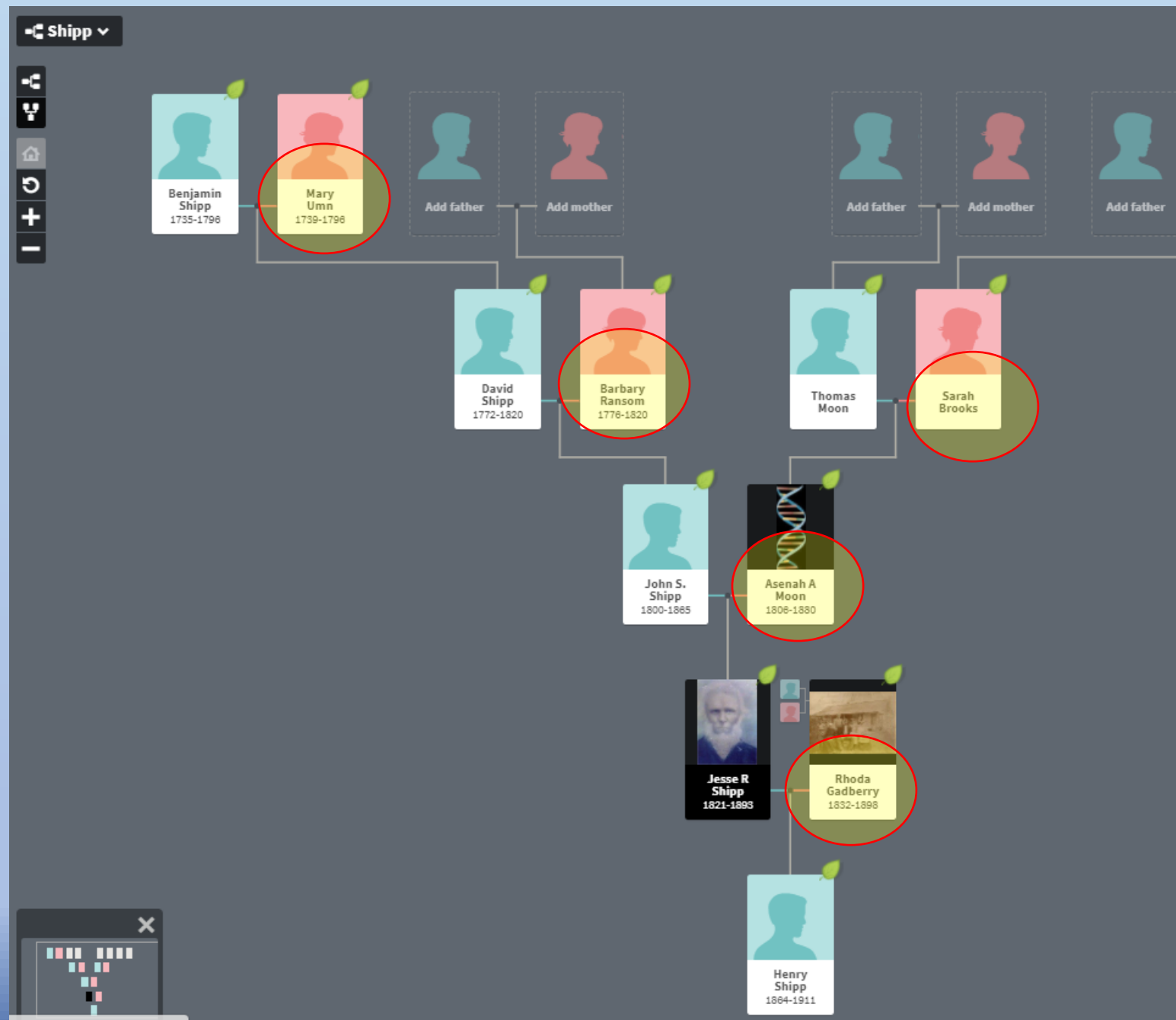
My Assessment:

- This may be a "sticky" segment that is common to many DNA matches and passed largely intact through many generations
  - Seems to be consistent segment, ~25 cMs, and shared by many

- **This is a line on my maternal side where Ancestry's Timbre algorithm appears to have split the same DNA segment on my mom's kit but did not split it on my kit --- This is why this network appeared to be a "DNA Island"**

- NEXT STEPS:
  - Work the Q&D tree back in time and search for surnames from that tree in my DNA matches, checking for any sign of shared matches
  - Search for a connection between the famous connection in KY and the Shipp's in AR
  - Try chromosome sites (MH, FTDNA, 23&Me, GEDmatch) to see if I can find any of these people

Discuss!

Questions?

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