Grangeburgh German-Swiss Genealogical Society

Oktoberfest 2014

October 10th and 11th, 2014

Program Schedule

FRIDAY, OCTOBER 10, 2014

A. S. Salley Archives open for research ..... 9:00 AM – 2:00 PM

Registration – Family Life Center ..... 4:00 – 6:15 PM

Exhibit Area open – Family Tables, Vendors, Other Societies ..... 4:00 – 6:15 PM

President's Dinner (advance ticket required) ..... 6:30 PM

Speaker: Dr. Michael Byrd, *White Poverty and Poor Relief in St. Philips and St. Matthews Parishes, 1725-1775*

SATURDAY, OCTOBER 11, 2014

Exhibit Area open – Family Tables, Vendors, Other Societies ..... 8:30 AM – 3:00 PM

Registration (coffee, juice, pastries, and fruit available) ..... 8:30 AM

Annual Business Meeting .....9:00 AM

Ya'll Come: Early Marketing of South Carolina in Europe, William Delk.....9:30 AM

Westward Ho: Outmigration via the Federal Road, video by Larry Holman.....10:00 AM

Break .....10:45 AM

DNA Basics: yDNA and Beyond, Lynn Teague .....11:00 AM

Lunch (advance ticket required)..... 12:00 – 1:00 PM

Progress at the Salley Archives, Eric Powell ..... 1:00 PM

Working with Your Autosomal DNA Test Results ..... 1:15 – 2:00 PM

Individual DNA Consultations* ..... 2:00 – 3:00 PM

Lynn Teague, Margaret Waters

(*or small group discussions as participants desire)

Some family tables, vendors, and other societies may not be available the entire time.
Meal purchase deadline is October 3, 2014. Revised 11 October 2014

Working With Your Autosomal DNA Test Results

- What is Your Goal?
  - To discover a few random matches or to
  - Use DNA data to leverage your genealogical research – YES!
  - If you decide not to work with this process, know that your DNA data is still very valuable as part of the Orangeburgh District DNA Project!
- How can atDNA test results help focus your genealogical research?
  - Work with Triangulated Groups of Matches
  - A Triangulated Group is three or more matches who all match each other on the same segment
  - All Triangulated Group members will share a Common Ancestral Couple!
- The details that follow pertain to working with data from FTDNA by using an Excel spreadsheet
- An asterisk indicates that there is more detailed information available in the Excel Tips section of this handout

Creating the Spreadsheet

- Download all match data
  - Click on Chromosome Browser tab
  - Click on Download All Matches option just above chromosome browser
- Make the results a little more "eye friendly"
  - Adjust column widths to correctly display numbers*****
  - Revise column headings if desired
  - Format Start and End columns as numbers with commas and no decimals*****
  - Format cM column as numbers with two decimal places*****
- Be sure to save your spreadsheet
  - Use SAVE AS option rather than SAVE
  - Change the filename to include the kit owner's name
  - Choose Excel Workbook as file type
  - Pick a good folder location in which to store the file
- Reduce the spreadsheet
  - The first column with the kit owner's name can be removed if the owner's name is part of the file name
  - Do a sort on the cM column, highest to lowest (see applicable slides)
  - Consider IBD (Identical by Descent – matches share a Common Ancestral Couple in last ten generations or so) vs. IBS (Identical by State – matches are coincidental or Common Ancestral Couple is too far back to realistically identify)
  - Implications of Segment Length
    - 10 cM segments should be about 99%IBD
    - 8 cM segments are probably about 50% IBD
    - 5 cM segments are probably only 10% IBD
  - Select everything on the spreadsheet below your cutoff point (minimum segment length to work with) and use the Delete key
- Add a column for MRCAC (Most Recent Common Ancestral Couple) data

  - Sort by Match name, if you have some close matches, to facilitate adding MRCAC data
  - Consider using row highlighting if you have known first and/or second cousin matches*****
  - Be sure to add MRCAC data whenever identified for any matches
- Sort spreadsheet, first by Chr (Chromosome) and then by Start location

Identifying (Triangulated) Groups of Matches

- Start with a chromosome where there are fewer matches
  - This is often the shorter chromosomes
  - Chromosome 1 is the longest with chromosome 22 being the shortest
  - This technique can also be used on the X chromosome but be aware that it has different inheritance patterns than the other 22 chromosomes
- Copy and paste all data from any one chromosome into a new worksheet in the workbook*****
  - Rename first sheet as All Matches and label each additional worksheet with its appropriate chromosome number*****
  - It can also be helpful to add a worksheet to keep notes on*****
- Look for overlapping segments
- Create groups of matches within the overlapping segments
  - Choose the match with the shortest segment in an overlapping group and add a group identifier by that match name
  - Find that match in your list of FTDNA matches
  - Use the In Common With (ICW) feature to see if any of the other names in the overlapping segment show up
  - Those matches that are ICW the first match can be added to the group and labeled
  - Any matches that did not show up as ICW should be checked against each other and made a separate group
  - Important concept – Since chromosomes come in pairs, one from dad and one from mom, there will be two different sets of matches along each chromosome!
- Work with your groups of matches as time and interest allow
  - When possible, label groups as Paternal or Maternal matches
  - Test results from known first and second cousins can be very helpful in directing the lineage focus in any group they appear in

Excel (2010) Tips

To "select" a column or row, click on the letter above the column or the number to the left of the row. Multiple adjacent columns or rows can be selected at the same time by holding the clicker down and moving the cursor as far as desired.

To adjust column width, position cursor on the right side boundary of the column heading. When the cursor appears as a vertical line crossed by a horizontal line with arrows at each end, click and

drag the column boundary to the desired width. If the crossed lines do not appear when hovering over a column boundary, select (click) on any cell in the spreadsheet and try again.

To format column data as numbers, select the column or columns where the formatting change is wanted. When the Home tab across the top of the window is chosen, the next-to-last section of the ribbon pertains to CELLS. Click on the FORMAT option and select the last choice, FORMAT CELLS, from the drop down menu. This opens a dialog box with many options. Select the NUMBER tab if it is not already the default choice. Under CATEGORY select the Number designation. The dialog box will then change to allow selections for number of decimal places and use of comma separators. Make choices as appropriate for columns that were selected.

To highlight data in a row, select the cells in that row. When the Home tab is selected on the menu bar the second area of the ribbon will show FONT options. Click on the FILL COLOR arrow and select the desired color by clicking on it. This will apply the color to the selected cells.

To copy and paste data from one group of cells to another, select the cells to be copied. Do this by positioning the cursor in the upper left cell of the area to be copied, holding it down, and dragging it to the lower right cell of the data to be copied. Select COPY from the CLIPBOARD section of the HOME ribbon. Next, position the cursor in what will be the upper left cell of the area to receive the data. Select the PASTE option in the Clipboard area. Use the Paste option that retains the Source Column Widths.

To fill multiple cells in a column with the same data (for example, MRCAC data), type the information into the first cell where it should appear. After moving the cursor out of that cell, go back to it. Hold the cursor down and select (drag) down to the last cell where the data should go. Select the FILL option from the EDITING section (last section) of the HOME ribbon. Click on DOWN and the data will appear in all selected cells.

Worksheets within an Excel Workbook:

- Across the bottom of an Excel window is a bar showing the worksheets in the open workbook
- New worksheets can be added simply by clicking on the Insert Worksheet icon in this area
- Worksheets can be renamed by right clicking in the tab that shows the visible worksheet
- Worksheets can be placed in a different order by left clicking on the worksheet name, holding the cursor down, and dragging the sheet name to its new position

WORKING WITH YOUR AUTOSOMAL DNA TEST RESULTS

Presented by
Margaret G. Waters
At Oktoberfest 2014

What is Your Goal?

- To Discover a Few Random Matches
- To Use the DNA Data to Leverage your Genealogical Research?
- If you do nothing with your matches, your information is still VERY valuable to our group project!

Using Your atDNA Results for the Maximum Benefit

- Work with Triangulated Groups of matches

- A triangulated group is where 3 or more matches all match each other on the same segment

The Value of Triangulated Groups

- All Triangulated Group members share a Common Ancestral Couple (CAC)!
- Most group members should be interested in identifying that couple
- Any two members of the group can potentially identify the CAC (who may be behind your brick wall!)

How to Identify Triangulated Groups

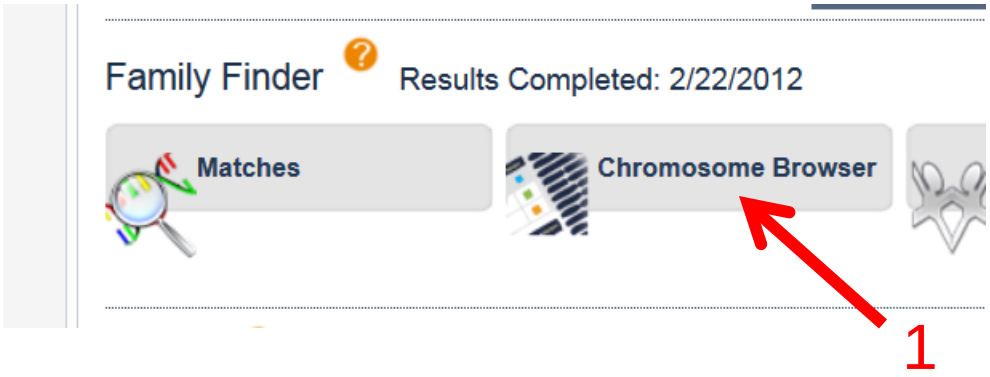
- Randomly – not very productive
- Third Party Software – GedMatch, Genome Mate, etc.
- Using an Excel Spreadsheet ←

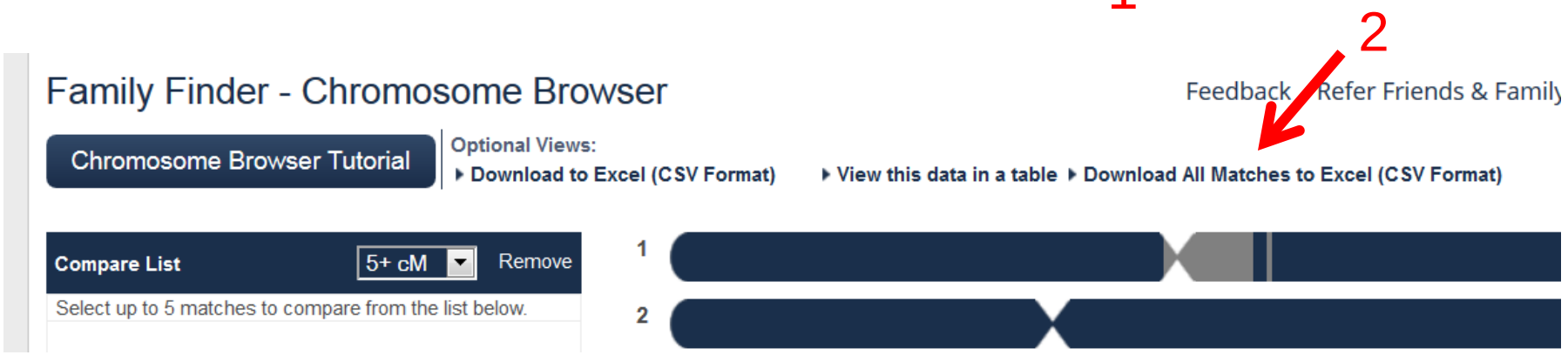
This Presentation Will

- Show the process for your FTDNA results
- Get you started on a productive path to working with your results
- Supplemental Excel tips are included in the handout

Download all Match Data

Starting at your FTDNA Family Finder page:





What is This?? !!

A1 | NAME

	A	B	C	D	E	F	G	H
1	NAME	MATCHNA	CHROMOS	START LOC	END LOCA	CENTIMOI	MATCHING SNPS	
2	Margaret (		1	78868114	87901748	9.68	2497	
3	Margaret (		2	52725445	54747547	2.09	600	
4	Margaret (		2	2.01E+08	2.04E+08	1.47	500	
5	Margaret (		5	1.55E+08	1.57E+08	1.84	600	
6	Margaret (		6	25580766	30453118	1.26	3300	
7	Margaret (		12	38674604	40568044	2.21	600	
8	Margaret (		17	23720820	26727500	2.87	500	
9	Margaret (		1	14920913	28760688	20.71	3976	
10	Margaret (		2	1.34E+08	1.37E+08	2.51	800	
11	Margaret (		3	1.36E+08	1.38E+08	1.74	500	
12	Margaret (		4	30977268	35230984	3.09	578	
13	Margaret (		6	33749990	35542251	1.73	600	
14	Margaret (		6	1.44E+08	1.46E+08	2.11	600	

3,584 Rows of This!! (Most folks will have much more!)

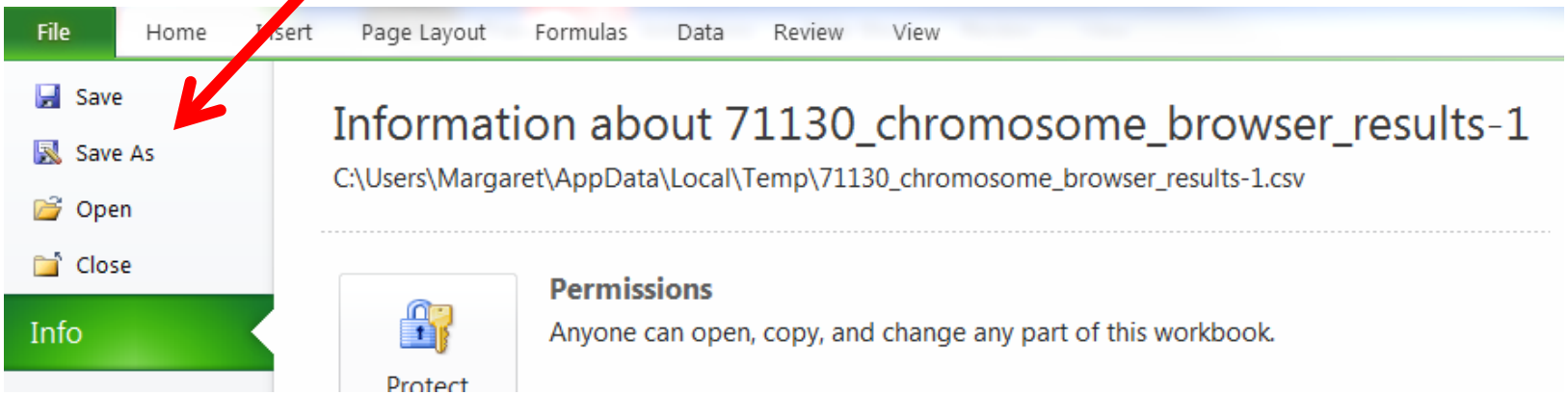
First, Make it More Legible

	A	B	C	D	E	F	G
1	NAME	**Match**	**Chr**	**Start**	**End**	**cM**	**SNPs**
2	Margaret (		1	78,868,114	87,901,748	9.68	2497
3	Margaret (		2	52,725,445	54,747,547	2.09	600
4	Margaret (		2	201,432,359	204,278,384	1.47	500
5	Margaret (		5	154,589,273	157,064,519	1.84	600
6	Margaret (		6	25,580,766	30,453,118	1.26	3300
7	Margaret (		12	38,674,604	40,568,044	2.21	600
8	Margaret (		17	23,720,820	26,727,500	2.87	500
9	Margaret (		1	14,920,913	28,760,688	20.71	3976
10	Margaret (		2	134,283,795	137,439,496	2.51	800
11	Margaret (		3	135,800,027	138,154,451	1.74	500
12	Margaret (		4	30,977,268	35,230,984	3.09	578
13	Margaret (		6	33,749,990	35,542,251	1.73	600
14	Margaret (		6	143,522,436	145,605,897	2.11	600
15	Margaret (		11	46,718,718	55,878,633	1.24	700

- Improve column headings and adjust column widths
- Format Start and End points as numbers with commas
- Format cM column as numbers

Be Sure to Save Your Work!

Use “Save As”

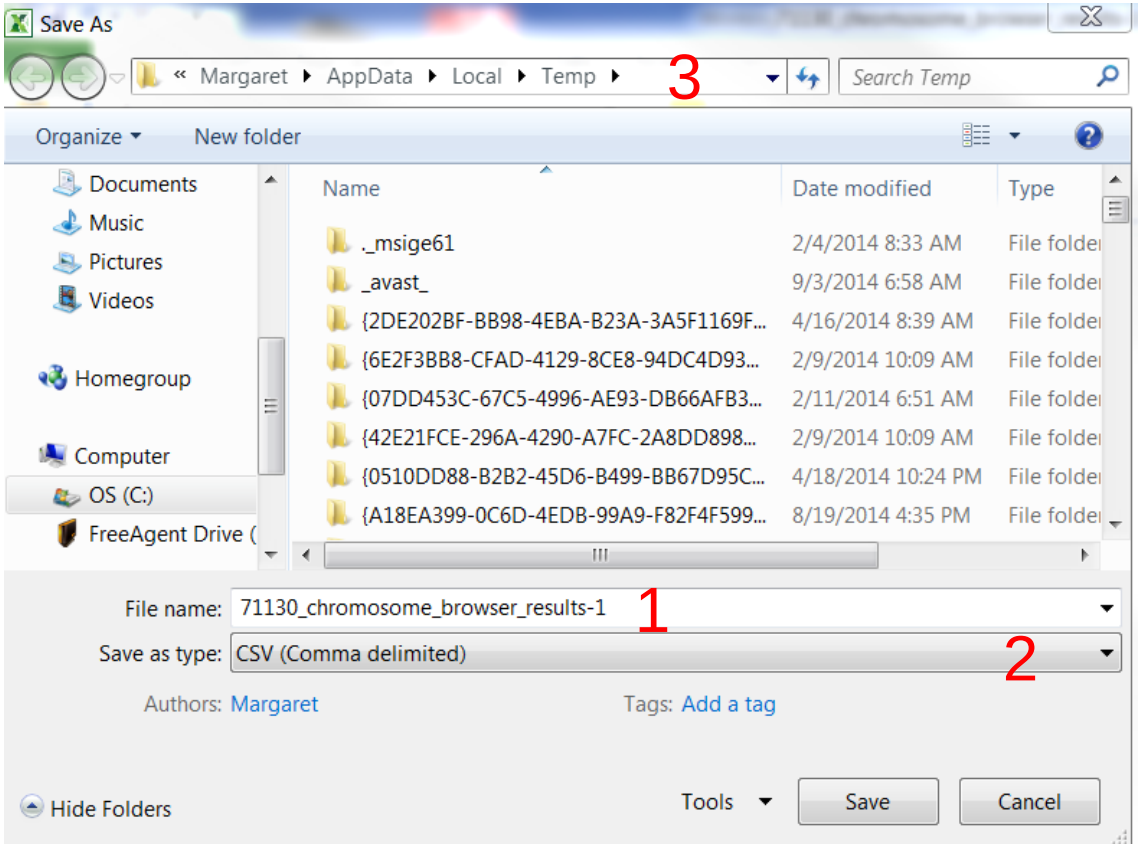


3 Important Changes before “Save”

1 – File Name should include kit owner’s name

2 – File Type should be Excel Workbook

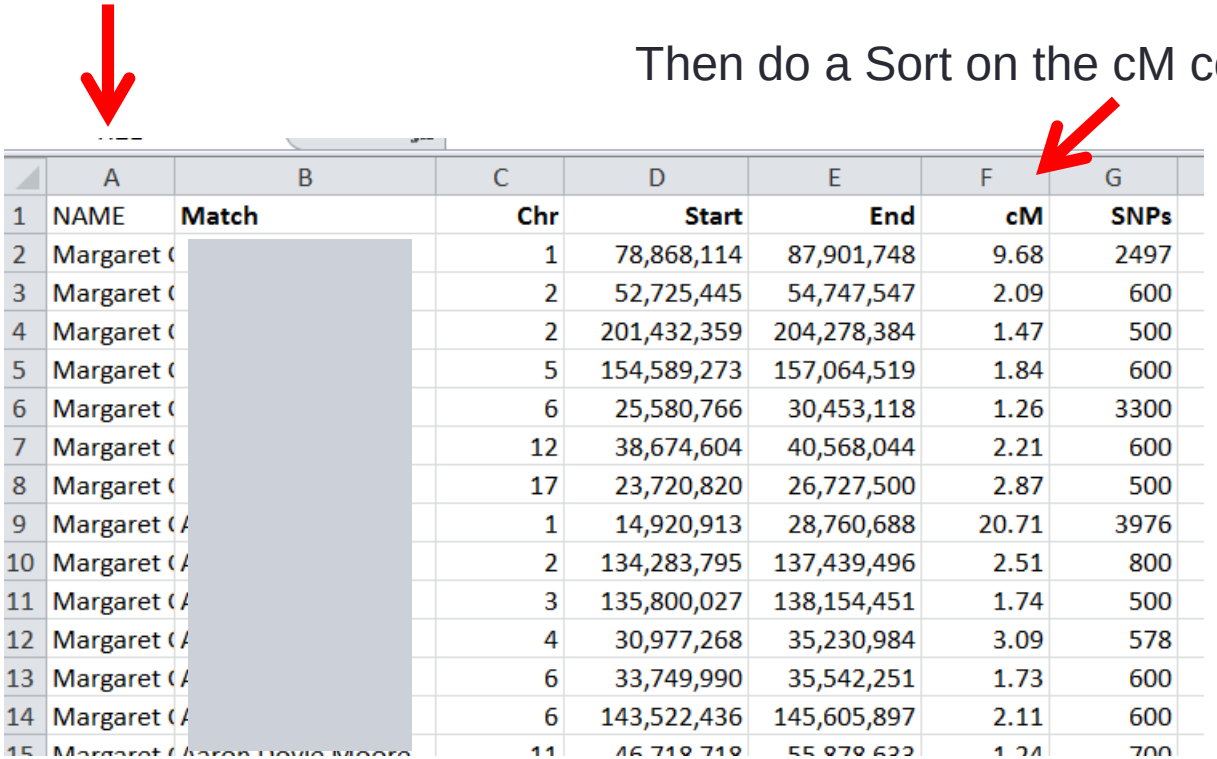
3 – Folder Location



Go on a Spreadsheet Diet!

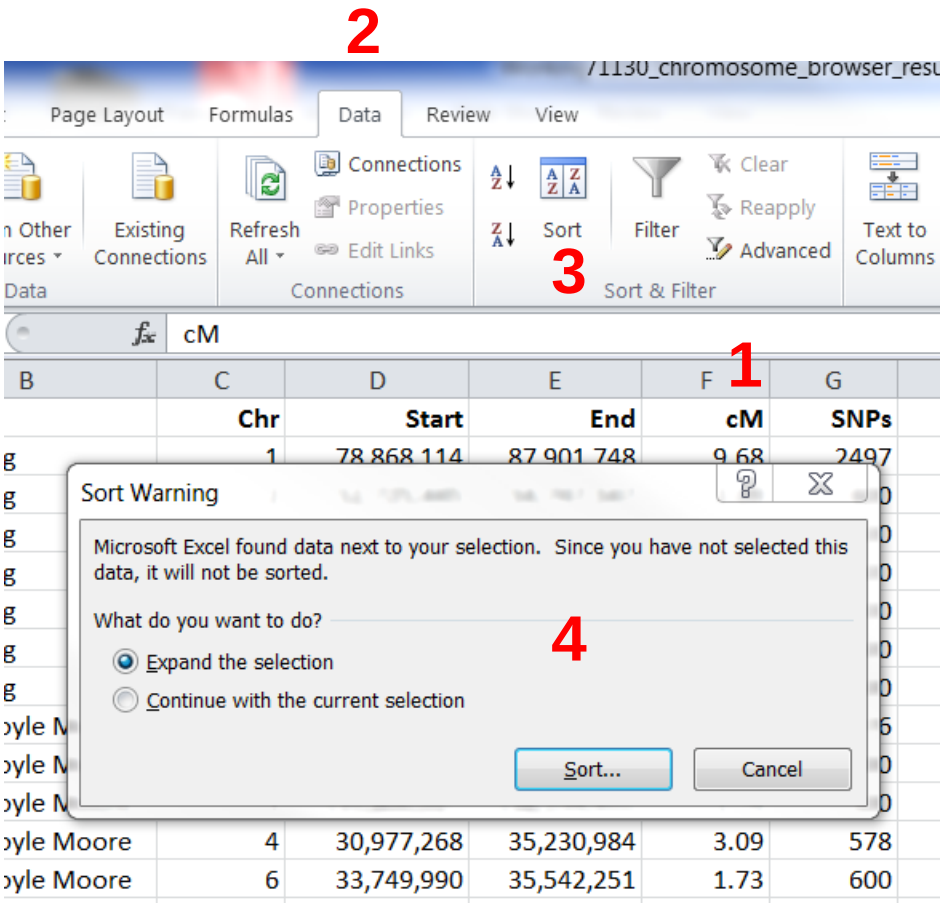
If the Kit Name was included in the File Name, Column A can be deleted

Then do a Sort on the cM column



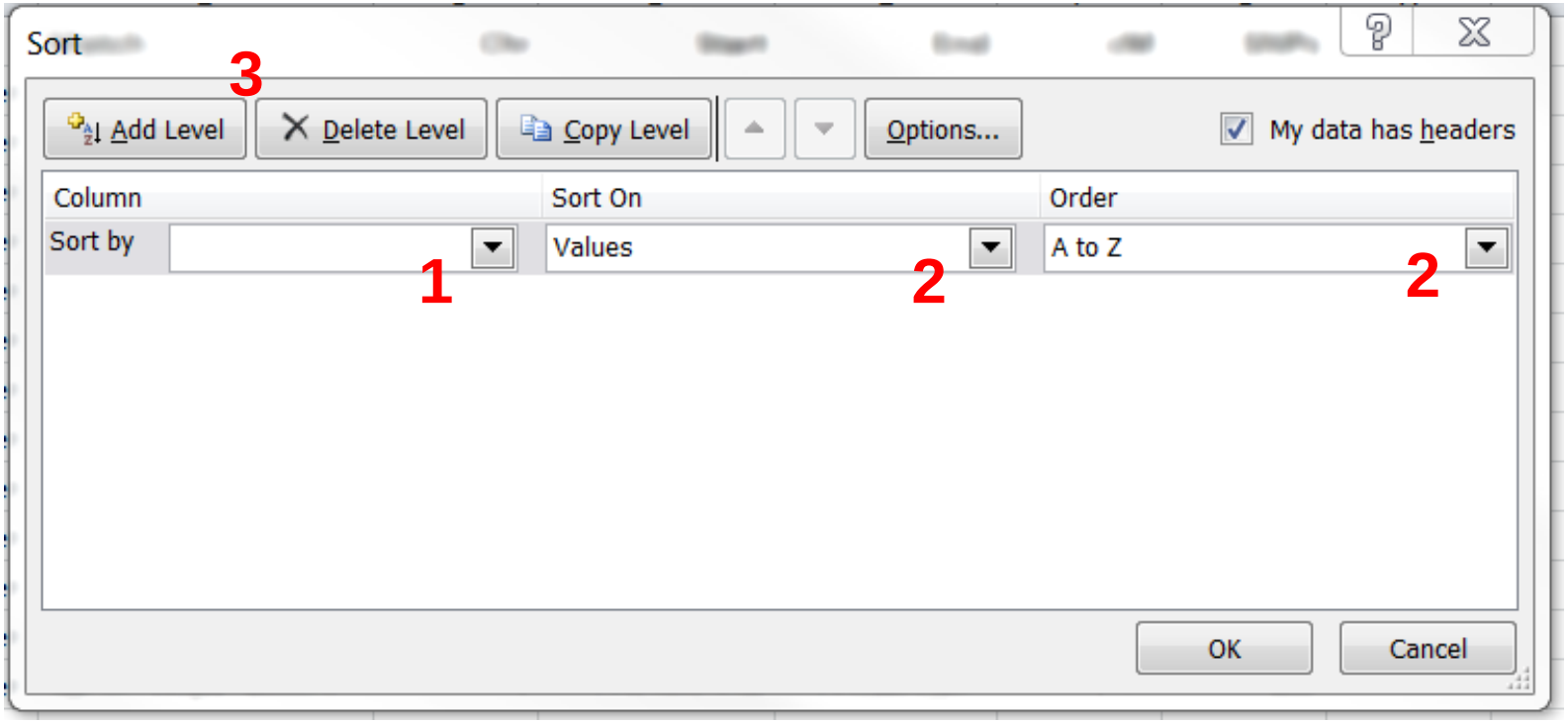
	A	B	C	D	E	F	G
1	NAME	**Match**	**Chr**	**Start**	**End**	**cM**	**SNPs**
2	Margaret (		1	78,868,114	87,901,748	9.68	2497
3	Margaret (		2	52,725,445	54,747,547	2.09	600
4	Margaret (		2	201,432,359	204,278,384	1.47	500
5	Margaret (		5	154,589,273	157,064,519	1.84	600
6	Margaret (		6	25,580,766	30,453,118	1.26	3300
7	Margaret (		12	38,674,604	40,568,044	2.21	600
8	Margaret (		17	23,720,820	26,727,500	2.87	500
9	Margaret (		1	14,920,913	28,760,688	20.71	3976
10	Margaret (		2	134,283,795	137,439,496	2.51	800
11	Margaret (		3	135,800,027	138,154,451	1.74	500
12	Margaret (		4	30,977,268	35,230,984	3.09	578
13	Margaret (		6	33,749,990	35,542,251	1.73	600
14	Margaret (		6	143,522,436	145,605,897	2.11	600
15	Margaret (		11	46,718,718	55,878,633	1.24	700

Sorting Demystified



1. Select cM column
2. Click on Data tab
3. Click Sort option
4. Sort Warning appears

Sorting Choices



1. **Each column heading appears here – make a selection**
2. **These options are adjusted automatically based on first selection**
3. **Use “Add Level” or “Delete Level” as necessary**

Back to that Spreadsheet

- **Sort on Centimorgan Column (cM), highest to lowest**

- **Consider IBD vs. IBS**
  - **IBD is Identical by Descent – Matches share a Common Ancestral Couple**
  - **IBS is Identical by State – Coincidental matches**

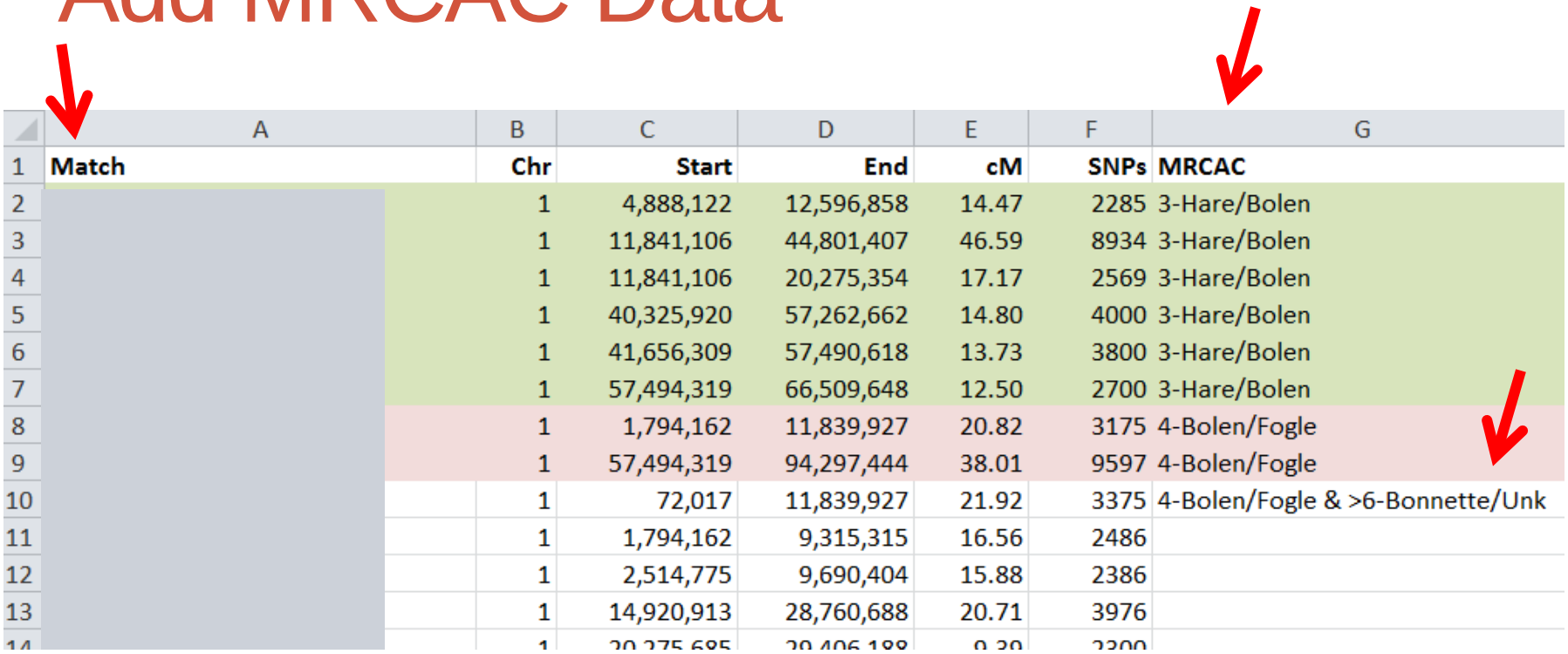
- **Implications of segment length:**
  - **10 cM segments should be about 99% IBD**
  - **8 cM segments are about 50% IBD**
  - **5 cM segments are probably only 10 % IBD**

Reduce that Spreadsheet!

285	Margaret (		1	240,474,093	245,665,855	10.07	1434
286	Margaret (		1	240,474,093	245,665,855	10.07	1434
287	Margaret (		12	116,960,462	123,691,027	10.05	1573
288	Margaret (		20	9,451,542	15,688,367	10.03	2100
289	Margaret (		7	41,486,337	51,496,396	9.98	2500
290	Margaret (		19	18,744,593	35,366,988	9.96	1700
291	Margaret (		15	85,237,318	90,122,915	9.96	1468
292	Margaret (		1	57,494,319	64,298,549	9.94	2100
293	Margaret (		6	124,485,359	133,931,888	9.90	2199
294	Margaret (		5	75,518,658	83,021,905	9.90	2076
295	Margaret (		5	75,518,658	83,021,905	9.90	2076

Select everything from your cutoff point to the end of the spreadsheet and hit the “DELETE” key

Add MRCAC Data



	A	B	C	D	E	F	G
1	**Match**	**Chr**	**Start**	**End**	**cM**	**SNPs**	**MRCAC**
2		1	4,888,122	12,596,858	14.47	2285	3-Hare/Bolen
3		1	11,841,106	44,801,407	46.59	8934	3-Hare/Bolen
4		1	11,841,106	20,275,354	17.17	2569	3-Hare/Bolen
5		1	40,325,920	57,262,662	14.80	4000	3-Hare/Bolen
6		1	41,656,309	57,490,618	13.73	3800	3-Hare/Bolen
7		1	57,494,319	66,509,648	12.50	2700	3-Hare/Bolen
8		1	1,794,162	11,839,927	20.82	3175	4-Bolen/Fogle
9		1	57,494,319	94,297,444	38.01	9597	4-Bolen/Fogle
10		1	72,017	11,839,927	21.92	3375	4-Bolen/Fogle & >6-Bonnette/Unk
11		1	1,794,162	9,315,315	16.56	2486	
12		1	2,514,775	9,690,404	15.88	2386	
13		1	14,920,913	28,760,688	20.71	3976	

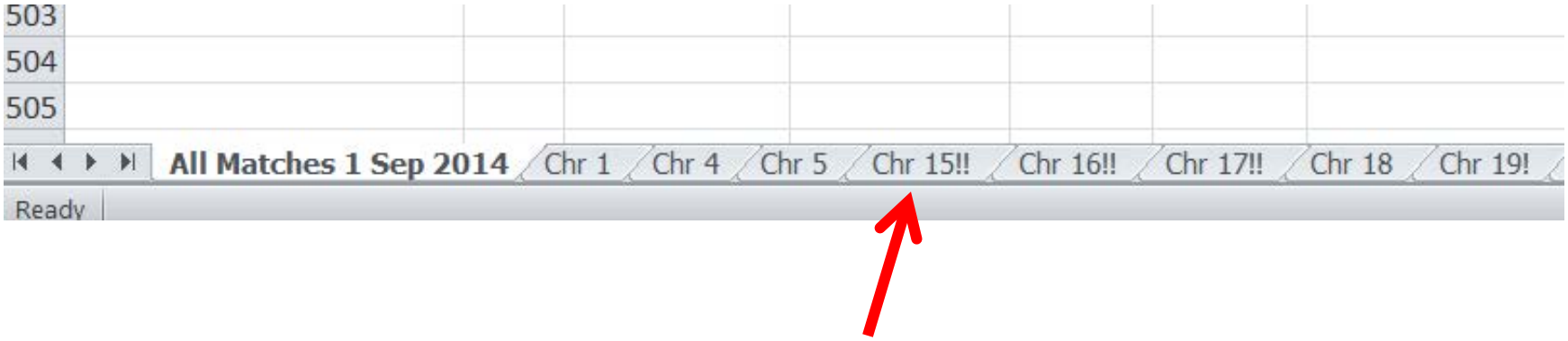
- **Sort by Match to get close cousin segments together**
- **Add column for MRCAC**
- **Be careful to note if there is more than one MCRAC!**
- **Sort by MRCAC to add highlight if desired**

Last Sort, for now (on Chr and Start)

	A	B	C	D	E	F	G
1	**Match**	**Chr**	**Start**	**End**	**cM**	**SNPs**	**MRCAC**
2	[redacted]	1	72,017	11,839,927	21.92	3375	4-Bolen/Fogle & >6-Bonnette/Unk
3		1	1,794,162	11,839,927	20.82	3175	4-Bolen/Fogle
4		1	1,794,162	9,315,315	16.56	2486	6-Bolen/Salley
5		1	2,514,775	9,690,404	15.88	2386	8-Salley/von Arx
6		1	4,888,122	12,596,858	14.47	2285	3-Hare/Bolen
7		1	11,841,106	44,801,407	46.59	8934	3-Hare/Bolen
8		1	11,841,106	20,275,354	17.17	2569	3-Hare/Bolen
9		1	14,920,913	28,760,688	20.71	3976	
10		1	20,275,685	29,406,188	9.39	2300	
11		1	28,848,588	34,620,770	7.40	1038	
12		1	30,872,516	37,202,853	7.99	1565	
13		1	31,098,788	39,916,684	11.08	2165	
14		1	31,098,788	37,961,729	8.18	1665	
15		1	31,098,788	38,365,641	8.76	1765	
16		1	40,325,920	57,262,662	14.80	4000	3-Hare/Bolen
17		1	41,656,309	57,490,618	13.73	3800	3-Hare/Bolen
18		1	57,494,319	66,509,648	12.50	2700	3-Hare/Bolen
19		1	57,494,319	94,297,444	38.01	9597	4-Bolen/Fogle
20		1	57,494,319	63,466,691	8.74	1900	
21		1	57,494,319	64,298,549	9.94	2100	
22		1	57,494,319	68,709,107	15.40	3400	
23		1	57,494,319	85,109,766	28.84	7300	

Start Determining Groups of Matches

- Choose one chromosome (start with one that has fewer matches)
- Copy all chromosome data to separate worksheet

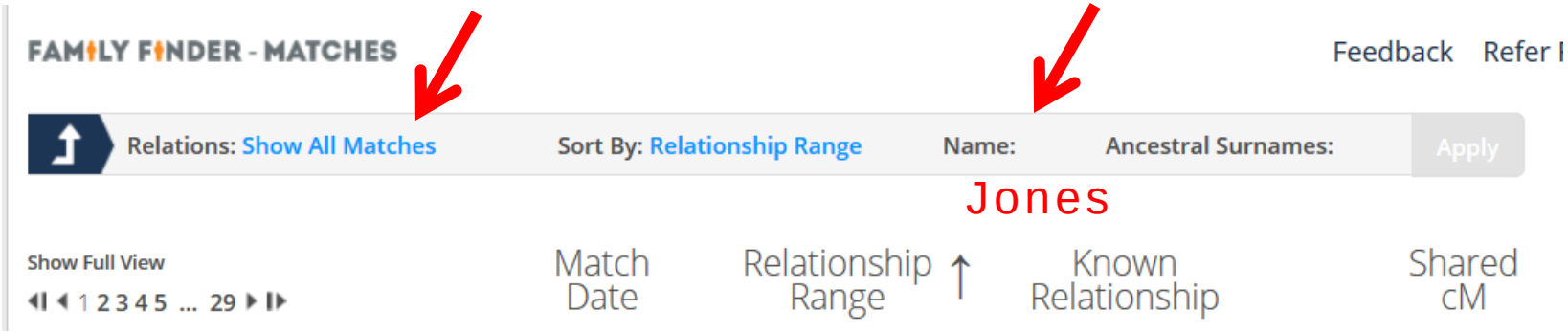


Look for Overlapping Segments

Joe Smith		15	18,331,687	91,527,938	94.54	18489
Susan Jones A		15	21,487,876	27,025,494	11.23	1428
Maria Green		15	32,195,250	39,896,515	8.79	2195
Sally Sanders		15	34,397,922	63,122,916	31.19	7587
Phyllis Sims		15	38,407,035	56,411,620	18.26	4400
Constance Stanley		15	44,291,100	58,060,422	15.84	3700
Henry Tucker		15	44,671,638	54,662,216	9.64	2500
Doris Mason		15	51,763,689	56,553,728	7.73	1500

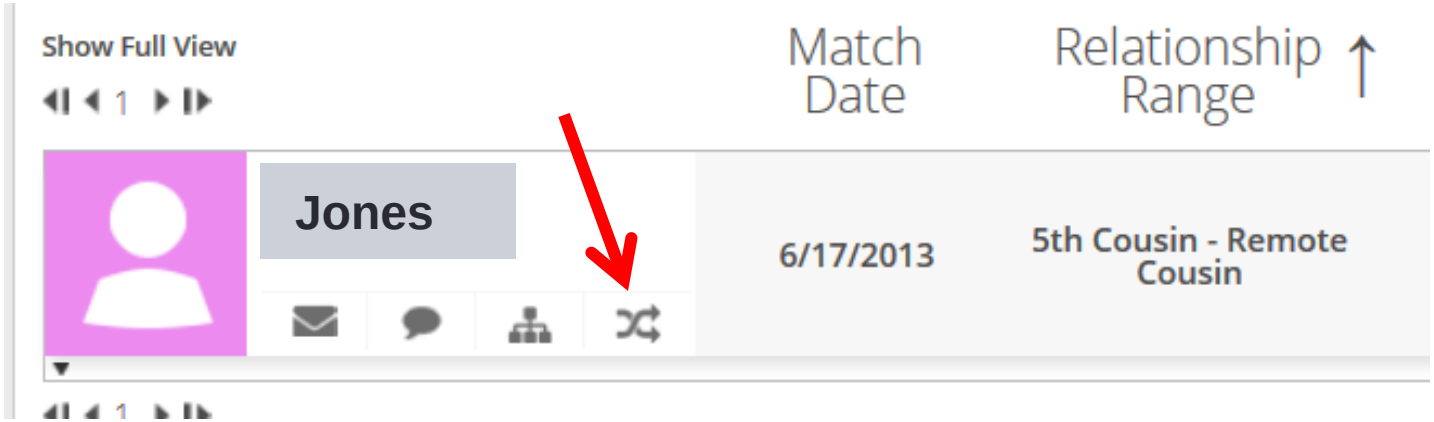
- Identify a smaller segment within a larger segment
- Label that smaller segment with a group name

Creating Groups of Matches



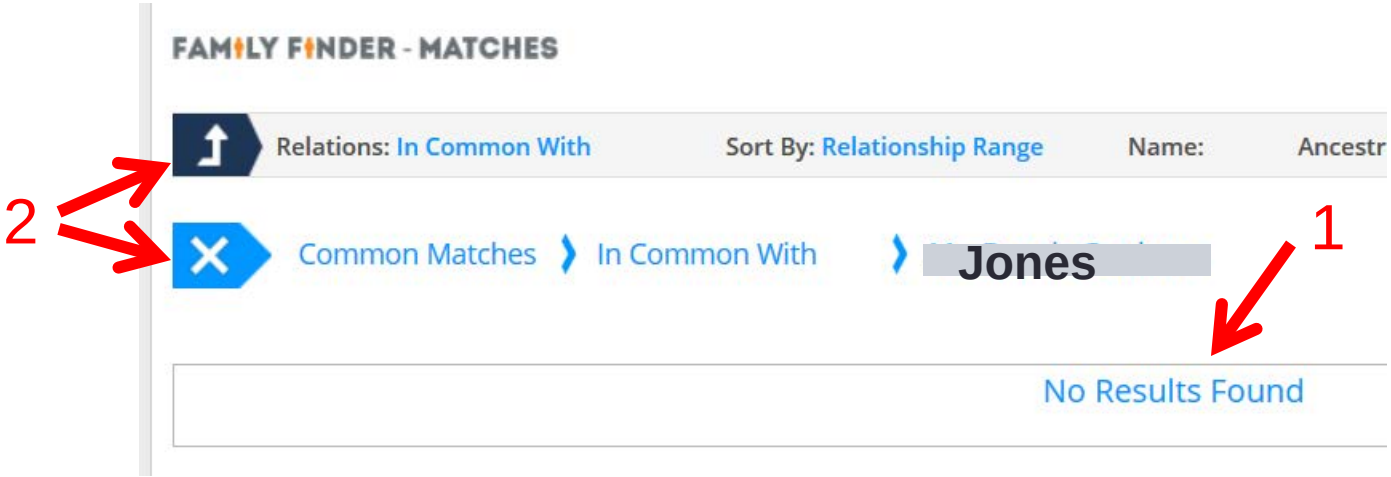
- Make certain that you are “Showing All Matches”
- Enter last name of shortest segment match to bring that match into view

Creating Groups of Matches



- Click on “Common Matches” icon
- Select “In Common With”

Creating Groups of Matches



1) If there are no matches this is a group of one

2) Use “X” or the Arrow to return to “Show All Matches”

Look for Overlapping Segments

Joe Smith	15	18,331,687	91,527,938	94.54	18489
Susan Jones A	15	21,487,876	27,025,494	11.23	1428
Maria Green B	15	32,195,250	39,896,515	8.79	2195
Sally Sanders	15	34,397,922	63,122,916	31.19	7587
Phyllis Sims	15	38,407,035	56,411,620	18.26	4400
Constance Stanley	15	44,291,100	58,060,422	15.84	3700
Henry Tucker	15	44,671,638	54,662,216	9.64	2500
Doris Mason	15	51,763,689	56,553,728	7.73	1500

Jones and Green are both groups of one; neither matches Smith; label each group

Smith is a maternal first cousin so “Groups” 15-A and 15-B are paternal groups

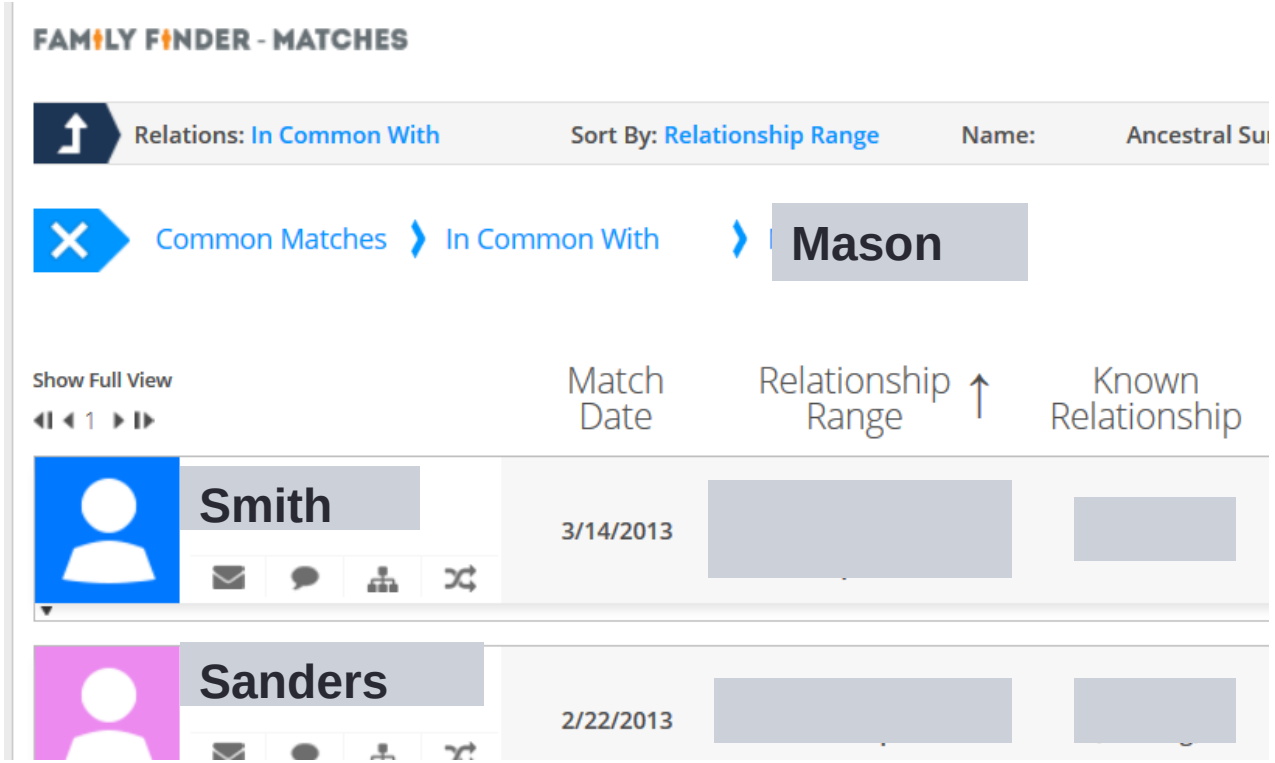
Look for Overlapping Segments

Joe Smith	15	18,331,687	91,527,938	94.54	18489
Susan Jones A	15	21,487,876	27,025,494	11.23	1428
Maria Green B	15	32,195,250	39,896,515	8.79	2195
Sally Sanders	15	34,397,922	63,122,916	31.19	7587
Phyllis Sims	15	38,407,035	56,411,620	18.26	4400
Constance Stanley	15	44,291,100	58,060,422	15.84	3700
Henry Tucker	15	44,671,638	54,662,216	9.64	2500
Doris Mason C	15	51,763,689	56,553,728	7.73	1500

Look for the next set of overlapping segments

Choose the shortest segment to begin looking for ICWs and add Group Label

Creating Groups of Matches



Look for names to add to group

Look for Overlapping Segments

Joe Smith	C	15	18,331,687	91,527,938	94.54	18489
Susan Jones	A	15	21,487,876	27,025,494	11.23	1428
Maria Green	B	15	32,195,250	39,896,515	8.79	2195
Sally Sanders	C	15	34,397,922	63,122,916	31.19	7587
Phyllis Sims		15	38,407,035	56,411,620	18.26	4400
Constance Stanley	C	15	44,291,100	58,060,422	15.84	3700
Henry Tucker		15	44,671,638	54,662,216	9.64	2500
Doris Mason	C	15	51,763,689	56,553,728	7.73	1500

Mason is ICW three other matches along this segment; this becomes Group 15-C

Since Smith and Sanders are maternal first cousins, Group 15-C is a maternal group

Caution! Mason could be IBS at only 7.73cM!

Look for Overlapping Segments

Joe Smith	C	15	18,331,687	91,527,938	94.54	18489
Susan Jones	A	15	21,487,876	27,025,494	11.23	1428
Maria Green	B	15	32,195,250	39,896,515	8.79	2195
Sally Sanders	C	15	34,397,922	63,122,916	31.19	7587
Phyllis Sims	D	15	38,407,035	56,411,620	18.26	4400
Constance Stanley	C	15	44,291,100	58,060,422	15.84	3700
Henry Tucker	D	15	44,671,638	54,662,216	9.64	2500
Doris Mason	C	15	51,763,689	56,553,728	7.73	1500

Sims and Tucker are ICW each other and become Group 15-D

Group 15-D is a paternal group since Group 15-C is known to be maternal

Review

- Using atDNA test results to leverage your genealogical research
- Need to work with triangulated groups of matches
- Using Excel to identify these triangulated groups

Review

- Download all match data to an Excel spreadsheet
- Slim down and “dress up” your spreadsheet
- Identify groups of matches using the ICW function at FTDNA

Summary:

- Use traditional genealogical research to identify Common Ancestral Couples in each Triangulated Group
- This is not an overnight project!
- Remember to periodically add new matches to spreadsheet