

## *What Do You Do When Your DNA Doesn't Match Your Paper Trail?*

### Information on DNA

#### Y-DNA

- Follows strictly through the paternal line
- Women do not have this chromosome
- It is carried down from father to son
- This is useful for surname genealogy studies

#### MtDNA

- Both men and women have mitochondrial DNA
- Only women can pass their MtDNA on to their children
- Sons and daughters would have the same MtDNA sequence but only the daughters could pass this sequence on

#### Caveat on DNA

- DNA is just one of many possible sources of information you can use to verify or deny a relationship
- Human error can occur when the results are transcribed, thereby providing false information
- DNA results should **always** be used in concert with your paper research

#### Learn migration paths for specific DNA haplogroups

- Haplogroups characterize the early migrations of specific population groups
- A shared haplogroup basically says that you all are descended from a common ancestor
- This will give clues as to whether you are researching the right family

#### Learn about non-paternity events if your Y-DNA doesn't come back what you expect it to be

- Non-paternity event (NPE): a term used in [genetic genealogy](#) to describe any event which has caused a break in the link between an hereditary surname and the [Y-chromosome](#) resulting in a son using a different surname from that of his biological father

#### Some scenarios for a non-paternity event (there are others)

- Illegitimacy
- Infidelity
- Re-marriage
- Adoption—both formal and informal
- Surrogacy
- Name change or Anglicization of surname
- Mistake in genealogy or in DNA analysis

### **What Do I Need to Do if My Paper Trail Doesn't Match My DNA?**

#### Go back to the beginning and redo your paper trail

- Don't assume anything but do listen to family lore—there may be clues there
- Always look at original records, if possible

- If not, compile a number of secondary sources that point to a specific conclusion
- List what you know and can prove
- Record what doesn't fit and why it is incorrect
- Use a timeline to follow a family
- Don't forget to research siblings and other relatives—their records may give clues not shown on your ancestor's records
- Look at all the small details on any record found
- Question and analyze what you find
- Make sure you are tracing the right family
  - Do this by making lists every so often of what you know, what you discovered, and what you are questioning
- If there was a non-paternity event, try to determine when and where it happened and what caused it
- If there was a non-maternity event, it means that your mother is not your biological mother
  - Usually, this points to an adoption or illegitimacy

Question different spellings of last name

- They could be just spelling mistakes or transcription errors
- Or, they could be different families

Understand the cultural norms

- For example, naming patterns
- Designations in church records

Look at all the record groups that might contain clues

- Be aware of what record groups are available and where they can be found
- Be sure you are searching in the right time frame and right place

Analyze everything and come up with an educated conclusion

- Write what your conclusion is and why you came to it
- Realize that answers may never be definitively found
- The records may not exist or there may have been an informal event involved, eg. adoption

**REMEMBER:** You are who you are and that's what makes you special! Embrace the results—whatever they turn out to be!