

Brick Wall Smashing with DNA

Amberly Beck
amberlyfamilyhistory@yahoo.com
thegenealogygirl.blog
Mapleton Utah Family History Center, Thursdays 7-9 pm

A few terms:

- **ICW** - In Common With, or **Shared Matches**
- **cM - centiMorgan** - *“In genetic genealogy, a centiMorgan (cM) or map unit (m.u.) is a unit of recombinant frequency which is **used to measure genetic distance**... The genetic genealogy testing companies 23andMe, AncestryDNA, Family Tree DNA and MyHeritage DNA use centiMorgans to **denote the size of matching DNA segments** in autosomal DNA tests. Segments which share a large number of centiMorgans in common are more likely to be of significance and to indicate a common ancestor within a genealogical timeframe.”¹ (emphasis added)*
- **MRCA** - Most Recent Common Ancestor
- **Endogamy** - *“Endogamy is the practice of marrying within the same ethnic, cultural, social, religious or tribal group. In endogamous populations everyone will descend from the same small gene pool. People will be related to each other in a recent genealogical timeframe on multiple ancestral pathways and the same ancestors will, therefore, appear in many different places on their pedigree chart. Endogamy can be the result of a conscious decision or cultural pressure to marry within the selected group but also occurs as a result of geographical isolation (for example, in island communities).”²*

The Shared cM Tool:

<https://dnapainter.com/tools/sharedcmv4>

Identify Match, Example #1

Identify Parents, Example #2

¹ Definition of centiMorgan from the ISOGG Wiki - <https://isogg.org/wiki/CentiMorgan>

² Definition of endogamy from the ISOGG Wiki - <https://isogg.org/wiki/Endogamy>

Master Match Tree

Brick Wall Problem, Example #3

Shared Matches Don't Always = MRCA

DNA matches alone can't prove ANY relationship.

Did you know that 1 in every 250 males is an identical twin?

DNA data provides clues that we use to lead us to a person(s) or record(s) that can PROVE a relationship.

Endogamy makes this even more complicated because we know that people from endogamous groups will likely be related in multiple ways.

DO NOT assume that shared matches all match in a straightforward manner like this...

MRCA			
?		?	?
John Costello		?	?
Virginia	Vince	Sam Pilchen	goldblum_s
Mike	Debbie & Craig		

They might actually match like this...

MRCA		MRCA		MRCA	
?	?	?	?	?	?
John Costello		?		John Costello	
Virginia	Vince	Sam Pilchen		goldblum_s	
Mike	Debbie & Craig			Mike	Debbie & Craig

John Costello's descendants match both Sam Pilchen and goldblum_s. Sam Pilchen and goldblum_3 also match each other. But that doesn't mean that the John Costello family descends from the same MRCA that connects Sam Pilchen and goldblum_s. Use great care when comparing matches in endogamous populations.

Some helpful information for our research problem:

John Costello & Mary Brown Young											
Virginia				Dan (deceased)				Vince			
Mike	T	B	A	R	T	L	G	V	Craig	Debbie	M
Maggie							Ben			Amberly	
3	3	?	?	2	1	3	1	0	2	5	1

AncestryDNA	FamilyTreeDNA	23&Me	MyHeritageDNA
Mike, Craig, Debbie	Craig, Debbie		Craig, Debbie
Ben, Amberly	Amberly	Maggie, Amberly	Amberly

Let's Focus on These DNA Matches:

Sam Pilchen
 goldblum_s
 Isaac Kaplan

Charts always help, let's chart each of the DNA tested members of my family and the matches we are interested in:

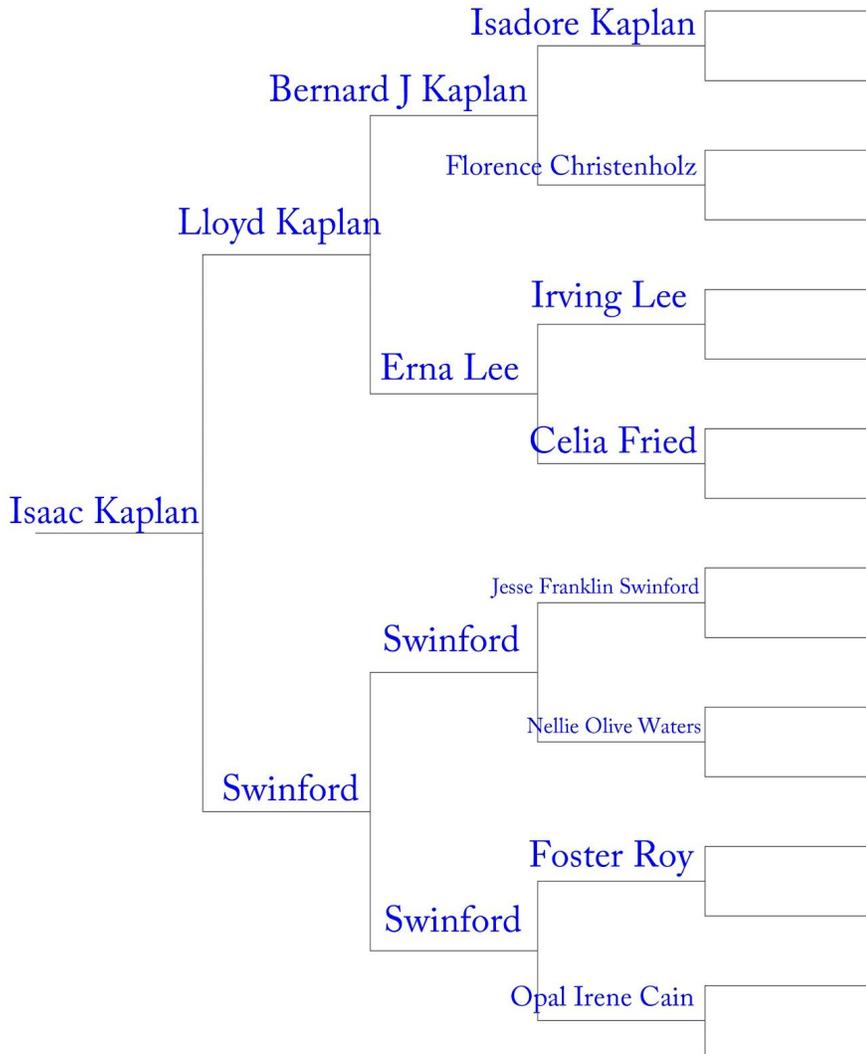
Known Family Member, Shared cMs with Focus Matches	Sam Pilchen	goldblum_s	Isaac Kaplan
Debbie, my Mom	132.4 cM	129.3 cM	19.8 cM
Uncle Craig	146 cM	160.6 cM	49 cM
Cousin Mike	161.1 cM	182.4 cM	133 cM
Cousin Ben	-	21.1 cM	-
Amberly	48 cM	13 cM	10.9 cM

Sam Pilchen



Children of Louis & Molly Pilchen					
Name	Birthdate	Birthplace	Spouse	Children	Grandchildren
Yetta	1921	Missouri			
Gussie	1923	Missouri			
Morris	1924	Missouri			
Sam	1926	Missouri			
Solomon	1929	Illinois			

Isaac Kaplan



But First...

This discovery highlights why a master match tree is helpful.

Each match goes into the tree.

Each obituary or other record, goes into the tree and is linked to each person mentioned in that obituary or record.

If I had forgotten the Fried name, attaching the obituary to each person would have shown me multiple Fried family members. I could then look at each Fried in my Master Match Tree and look for a connection.

We want every branch of our tree based on our target matches in ONE location so we can SEE the connections between them more easily.

Fried Sisters - Children of Isidore Fried & Sarah Esther Salzman					
Name	Birthdate	Birthplace	Spouse	Children	Grandchildren
Leona			Rubin Robert Covitz	Dan (Sally) Covitz Ellen (Sol) Pilchen Doris Davidowitz Florence Covitz	Earl (Steve) Cooper Sam (Henrietta) Pilchen Lilian (Dr. Bert) Mink Adam (Lisa) Pilchen Ken Davidowitz Larry (Leslie) Davidowitz
Celia			Jack Minicker Shapiro Lee Behr	Erna Lee (Bernard Kaplan) Eva Behr Greene (Henry Jamiel)	Zachary (Amy) Kaplan Abraham (Jill Swinford) Kaplan Lloyd (Nancy McCain) Kaplan Julie Greene, Lily Greene GREAT-GRANDCHILDREN - Jacob, Evelyn, Saul, Isaac Kaplan
Fannie					

Isidore Fried & Sarah Esther Salzman				
Leona Fried	sisters	Celia Fried		
Ellen Covitz	1st cousins	Erna Lee		
Sam Pilchen	2nd cousins	Abraham Kaplan	brothers	Lloyd Kaplan
Faith Pilchen	3rd cousins	Isaac Kaplan		

John Costello				
Vince Costello			siblings	Virginia
Debbie	siblings	Craig	1C	Mike
Amberly			2C	Maggie

We now have two families that each have a MRCA. Because of DNA matches between the two families, we know that they connect somehow. We need to find the connection between Isidore Fried & Sarah Esther Salzman and John Costello.

Based on Shared cMs, I theorized five possible relationships between Isidore Fried & Sarah Esther Salzman and John Costello as follows:

Theory #1

Isidore OR Sarah are a ½ Sibling of John

Isidore Fried & Sarah Esther Salzman					½ siblings	John Costello				
Leona Fried	sisters	Celia Fried			½ 1C	Vince Costello			siblings	Virginia
Ellen Covitz	1C	Erna Lee			½ 2C	Debbie	siblings	Craig	1C	Mike
Sam Pilchen	2C	Abraham Kaplan	brothers	Lloyd Kaplan	½ 3C	Amberly			2C	Maggie
Faith Pilchen	3C	Isaac Kaplan								

Known Family Member, Shared cMs with Focus Matches	Sam Pilchen	Tree Relationship	Works ?	Faith Pilchen	Tree Relationship	Works ?	Isaac Kaplan	Tree Relationship	Works ?	Lloyd Kaplan	Tree Relationship	Works ?
Mom	132.4 cM			54.5 cM			19.8 cM			-		
Uncle Craig	146 cM			118.2 cM			49 cM			-		
Mike	161.1 cM			-			133 cM			-		
Maggie	-			-			-			159 cM		
Amberly	48 cM			34 cM			10.9 cM			66 cM		

Theory #2

Isidore OR Sarah are an Aunt/Uncle of John

Isidore Fried & Sarah Esther Salzman					siblings	???				
Leona Fried	sisters	Celia Fried			1C	John Costello				
Ellen Chensky	1C	Erna Lee			2C	Vince Costello			siblings	Virginia
Sam Pilchen	2C	Abraham Kaplan	brothers	Lloyd Kaplan	3C	Debbie	siblings	Craig	1C	Mike
Faith Pilchen	3C	Isaac Kaplan			4C	Amberly			2C	Maggie

Theory #3

Isidore OR Sarah are a Sibling of John

Isidore Fried & Sarah Esther Salzman					siblings	John Costello				
Leona Fried	sisters	Celia Fried			1C	Vince Costello			siblings	Virginia
Ellen Covitz	1C	Erna Lee			2C	Debbie	siblings	Craig	1C	Mike
Sam Pilchen	2C	Abraham Kaplan	brothers	Lloyd Kaplan	3C	Amberly			2C	Maggie
Faith Pilchen	3C	Isaac Kaplan								

Theory #4

Isidore OR Sarah are 1C1R of John

Isidore Fried & Sarah Esther Salzman					1C	???				
Leona Fried	sisters	Celia Fried			2C	John Costello				
Ellen Chensky	1C	Erna Lee			3C	Vince Costello			siblings	Virginia
Sam Pilchen	2C	Abraham Kaplan	brothers	Lloyd Kaplan	4C	Debbie	siblings	Craig	1C	Mike
Faith Pilchen	3C	Isaac Kaplan				5C	Amberly			2C

Theory #5

Isidore OR Sarah are a 1/2 Aunt/Uncle of John

Isidore Fried & Sarah Esther Salzman					1/2 siblings	???				
Leona Fried	sisters	Celia Fried			1/2 1C	John Costello				
Ellen Chensky	1C	Erna Lee			1/2 2C	Vince Costello			siblings	Virginia
Sam Pilchen	2C	Abraham Kaplan	brothers	Lloyd Kaplan	1/2 3C	Debbie	siblings	Craig	1C	Mike
Faith Pilchen	3C	Isaac Kaplan				1/2 4C	Amberly			2C

After testing my hypotheses, what are the possible relationships between John Costello and Isidore & Sarah?

Half-Sibling
Aunt/Uncle
Sibling

Knowing that, what do I need to do next?

Learn EVERYTHING I can about Isidore Fried & Sarah Esther Salzman both in the US and in Ukraine. I am especially interested in their parents, siblings, and grandparents because, through the extended family, I may find John.

I also need a DNA plan - who to test and which matches to focus on and work with.

Quick Review

- Identify each match - who are they, who are their family members, who are your shared matches? Even the most generic data can often lead you to answer some or all of these questions.
- Identify the MRCA for key matches - each MRCA has the potential to help you connect matches and smash through brick walls.
- Use targeted match analysis & targeted DNA testing - identify a problem/goal/research question and then identify the person or persons whose DNA is most likely to help find the answer.
- Chart possible theoretical relationships between key matches & use the Shared cM Tool to test your hypotheses - remember that one hypothesis is not enough, we are both trying to prove AND disprove ourselves at the same time. We need to be careful about having a bias. Consider all of the possible relationships based on the data you have to work with.
- Celebrate the victories!
- Constantly reassess and adjust your goals and questions - answers often take time and patience. Every time you make some progress, compare the new information to your previous data - what do you need to change, update, consider in light of the new information?

“Like partaking of the sacrament, attending meetings, reading the scriptures, and saying personal prayers, doing family history and temple work should be a regular part of our personal worship. The response of our youth and others to prophetic invitations has been inspiring and proves this work can and should be done by *all* members at *any* age.

As Elder Quentin L. Cook explained, **“We [now] have the doctrine, the temples, and the technology.”** Doing the work now is much easier and limited only by the number of members who make this a priority. The work still takes time and sacrifice, but all can do it, and with relative ease compared to just a few years ago.

To assist members, the Church has gathered records and provided tools so that much of the work can be done in our own homes or in the ward buildings and the temple. Most obstacles have been removed. Whatever your past perception, it is different now!”

- Elder Allan F. Packer, “The Book”, October 2014 General Conference