


**DNA and the
Book of Mormon**

Bishop **John M. Butler**, Ph.D.
Washington DC Temple Visitor Center Presentation
September 9, 2007



President Hinckley's Promise
[When We Read the Book of Mormon](#)
"A Testimony Vibrant and True," *Ensign*, Aug 2005, pp. 2-6

There will come into your lives and into your homes

- (1) an added measure of the Spirit of the Lord,
- (2) a strengthened resolution to walk in obedience to His commandments, and
- (3) a stronger testimony of the living reality of the Son of God.

Did you meet that challenge and finish the *Book of Mormon* by December 31, 2005?

Los Angeles Times **Front Page Article**
fourth-most widely distributed U.S. newspaper **Feb 16, 2006**

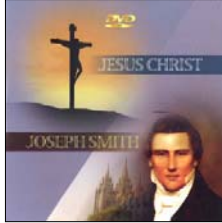
Bedrock of a Faith Is Jolted:
DNA tests contradict Mormon scripture.
The church says the studies are being twisted to attack its beliefs.

By William Lobdell, Times Staff Writer

"...For Mormons, the lack of discernible Hebrew blood in Native Americans is no minor collision between faith and science. It burrows into the historical foundations of the Book of Mormon..."

"...Officially, the Mormon Church says that nothing in the Mormon scriptures is incompatible with DNA evidence, and that the genetic studies are being twisted to attack the church..."

More Recently...



- On March 25, 2007, an Anti-Mormon DVD entitled "**Jesus Christ/Joseph Smith: Search for the Truth**" was distributed to thousands of homes throughout Utah other parts of the U.S.
- One section entitled "DNA" makes the claim that modern science renders the Book of Mormon a fraud

Is what the critics are saying true or not?
Is it possible for DNA evidence to prove or disprove the Book of Mormon?

One of the Signs of the Times:
Satan Spreads Rumors

- Shortly before the First Coming of Christ...
– **Helaman 16:22** "...Satan did stir them up to do iniquity continually; yea, **he did go about spreading rumors** and contentions upon all the face of the land, **that he might harden the hearts of the people against that which was good and against that which should come...**"
- Now just before His Second Coming...
– Critics are trying to subtly use modern DNA science to challenge the Book of Mormon

Some Questions I Would Like to Address...

- Who are the critics and what are their contentions?
- How has the Church responded to these attacks on the Book of Mormon?
- How is DNA used today for forensic and ancestry testing?
- What can we infer from the Book of Mormon about the genetics of its people?

The Critics



Thomas W. Murphy

Less active member for >10 years
Wrote anti-Mormon article in 2002
Received Ph.D. in 2003 (Anthropology)
Now silent about the topic



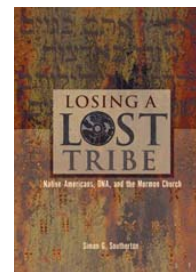
Simon G. Southerton

Former bishop in Australia
Left Church in 1998
Ph.D. in Plant Genetics
Wrote anti-Mormon book in 2004
Excommunicated in 2005 for adultery

Writings of Murphy and Southerton



May 2002
Signature Books



Aug 2004
Signature Books

Los Angeles Times

fourth-most widely distributed U.S. newspaper

Front Page Article

Feb 16, 2006

- **Bedrock of a Faith Is Jolted**
– DNA tests contradict Mormon scripture.
The church says the studies are being twisted to attack its beliefs.

By William Lobdell, Times Staff Writer **Quotes Simon Southerton...**

Take away the Book of Mormon and the revelations, and where is our religion? We have none. – Joseph Smith (TPJS, p. 71)

What Are the Critics of the Book of Mormon Arguing?

- Native Americans living today have DNA that most closely resembles Asian DNA which “proves” that Book of Mormon is not true since Lehi was from the Middle East and Jewish DNA has not been found in modern Native Americans
- DNA is used in courts of law. DNA results from Native Americans is “evidence” against the statement found in the Introduction to the Book of Mormon that the Lamanites “are the principal ancestors of the American Indians”

This is not really a “new” issue as many battles have been fought for the past six years in intellectual circles prior to becoming more visible with the L.A. Times

INTRODUCTION

The Book of Mormon is a volume of holy scripture comparable to the Bible. It is a record of God's dealings with the ancient inhabitants of the Americas and contains, as does the Bible, the fulness of the everlasting gospel. The book was written by many ancient prophets by the spirit of prophecy and revelation. Their words, written on gold plates, were quoted and abridged by a prophet-historian named Mormon. The record gives an account of two great civilizations. One came from Jerusalem in 600 B.C., and afterward separated into two nations, known as the Nephites and the Lamanites. The other came much earlier when the Lord confounded the tongues at the Tower of Babel. This group is known as the Jaredites. After thousands of years, all were destroyed except the Lamanites, and they are the principal ancestors of the American Indians.

The crowning event recorded in the book of Mormon is the personal ministry of the Lord Jesus Christ among the Nephites soon after his resurrection. It puts forth the doctrines of the gospel, outlines the plan of salvation, and tells men what they must do to gain peace in this life and eternal salvation in the life to come.

After Mormon completed his writings, he delivered the account to his son Moroni, who added a few words of his own and hid up the plates in the Hill Cumorah. On September 21, 1823, the same Moroni, then a glorified, resurrected being, appeared to the Prophet Joseph Smith and instructed him relative to the ancient record and its destined translation into the English language.

In due course the plates were delivered to Joseph Smith, who translated them by the gift and power of God. The record is now published in many languages as a new and additional witness that Jesus Christ is the Son of the living God and that all who will come unto him and obey the laws and ordinances of his gospel may be saved.

Concerning the record the Prophet Joseph Smith said: “I told the brethren that the book of Mormon was the most correct of any book on earth, and the key-stone of our religion, and a man would get nearer to God by abiding by its precepts, than by any other book.”

In addition to Joseph Smith, the Lord provided for eleven others to see the gold plates for themselves and to be special witnesses of the truth and divinity of the Book of Mormon. Their written testimonies are included herewith as “The Testimony of Three Witnesses,” and “The Testimony of Eight Witnesses.”

We invite all men everywhere to read the Book of Mormon, to ponder its truths, to search the message it contains, and then to ask God, the Eternal Father, in the name of Christ if the book is true. Those who pursue this course and ask in faith will gain a testimony of its truth and divinity by the power of the Holy Ghost (See Mormon 10).

Those who gain this divine witness from the Holy Spirit will also come to know by the same power that Jesus Christ is the Savior of the world, that Joseph Smith is his revivifier and prophet in these last days, and that the Church of Jesus Christ of Latter-day Saints is the Lord's kingdom once again established on the earth, preparatory to the second coming of the Messiah.

- Written for the 1981 edition by Elder Bruce R. McConkie (Quorum of the Twelve Apostles)
- “[The Lamanites] are the principal ancestors of the American Indians”
- Critics contend that Israelite DNA is not found in Native Americans and therefore Book of Mormon is a product of the 19th Century rather than of ancient Israelite origin

Elder Bruce R. McConkie Stated in *Mormon Doctrine* (1966), p.33

- “The American Indians...as Columbus found them also had other blood than that of Israel in their veins. It is possible that isolated remnants of the Jaredites may have lived through the period of destruction in which millions of their fellows perished. It is quite apparent that groups of orientals found their way over the Bering Strait...”

Remember that Elder McConkie is the author of the “principal ancestor” statement included 15 years later in the Introduction of the 1981 edition

Elder Dallin H. Oaks (Quorum of the Twelve Apostles)
Statement in October 1993

- [Over forty years] I was introduced to the idea that the Book of Mormon is not a history of all of the people who have lived on the continents of North and South America in all ages of the earth. Up to that time I had assumed that it was... **If the Book of Mormon only purports to be an account of a few peoples who inhabited a portion of the Americas during a few millennia in the past, the burden of argument changes drastically... The opponents of historicity must prove that the Book of Mormon has no historical validity for any peoples who lived in the Americas in a particular time frame**, a notoriously difficult exercise.

Dallin H. Oaks, "The Historicity of the Book of Mormon," In Paul Y. Hoskisson, ed., *Historicity and the Latter-day Saint Scriptures* (Provo: Brigham Young University religious Studies Center, 2001), 238-239. This talk was first given at the Foundation for Ancient Research and Mormon Studies Annual Dinner in Provo Utah on 29 October 1993.

Church's Response to the L.A. Times Article

The day the L.A. Times article came out I received emails from Kent Brown and Dan Peterson of BYU asking for my help in responding to the article.



- **Hugh Hewitt Radio Show**
 - Nationally syndicated radio show out of Southern California
 - Positive towards the Church due to a friendship with Elder Neal A. Maxwell
 - Covered the L.A. Times story on his show the day it came out with the reporter
 - Permitted response by Church experts one week after the L.A. Times article



- **Postings on LDS.org Website**
 - Multiple articles available since Nov 2003
 - Immediate response article written by John Butler

February 22, 2006 transcript from Hugh Hewitt radio show broadcast out of Southern California

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We were given almost 30 minutes to respond to the L.A. Times article

The other side of the Book of Mormon DNA debate.

HH: Last week, on February 16, to be exact, I opened up not a can of worms, but a can of chromosomes by getting on my program [William Lobdell, Los Angeles Times reporter](#), who that day had a Page 1, above the fold story, [Bedrock of a Faith Is Jolted: The DNA tests contradict Mormon scripture](#). The Church says the studies are being twisted to attack its belief. There ensued three wonderful segments of controversy and a mountain of e-mail. So with the help of some Mormons out there, I've located a couple of specialists to come on from the perspective of the Church, and I'm pleased to welcome [Dr. Daniel Peterson](#). He's a native Southern Californian, he got his undergraduate degree in Greek, and philosophy from BYU. He got his PhD from the University of California, Los Angeles. He teaches at BYU now, where he's an associate professor of Islamic studies and Arabic. And he's also a member of the Center for the Preservation of Ancient Religions Texts, CPART, which has produced a computer digitized version of the Dead Sea Scrolls. I'm also joined by [Dr. John Butler](#), who is a project leader at the Human Identity DNA Technologies Group, Biotechnology Division for the National Institute

I finished writing this article following the Hugh Hewitt radio show and it was posted on the BYU site the next day with a link from the LDS.org site

Addressing Questions Surrounding The Book of Mormon and DNA Research

By John M. Butler*

On February 16, 2006 the Los Angeles Times ran a front page article questioning the authenticity of the Book of Mormon based on studies of human DNA. Citing DNA "evidence" that suggests an Asian ancestry for people native to the Americas, critics of the Church of Jesus Christ of Latter-day Saints have for the past several years claimed these DNA studies demonstrate that the Book of Mormon account of a group of colonists coming from the Middle East in 600 B.C. cannot be authentic.

Professor Hugh Nibley (1967)

- "The normal way of dealing with the Book of Mormon 'scientifically' has been first to attribute to the Book of Mormon something it did not say, and then to refute the claim by scientific statements that have not been proven."

Hugh Nibley, *Since Cumorah*, 2nd ed. (Salt Lake City: Deseret Book and FARMS, 1988), 214. The first edition appeared in 1967.

THE DATA

DNA Studies

- Hundreds of scientific articles published over the last 17 years have demonstrated that maternal and paternal **genetic lineages of present-day Native Americans correspond most closely to those found in Asians today**
- These data are used to support the theory that the Americas were populated ~15,000-30,000 years ago by groups traveling across the Bering Strait from Siberia into North America

What Does the Book of Mormon Say About the Genetics of Its People?

Three separate groups are described:

- Jaredites (Ether 6) – multiple families; unknown origin
- Lehites** (1 Nephi 18) – tribe of Joseph – divided into **Nephites** and **Lamanites** (2 Nephi 5)
- Mulekites (Helaman 6:10) or people of Zarahemla – tribe of Judah and others?

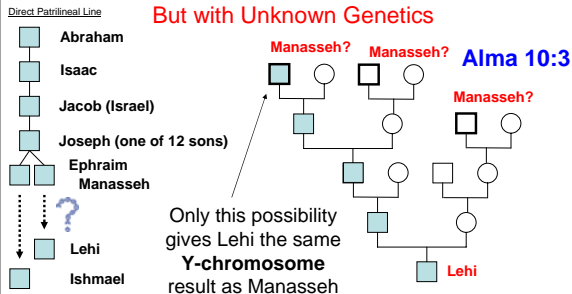
Lehi's Genealogy and Genetics

- Descended from Joseph of Egypt (1 Nephi 5:14) through Manasseh (Alma 10:3) – but on a direct male line?
- Mormon is a pure descendant of Lehi (3 Nephi 5:20) – why use that phrase unless others are there?

Apostle Erastus Snow in 1882 stated that **Ishmael**, who left Jerusalem with Lehi's family, was "of the lineage of Ephraim" and "thus these descendants of Manasseh and Ephraim grew together upon this American continent, with a sprinkling from the house of Judah, from Mulek...for aught we know, the remnants of some other tribes that might have accompanied Mulek" (*Journal of Discourses* 23:185-186).

Y-Chromosome (Paternal Lineage)

Lehi is Descended from Manasseh
But with Unknown Genetics



Ishmael's sons bring Ephraimite blood into the mix Zoram, servant of Laban, joins Lehi's party with an unknown background After Mosiah I, genetic mixing occurred with Mulekites (tribe of Judah)

Mitochondrial DNA (Maternal Lineages)

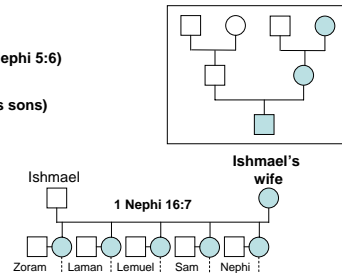
How many different lineages could be expected?

Lehite Colony Female Lines

Sariah (her daughters – 2 Nephi 5:6)

Ishmael's wife (her daughters marry Lehi's sons)

Wife of Ishmael's son #1
Wife of Ishmael's son #2



Nothing is known about their genetic backgrounds

All children of Nephi and his brothers as well as Zoram would have the mitochondrial DNA of Ishmael's wife (only mentioned in 1 Nephi 7:6, 7:19)

Relative Numbers of People

- Mosiah 25:1-3**
- Nephites in minority compared to Mulekites (people of Zarahemla)
- Combination of Nephites and Mulekites was less than half the number of Lamanites

Why would the Lamanite population be so much larger? Did they conquer local, native populations?

Were Other People There?

- The Book of Mormon is a religious record that provides only a partial picture of events usually within the confines of the recording prophet's family lineage. It is silent on other people being present.
- John Sorenson (BYU) argues that a large, local population base can be assumed based on the numbers described early in the Book of Mormon

John Sorenson (1992) When Lehi's party arrived in the land, did they find others there? *Journal of Book of Mormon Studies* 1:1-34

Jacob 5 May Have a Deeper Significance

- The placement of Zenos' allegory of the tame and wild olive trees by Jacob in the small plates of Nephi may have additional meaning in terms of the genealogy and genetics of Jacob's people... (v. 25,43,45,48)
- Wild root (native people; Gentiles) are grafted with tame branches (Nephites; house of Israel)...
- Note Jacob 7:1 – “there came a man among the people of Nephi, whose name was Sherem...” (he had never met Jacob)
- Amulek on meeting Alma states: “I am a Nephite” (Alma 8:20)

John Sorenson and Matt Roper (2003) *Before DNA. Journal of Book of Mormon Studies* 12(1): 6-23

The Jaredites Did they have Asian ancestry?

- Jaredite nation existed >1,500 years before the Lehiters and Mulekites arrived in the New World
- Most likely came from central Asia to northeast Asia and then by barge down the West Coast to west central Mexico
- **Genetically, their path of travel would have seemed much like land passage across the Bering Strait**
- Spanned at least 29 generations (Ether 1:6-33) – hundreds of years with combinations of marriages between people we know virtually nothing about
- May not have been completely annihilated – Ether's prophecy was that all of Coriantumr's household would be destroyed (Ether 13:20-21)
- Hugh Nibley argues for interaction and influence between Jaredites and Lehiters because of continuation of Jaredite names such as Korihor (Alma 30; Ether 7:3) and Coriantumur (Helaman 1:15; Ether 13)

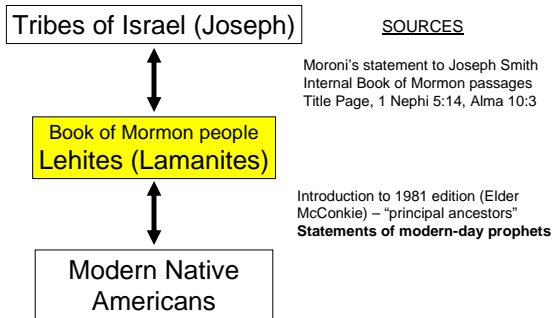
J.M. Butler (2003) *Journal of Book of Mormon Studies* 12:36-37

Angel Moroni's Statement

- Moroni informed the Prophet Joseph Smith during his first visit on the evening of September 21, 1823 that the Book of Mormon record gave “an account of **the former inhabitants of this continent, and the source from whence they sprang**” (JS-H 1:34)
- Note that this statement does not specifically connect modern-day Native Americans to the Book of Mormon peoples or prevent other people from living in ancient America

Title Page: “Written to the Lamanites, who are a remnant of the house of Israel...”

Establishing Connections



Anthony W. Ivins of the First Presidency (General Conference April 1929)

- We must be careful in the conclusions that we reach. The Book of Mormon teaches the history of three distinct peoples, or two peoples and three different colonies of people, who came from the old world to this continent. **It does not tell us that there was no one here before them. It does not tell us that people did not come after.** And so if discoveries are made which suggest differences in race origins, it can very easily be accounted for, and reasonably, for **we do believe that other people came to this continent** (LDS Conference Report, April 1929, p.15).

The Book of Mormon Record Closed Almost 1600 Years Ago...

- When Moroni is closing his record in 400 A.D. he records in **Moroni 1:2** that Nephites are being hunted down and the Lamanites are fighting among themselves
- 400 A.D. is over 50 generations ago – **plenty of time for Asian lineages to mix** with individuals containing the blood of Lehi (if they had not already mixed...)

More Recently...

- When Columbus and other Europeans came, they brought disease and killed millions of natives...
- Michael Crawford, author of the book *The Origins of Native Americans* (p. 261), concludes **“This population reduction [due to disease] has forever altered the genetics of the surviving groups, thus complicating any attempts at reconstructing the pre-Columbian genetic structure of most New World groups”**.

Journal of Book of Mormon Studies Nov. 2003, 12:36-37

A FEW THOUGHTS FROM A BELIEVING DNA SCIENTIST

John M. Butler

While it is possible to speculate endlessly about scenarios that would make Book of Mormon story lines compatible with current DNA evidence, the record itself is simply not descriptive enough to provide definitive calibration points with which to make confident scientific conclusions.

Thus, we are left where we started (and where I believe the Lord intended us to be)—in the realm of faith. A spiritual witness is the only way to know the truthfulness of the Book of Mormon. Although DNA studies have made links between Native Americans and Asians, these studies in no way invalidate the Book of Mormon despite the loud voices of detractors. ■

Without reference samples (i.e., original Lehiite DNA), no valid comparisons can be made.

Why What the Critics Are Saying Is Not True

- We are unsure of the Book of Mormon people's lineage
- The gene pool of today is vastly different than 2600 years ago (when Lehi left Jerusalem)
- There were probably other groups of people present that are not referred to in the text
- **No reference samples means no reliable conclusion**

President Gordon B. Hinckley (*Ensign* Feb 2004, p. 6)

- **“The evidence for [the Book of Mormon's] truth, for its validity in a world that is prone to demand evidence, lies not in archeology or anthropology, though these may be helpful to some. It lies not in word research or historical analysis, though these may be confirmatory. The evidence for its truth and validity lies with the covers of the book itself. **The test of its truth lies in reading it.** It is a book of God. Reasonable people may sincerely question its origin; but those who have read it prayerfully have come to know by a power beyond their natural senses that it is true, that it contains the word of God, that it outlines saving truths of the everlasting gospel.”**

Elder Dallin H. Oaks

- Just as science will not *prove* religious truth, neither will science *disprove* it. The eternal verities of religion will not be disproven by even the latest proof or the firmest laws of science. Science is too tentative. (*The Lord's Way*, pp. 91-93)

Professor Hugh Nibley (BYU) cautioned: “Let us not, therefore, seek to hold God to the learned opinions of the moment when he speaks the language of eternity (CWHN 3:134).”

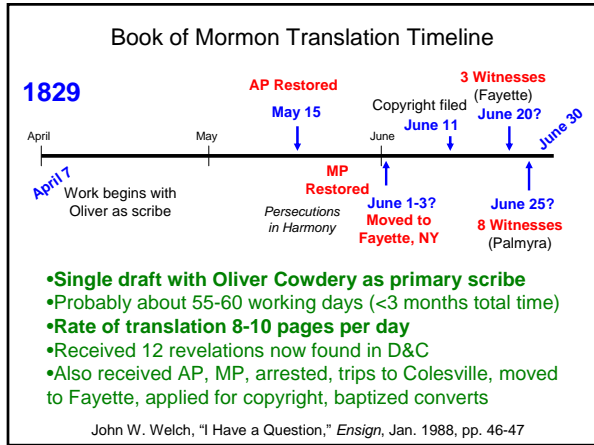
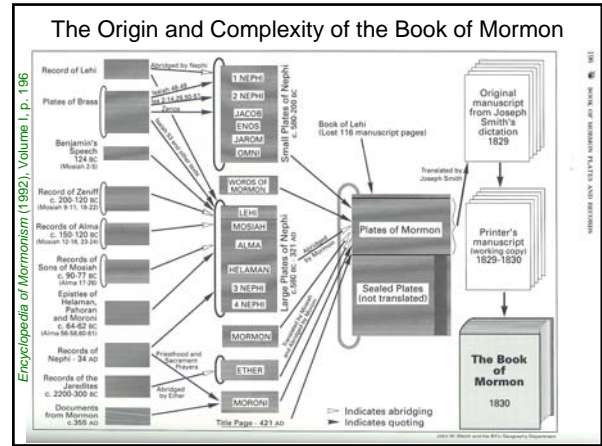
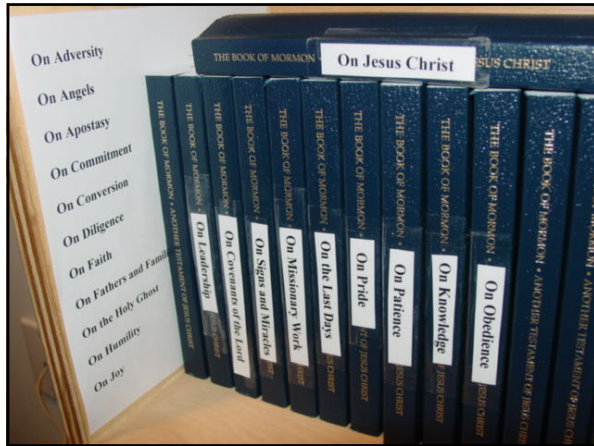
Hugh Nibley's Perspective

The evidence that will prove or disprove the Book of Mormon does not exist.

When, indeed, is a thing proven? Only when an individual has accumulated in his own consciousness enough observations, impressions, reasonings, and feeling to satisfy him personally that it is so.

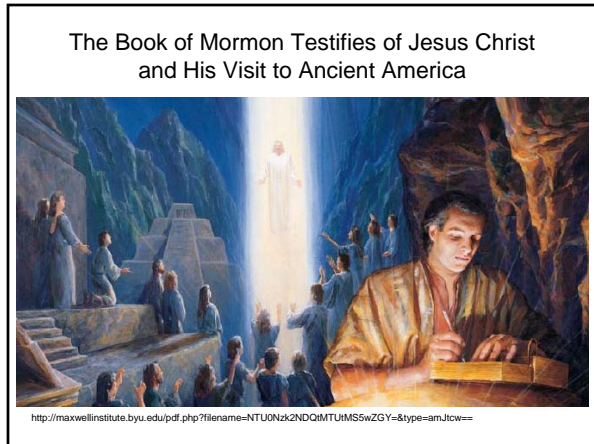
-- *Since Cumorah, Collected Works of Hugh Nibley* 7:xiii-xiv

Moroni 10:4 defines the Lord's formula in His laboratory of learning



A Simple Comparison

Forensic DNA Typing	Book of Mormon
• 335 pages (1st edition), 676 pages (2nd ed.)	• 590 pages (531 pages today)
• 18 months with intense effort for last 4	• 55-60 days during April-June 1829
• 20 years of school; 6 years of specialized training in my subject	• 3 years of school; 6 years of advanced training by heavenly messengers
• Author was 30	• "Author" (translator) was 23
• Written on word processor; over a dozen draft with careful editing by my wife	• Written by hand; first draft used as dictated to scribe; nothing is out of place
• Referred to over 1,000 difference sources for reference material	• No references consulted; no library of cross-references to confirm anything
• Printing time of 6 months (July 2000 - Jan 2001)	• Printing time of 8 months (August 1829-March 1830)
• 5,000 copies printed for first edition	• 5,000 copies at a cost of \$3,000
• Parts were already out of date even before it was published because of rapid changes in the field	• "Most correct book" containing doctrines of salvation that are timely and will never be out of date
• Written for DNA scientists and students	• Written anciently for people of our time
• Endorsed with a foreword written by a fellow scientist; marketed by publisher	• Endorsed by 3 & 8 witnesses; the Lord (D&C 17:6); Holy Ghost (Moroni 10:3-5)
• The words of John Butler	• The Word of God



Feel free to email me with further questions or if you would like a copy of this presentation:

JMBnTWB@aol.com

Information from the Church Website

<http://www.lds.org>

NEWSROOM

The Official Resource for News Media, Opinion Leaders, and the Public

The Unofficial Defenders of the Faith

FARMS and FAIR Responses

- Foundation for Ancient Research and Mormon Studies (**FARMS**) – <http://farms.byu.edu>
 - Part of BYU Neal A. Maxwell Institute for Religious Scholarship
 - Publishes *Journal of Book of Mormon Studies*
 - November 2003 JBMS had a special issue on DNA
- Foundation for Apologetics and Information Research (**FAIR**) – <http://www.fairlds.org>
 - Unofficial responses to anti-Mormon attacks
 - Holds an annual conference in Utah each August

November 2003 Issue covered DNA and the Book of Mormon

From *Journal of Book of Mormon Studies*

[The Problematic Role of DNA Testing in Unraveling Human History](#)

By: John L. Sorenson

Before DNA

By: John L. Sorenson, Matthew Roper

[DNA and the Book of Mormon: A Phylogenetic Perspective](#)

By: Michael F. Whiting

[A Few Thoughts From a Believing DNA Scientist](#) ←

By: John M. Butler

[Who Are the Children of Lehi?](#)

By: D. Jeffrey Meldrum, Trent D. Stephens

Other FARMS Publications on the Topic

From *FARMS Review*

[Losing a Lost Tribe: Native Americans, DNA, and the Mormon Church](#)

By: Ryan Parr

[Editor's Introduction: Of "Galileo Events," Hype, and Suppression: Or, Abusing Science and Its History](#)

By: Daniel C. Peterson

[Appendix, On Aping Aristotle: Modern-day Simplicios](#)

[Prolegomena to the DNA Articles](#)

By: Daniel C. Peterson

[Detecting Lehi's Genetic Signature: Possible, Probable, or Not?](#)

By: David A. McClellan

[Nephi's Neighbors: Book of Mormon Peoples and Pre-Columbian Population](#)

By: Matthew Roper

[Swimming the Gene Pool: Israelite Kinship Relations, Genes, and Genealogy](#)

By: Matthew Roper

[Evasive Israel and the Numerical Dynamics of Population Mixing](#)

By: Brian D. Stubbs

FARMS
Reviews
October
2006
Issue

[The Charge of 'Racism' in the Book of Mormon](#)

By: John A. Tvedtnes

[Addressing Questions Surrounding the Book of Mormon and DNA Research](#) ←

By: John M. Butler

[DNA and the Book of Mormon](#)

The FAIR Response to the March 2007 Anti-Mormon DVD

The screenshot shows a web browser window displaying the FAIR website. The page title is "Search for the Truth DVD:DNA". The main heading is "DNA". Below the heading, there is a claim: "Claim: 'Prisoners are routinely freed from crimes they supposedly committed many years before when scientific experts prove conclusively that the DNA found on the victim did not match the DNA of the convict.'" The text continues: "The video's producers hope that the viewer will be impressed by the use of DNA in legal proceedings (which is very precise) and assume that the science as (mis)applied to the Book of Mormon is equally solid." A small image of a DNA double helix is visible on the right side of the page. The URL at the bottom is "http://en.fairmormon.org/index.php/Search_for_the_Truth_DVD:DNA".

Henry Eyring

World-famous chemist and father of Elder Henry B. Eyring

- **In the Church, you only have to believe the truth.** Find out what the truth is! This Church is not worried...because the Church is committed only to the truth. I do not mean to say that individuals in the Church always know the whole truth, but we have the humility sometimes to say we do not know all the answers about these things (*Reflections of a Scientist*, p. 7).

Summary

- We do not know how current genetic studies of modern-day Native Americans coincide with Lamanite genealogy because **there is not enough information within the Book of Mormon record to be able to draw valid scientific conclusions about the origin and genetic ancestry of its peoples.**
- Thus, **we remain in the realm of faith.** A spiritual witness is the only way to know the truthfulness of the Book of Mormon.

Alma 30:44 [to one who believes]...All things denote there is a God...