Introduction

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“The normal way of dealing with the Book of Mormon ‘scientifically,’” wrote Hugh Nibley in 1967, “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.”

More than forty years later, Professor Nibley’s words still ring true.

In this volume, the first in the series The Best of the Maxwell Institute, we present articles written by contributors to both the Journal of Book of Mormon Studies and The FARMS Review that deal specifically with the subject of DNA and the Book of Mormon. Where applicable, we have updated the references to reflect later publications. Although the question of limited geography is strongly linked to DNA and the Book of Mormon, we will not be dealing with that in this volume. It will appear in a volume on approaches to the Book of Mormon. However, a comprehensive survey of the literature by Matthew Roper can be found in The FARMS Review 16/2 (2004) 225–74, and on the Maxwell Institute Web site.

The first article, John L. Sorenson’s “The Problematic Role of DNA Testing in Unraveling Human History,” was published before the so-called controversy about DNA and the Book of Mormon had drawn much attention among the general public. Sorenson’s article serves as an introduction to the subject, highlighting the complexity of the research and the tools used to conduct it. In a short piece, John M. Butler, the lead scientist in developing DNA tests that identify the victims of the attacks on the World Trade Center on September 11, 2001, points to the insurmountable difficulties in identifying the genetic
heritage of the chief ancestors of the Lehite peoples. One of his points is that the females in the Lehite colonies all inherited their mitochondrial DNA from Ishmael’s wife, about whom we know almost nothing, including whether she was a full-blooded Israelite.

“Before DNA,” by John L. Sorenson and Matthew Roper, sets out the major cultural, historical, and theological questions that a person must attempt to answer before turning to science. Though necessarily brief, their answers to fourteen questions bring us inside what scholars have learned during the past century about ancient America. John Butler’s second piece in this collection, “Addressing Questions surrounding the Book of Mormon and DNA Research,” gives an in-depth study of DNA with regard to ancestry studies. He insightfully addresses the tension between science and religion as he turns the question of DNA ancestry studies to the Book of Mormon.

Michael F. Whiting’s DNA-related work on walking sticks that re-evolved the ability to fly 50 million years after losing it was featured in the 16 January 2003 issue of the journal Nature. In “DNA and the Book of Mormon: A Phylogenetic Perspective,” Whiting, a BYU professor of biology, frames the challenges of creating an experiment that could determine scientifically which Native Americans are descendants of any of the three known colonizing groups mentioned in the Book of Mormon. He concludes that, given the present state of science, such an experiment is impossible to design and would not be taken seriously by the scientific community.

In “Detecting Lehi’s Genetic Signature: Possible, Probable, or Not?” David A. McClellan, who differs from the most prominent critics on this issue in being an actual scientist actually specializing in human genetics, offers a challenging but essential basic overview of the biology relevant to serious discussion of questions involving DNA. But he does not expect to find “an Israelite genetic presence in Central America and perhaps as far away as Arizona to the north and Colombia to the south.” McClellan points out that proper interpretation of Native American population genetic data in the context of Latter-day Saint
claims about ancient migrations to the Americas by a few families from the Middle East requires a preliminary understanding of several fairly complex concepts, including scientific method, basic genomics and genetics, molecular evolution, population genetics, and genealogical inference from molecular data. His essay seeks to outline these concepts in layman’s terms and to evaluate the current status of Native American genetic data in light of these concepts in order to evaluate the plausibility of the Book of Mormon story line. McClellan’s general conclusion is that, although it may be possible to recover the genetic signature of a few migrating families from 2,600 years ago, it is not probable. However, the data suggest that there has been a trickle of gene flow to the Americas from non-Asiatic source populations. Though far from verifying or proving the Book of Mormon, these data do allow for the plausibility of its story line.

Two biologists from Idaho State University, D. Jeffrey Meldrum and Trent D. Stephens, focus on DNA questions touching on the descendants of Lehi and Sariah in their essay entitled “Who Are the Children of Lehi?” One of their chief points has to do with the traceable genetic characteristics that a person inherits from distant ancestors. By appealing to straightforward genealogical research, they show that the chance of scientifically tracing a person’s genetic heritage by DNA alone is highly remote. This observation has important consequences for any DNA research that seeks to identify descendants of the Lamanite survivors from the devastating wars of the fourth century AD.

In “Nephi’s Neighbors: Book of Mormon Peoples and Pre-Columbian Populations,” Matthew Roper addresses the assumption that the peoples of the Book of Mormon were the only inhabitants of the pre-Columbian New World and, thus, inescapably the sole ancestors of the Amerindians. Many close students of latter-day scripture have long recognized the overwhelming likelihood that contemporary Native American peoples represent a blending of various groups descended from a variety of ancestors in addition to Lehi
and Sariah. Given this complexity and the extremely limited picture that contemporary genetics offers of our distant ancestral tree, it is unreasonable to insist that DNA studies alone can prove or disprove an Israelite connection.

Roper follows this study with “Swimming in the Gene Pool: Israelite Kinship Relations, Genes, and Genealogy,” in which he investigates the nature of the people of ancient Near Eastern Israel and of Lehite Israel as described in the Book of Mormon, illustrating the complexity of kinship and tribal lineage terminology among the Israelites and those who were affiliated with them.

“Elusive Israel and the Numerical Dynamics of Population Mixing,” by Brian D. Stubbs, offers an independent discussion of the complex nature of population dynamics and the factors that lead, surprisingly quickly, to extensive literal kinships among large populations and the dissemination of a distinct group into the mainstream population. Even a fairly low rate of intermarriage can transform a once homogenous group within relatively few generations.

In a very real sense, this debate is (or should be) over. Just two or three years ago, the Signature Books Web page still featured an admission from Simon Southerton, an Australian plant geneticist and former Latter-day Saint who is now the most vocal critic of the Book of Mormon on DNA grounds, that “In 600 BC there were probably several million American Indians living in the Americas. If a small group of Israelites, say less than thirty, entered such a massive native population, it would be very hard to detect their genes today.” This confession effectively concedes a major portion of what several in this volume argue regarding Amerindian DNA and the Book of Mormon. Strikingly, though, so far as I can determine, it has now utterly disappeared from the Signature Web page.

So the controversy continues, albeit at a lower level of intensity and media attention than it once enjoyed. (As we go to press, an essay by Terryl Givens has just been published which offers a brief but superb summary statement about the DNA issue.) Significantly, it now
seems to have little to do with genetics as such—the articles collected in this book will illustrate why the critics’ hoped-for magic DNA bullet has notably failed to give them the clean kill they sought—but has shifted to how the Book of Mormon should be interpreted.

Desperate Latter-day Saint scholars, we are told, have retreated to a limited Mesoamerican geography for the Book of Mormon in a forlorn last ditch effort to cope with mounting challenges from archaeology and genetic science. But this is demonstrably false. Limited Mesoamerican models were indisputably circulating before Watson and Crick’s 1953 discovery of the structure of the DNA molecule, and, as even a cursory reading of John L. Sorenson’s seminal *An Ancient American Setting for the Book of Mormon* confirms, a limited geography flows inescapably from close and careful reading of the Nephite text.

Latter-day Saint scholars are also said to be in utter, despairing disarray—literally all over the map—with some, yes, holding to a limited Mesoamerican model but others insisting that the Book of Mormon narrative covers both North and South America, or simply the vicinity of New York State, or the Upper Midwest of the United States, or, even, the Malay Peninsula.

“It may come as a surprise to some readers,” writes one vocal internet critic, “that there are many apologists who see the Book of Mormon events as having occurred outside the Americas. The weight of scientific evidence against the possibility of an American setting has been sufficiently compelling, and their faith in the historical claims of the Book of Mormon sufficiently rigid, that they have looked elsewhere.” In support of his assertion that there are “many” such apologists, he cites a single author’s self-published book.

The broad consensus of serious Book of Mormon researchers, however, remains today what it has been for many decades: Book of Mormon events took place chiefly within a relatively small area in Mesoamerica. This consensus, reflected in a large number of scholarly publications, is scarcely to be overturned by the appearance of a handful of self-produced books and videos or an engaging fireside speaker or two.
It will be obvious, after serious engagement with the essays re-published here, that simplistic claims that the Book of Mormon has been “proven false” by contemporary genetic research reflect wishful thinking and propaganda rather than science. Of course, studies of Amerindian DNA haven’t proven the Book of Mormon true, either. Which leaves the matter where, on the whole, it has always been, and where, it would seem, it was always intended to be: Opinions regarding the claims of the Restoration in general must go beyond what the evidence strictly requires into the territory of religious faith. Fancy that.

As usual, the efforts of many people went into the production of the materials included here. Louis Midgley, George Mitton, Shirley Ricks, S. Kent Brown, and Don Brugger edited the articles for their original publication. Alison V. P. Coutts and Jacob Rawlins put this particular volume together and typeset it. Alison Coutts created the index and updated the articles where necessary. Jacob Rawlins designed the cover, and Brette Jones helped him to secure input and permissions from the authors. Paula Hicken proofread the text, while Shirley Ricks proofread the index. We are grateful to all of them, and, most especially of course, to the authors themselves for creating the articles in the first place.

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