



A medical researcher doing genetic sequencing for the US military. Photo by the US Air Force in 2017: <https://bit.ly/2AsEEob>

## Note on this Case Study:

New technologies present both opportunities and challenges to religious communities. Throughout history, many religious people have created and used new technologies on behalf of their religious traditions. At times, religious needs have driven technological innovation. Yet many religious people have also tried to limit the use of certain technologies that they felt violated principles of their tradition. The relationship between religion and technology is complex and highly dependent on context. As you read these case studies, pay attention to that context: Who are the groups involved? What else is happening in their context? Who benefits from new technologies? Who gets to decide if they are legitimate or not?

As always, when thinking about religion and technology, maintain a focus on how religion is internally diverse, always evolving and changing, and always embedded in specific cultures.

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## Mormons, Genetics, & Digitized Data

The Church of Jesus Christ of Latter-day Saints (LDS), more commonly known as Mormons, are a group of millions of Christians who hold unique beliefs not shared by other Christians. For Mormons, baptisms can be performed on the living and the dead to join families for eternity after death.<sup>1</sup> When performed on the dead, they are called “proxy” or “vicarious” baptisms. The LDS church teaches that the deceased person will then be able to accept or reject their Mormon baptism. While the church instructs its members to focus proxy baptisms on their relatives, its stated goal is that all deceased people will one day be baptized.<sup>2</sup> To meet this goal, and to keep track of who has received proxy baptisms, the LDS church keeps records of genealogies across the globe. As a result, over the last century Mormons have become experts in digital data storage and an important research population for geneticists.

Since 1894, the LDS church has sent representatives around the world to collect records from churches, governments, libraries, and more. At first, the church gathered data on notecards, but as the archives grew, paper records became impossible. In 1938, the church became a leader in microfilm, a technology to miniaturize documents that can shrink a page to 1/25<sup>th</sup> of its original size. With the development of computers and the internet, Mormons have created some of the most sophisticated informatics and digital storage technology in the world, stored in the Granite Mountain Records Vault in Utah.<sup>3</sup>

Today, the LDS church claims to have the records of over 12 billion deceased people, some going all the way back to the 1<sup>st</sup> century CE. Data-gatherers on 220 teams in 45 countries, along with hundreds of thousands of Mormon volunteers are digitizing millions of paper records, photos, microfilm, and more. By 2014, the church records were 32 times the size of the data recorded by the US Library of Congress. Each year, they add a quantity of data equal to another Library of Congress, all of which is stored in their International Genealogical Index (IGI). Mormons have free access to the IGI through the church’s FamilySearch website and 4,600 Family History Centers, Mormons’ public

<sup>1</sup> “Genealogy,” Church of Jesus Christ of Latter-day Saints, accessed Jan. 3, 2019, <https://bit.ly/2B72YxT>.

<sup>2</sup> “Background Explanation of Temple Baptism,” Church of Jesus Christ of Latter-day Saints, accessed Jan. 3, 2019, <https://bit.ly/2Qn5I19>.

<sup>3</sup> Christine Kenneally, *The Invisible History of the Human Race* (Viking: New York City, 2014).

genealogical library system. Due to the IGI, the best records for many countries across the world are in Utah.<sup>4</sup> However, many people object to this mass collection of personal data, because its primary purpose is proxy baptisms. In the late 1990s, the Jewish community was offended to learn Mormons were giving proxy baptisms to Holocaust victims, which to many Jews echoed their terrible history of forced baptisms by Christians. In response to these concerns, the church promised to end the collection of Holocaust victims' names for proxy baptisms, but the practice continued. In 2008, the Vatican instructed Catholic clergy to deny Mormon data collectors access to parish records, in order to prevent future proxy baptisms of Catholics. The LDS church's digitized genealogy systems have also been controversial because they allow only heterosexual couples to be recorded in the archives, not same-sex couples.<sup>5</sup>

But digital data storage is not the only scientific tool that Mormons use to further their global baptismal goals. Many Mormons have also become interested in genetic research as they collect genealogical data. The LDS church actively promotes DNA testing for its members to help them discover unknown branches of their family tree, and many of the first popular genetic testing kit companies were created by Mormons. In 2001, Mormon billionaire James Sorenson started one of the earliest genetic test kit companies, Relative Genetics, in part due to his religious interests. It was later bought by Ancestry.com, another Mormon company. While today, Ancestry is a publicly traded company, it uses LDS church records and the IGI. All LDS church members receive free memberships, and they can use their account to send relatives they find on Ancestry.com directly to the LDS church for a proxy baptism with the click of a button.<sup>6</sup>

In addition to Mormons' interest in genetics, genetic researchers are interested in them. Because Utah's Mormon population began as a relatively small, insular community, and the LDS church has recorded a vast trove of genealogical data about them, Mormons are an ideal test group for genetic research. Scientists are able to match church records with other data sets, such as cancer registries to study inherited traits over centuries. Many scientists have also found most Mormons to be willing research subjects due to the church's encouragement, even though there are radical sects of Mormons who reject most medical science. However, Utah's Mormons have become one of the most important genetic research populations because of the combination of their genetic information and the known medical histories of their ancestors.<sup>7</sup>

Still, Mormon interest in genetics has limits, and at times the LDS church has rejected research that it believes to be in conflict with its values and teachings. For example, the LDS church has denied access to its archives to scientists working on the genetics of birth defects, as LDS leaders fear such research could lead to more abortions. Church leaders also reacted strongly against Mormon scientist Thomas W. Murphy, who in 2002 confirmed with DNA analysis that Native Americans arrived in America from Asia, and not from Israel as the Book of Mormon claims. When the LDS church demanded Murphy recant his findings or be excommunicated, he refused to recant.<sup>8</sup> While his trial was postponed indefinitely in 2003, it illustrated the complex relationship between the LDS church and its controversial uses of technology.

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<sup>4</sup> Ibid.; FamilySearch, "FamilySearch | What's Your Story?" YouTube Video, 3:33, May 22, 2012, <https://bit.ly/2R9J9yc>.

<sup>5</sup> Mark Oppenheimer, "A Twist on Posthumous Baptisms Leaves Jews Miffed..." *New York Times*, Mar. 2, 2012, <https://nyti.ms/2Fa51R4>;

"Vatican Tells Parishes not to Open Archives to LDS Church," *Catholic News Agency*, May 7, 2008, <https://bit.ly/2RwuLPN>.

<sup>6</sup> Aubrey Eyre, "How DNA is 'Changing Everything' ..." Church of Jesus Christ of Latter-day Saints, Mar. 9, 2018, <https://bit.ly/2s8rij2>;

George Anders, "For Utah Billionaire, Search for Roots..." *Wall Street Journal*, Apr. 26, 2005, <https://on.wsj.com/2AzkF79>; Leslie Albrecht Huber, "How to Make the Most of Your Free Ancestry LDS Account," *FamilySearch Blog*, July 18, 2017, <https://bit.ly/2Fb2bwQ>.

<sup>7</sup> Sarah Zhang, "What Mormon Family Trees Tell Us about Cancer," *The Atlantic*, June 23, 2017, <https://bit.ly/2t6OH0b>; Kirk Johnson, "By Accident, Utah is Proving an Ideal Genetic Laboratory," *New York Times*, July 31, 2004, <https://nyti.ms/2s9u1SD>.

<sup>8</sup> Ibid.; William Lobdell & Larry Stammer, "Mormon Scientist, Church Clash over DNA..." *LA Times*, Dec. 8, 2002, <https://lat.ms/2TsaSXy>.

## Additional Resources

### Primary Sources:

- Video introduction to LDS's FamilySearch and how they collect their records (2012): <https://bit.ly/2R9J9yc>
- Videos about storage technologies in the Granite Mountain Records Vault from the LDS's FamilySearch (2011): <https://bit.ly/2Qqmjx3> and <https://bit.ly/2RawWcl>
- Promotional video for LDS's FamilySearch (2012): <https://bit.ly/2Ryqbkf>
- Video from LDS's FamilySearch explaining how their volunteer indexers work: <https://bit.ly/2SBjiad>
- Official church explanation to the media about proxy baptisms (accessed 2019): <https://bit.ly/2Qn5J19>

### Secondary Sources:

- NYT article on the importance of Utah to genetic scientists (2004): <https://nyti.ms/2s9u1SD>
- Atlantic article on the importance of Mormons to genetic scientists (2017): <https://bit.ly/2t6OH0b>
- NYT article on Jewish reactions to proxy baptisms (2012): <https://nyti.ms/2Fa5JR4>

## Discussion Questions

- Watch the primary source videos from the LDS site FamilySearch. What religious themes do you notice? Why might FamilySearch use or avoid religious themes?
- Read the explanation of proxy baptism that the LDS church published for the media. How does an understanding of the internal diversity of Mormonism help explain the LDS church's position? How might the church's intended audience for this article impact its content?
- How has the LDS quest for global genealogies changed over time?
- How have Mormon religious practices affected the growth of new technologies in the fields of digitization and genetics?
- Why does the LDS church leadership support some forms of genetic research and not others? What effects might this have on scientific research?
- Why are many Jews and Catholics offended by proxy baptisms? How are their reasons for offense similar or different?



The baptismal font of the Mormon Salt Lake Temple, where some proxy baptisms are performed. Photo by James E. Talmage for the Mormon *Deseret News* in 1912, via Wikimedia Commons: <https://bit.ly/2F4hqZt>