## **DNA shows Joseph Smith was Irish**

## **By Michael De Groote**

Mormon Times Published: Friday, Aug. 8, 2008

SANDY, Utah -- DNA research into Joseph Smith Jr.'s genealogy has turned up a surprise, according to Ugo Perego, director of operations at the Sorenson Molecular Genealogy Foundation: A rare DNA marker shows that the assumption Smith's family line came from England is probably wrong.

The Smiths were Irish.

Perego was speaking at the 10th annual Mormon Apologetics Conference presented by the Foundation for Apologetic Information & Research this week at the South Towne Exposition Center in Sandy. He recounted the investigation into Joseph Smith's DNA and some of the results.

The primary means used to investigate Joseph Smith's DNA was the Y chromosome -- a part of DNA that is only passed from father to son and has few mutations.

Elaine Nichols, a specialist in Joseph Smith's genealogy, according to Perego wrote in 1991 that Smith's line can only be followed with confidence back to Robert Smith, possibly born in 1626. Robert Smith showed up in 1638 in Boston, Mass., as an indentured servant to another man. No parents known. No siblings known.

"At that time we thought: 'Wouldn't it be cool if we can reconstruct the Joseph Smith genetic signature, the paternal-line signature ... and then, somehow,... collect samples from Smiths in England, particularly in the area where we think (Robert Smith) came from, see if we find similar genetic signatures there, and perhaps bridge the gap between the Utah or Mormon Smiths and those in England -- and find a way to bridge this genealogical gap using DNA," Perego said.

By using DNA samples from several known Joseph Smith Jr. and his father's descendants, an accurate example of his Y chromosome DNA profile was identified. There was no need to test his blood or bones or hair or anything.

"If I had Joseph Smith standing by me and be able to (take a sample of his cells) and get some DNA from him, I wouldn't know any additional information than what I already know based on the (samples) of his descendants. That is how accurate this information is," Perego said.

Having this accurate DNA profile also enabled testing of his alleged descendants through polygamous or plural wives.

Perego showed part of a list of alleged children of Joseph Smith through other wives. The DNA of a number of the alleged children was identified and compared:

Moroni Pratt was not his child, contrary to what Fawn Brodie speculated in her critical biography of Joseph Smith, "No Man Knows My History."

Zebulon Jacobs was not his child.

Oliver Norman Buell was claimed by Brodie to be a son of Joseph Smith. She had compared his photograph with Joseph Smith III. "Even the hairstyle was the same," Perego said, eliciting some laughter from the crowd. But notwithstanding the physical similarities, Buell was not Smith's child.

Mosiah L. Hancock was not his child either.

Using other DNA tests, Perego also hopes to determine whether Josephine Rosetta Lyon is a daughter of Joseph Smith. So far he has collected 120 DNA samples from her descendants. He says they should know in the "next year or so."

"My testimony of Joseph Smith has absolutely nothing to do with to what extent he practiced polygamy," Perego said. "But there is an interesting situation in which there are literally thousands of people descended of these individuals that are wondering, based on what has been written, whether or not they are descendants of Joseph Smith, and so here you have a chance to tell these people how things are."

Whether Joseph fathered some of the other children on the list may never be known, because some of them died too young to have any children themselves. "I'm not really in the business of going around and digging up graves and testing," Perego said.

Perego then returned to his search for Joseph Smith's ancestor in England. Because Joseph Smith's last certain ancestor on the Smith paternal line, Robert Smith, was indentured to a man who had property in Kirton, Lincolnshire, England, the assumption was made that Robert Smith was also from Kirton.

Another Robert Smith was found there who had a son named Robert at about the correct time. This new Robert Smith was assumed to be the father of the younger indentured servant Robert Smith who came to America -- even though the connection was weak. Smith is a common name, of course, and Robert was the most popular first name at the time.

This is where the trail goes completely cold using standard genealogical methods. Perego's goal was to see if any traces of the Smith family DNA were still in the area. If Robert Smith came from that area, some matching DNA should remain in living Smiths. This would add some support to the genealogical record.

Perego wrote letters to 1,100 Smiths in the Lincolnshire area asking for DNA samples. Thirtythree people responded, but testing showed zero matches with Joseph Smith's DNA. The Joseph Smith DNA was unusual for Smiths -- even among Smiths in the United States. Without any success in the target area, Perego cast a wider net -- using both Joseph Smith's specific DNA Y chromosome profile and a "haplogroup" to look for matches. A haplogroup is a grouping of Y chromosome profiles that share similar characteristics. These haplogroups are usually very geographically specific.

First, Perego put the Joseph Smith DNA profile into the Sorenson Molecular Genealogy Foundation database of 23,403 Y chromosome DNA samples. He was looking for matches from about the time when Robert Smith came to America. He found close matches, many of which were Irish.

From there, Perego identified a part of Joseph Smith's DNA that had a very rare marker called M222. With this "higher resolution" he found that the same marker was found in Northwest Ireland -- with a little bit in Lowland Scotland.

Finally, Perego looked at a study published in 2006 that dealt with this same area of Ireland. A Y chromosome profile had been found that was attributed to the many descendants of "Niall of the Nine Hostages," a fifth-century Irish warlord who was the ancestor of the kings of Ireland up to the 10th century. Perego compared that Y chromosome with Joseph Smith's profile and found they matched very closely. This was another indication that Smith's ancestors along his paternal line were not just Irish, but probably related to Irish royalty.

"Perhaps this indentured servant, this 12-year-old boy, was an Irish descendent, perhaps only one or two generations before they were living in Ireland ... and moved to England," Perego said. "Irish people were not viewed too well in England, perhaps there was a surname change. Perhaps Smith was not a Smith, was something else at some point."

Perego speculated the Irish Smiths were likely not in England for many generations, otherwise he would have found a lot of genetic matches from the samples he collected from the English Smiths who live now in that area.

"I hope that that doesn't change anybody's testimony here," he joked. "I feel OK about the Irish people."

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