



# A U-Turn on Adam and Eve

S. Joshua Swamidass

<https://doi.org/10.54739/83rj>

Evolutionary creationists at BioLogos Foundation just changed their position on the science pertaining to Adam and Eve. The new position is a significant change to previous conclusions, and brings the organization into closer alignment with mainstream science.

This change makes space for religious beliefs once thought to be in unresolvable conflict with mainstream science. Correcting the science here is an important opportunity for those seeking to advance science in a divided society.

## Why Is This Important?

The trust-deficit between the public and mainstream science has rarely been so evident. Scientists need to build trust with the public.

Many religious communities are skeptical of evolution because it seems to require large revisions of traditional beliefs. One way scientists can build trust is explaining when and how perceived conflict is not real.

For many, evolution threatens two key religious beliefs about human origins,

1. The doctrine of “monogenesis:” we all descend from Adam and Eve.
2. Adam and Eve were specially created without parents.

If evolution is true, it seemed that these beliefs must both be false, as is well explained by Thomas McCall,

The broader context is the widespread sense that evolution must be the enemy of traditional Christian belief—and thus that Christian belief must be either dramatically and drastically reformed or surrendered entirely to maintain consistency with scientific orthodoxy and respectability. The narrower context is the concern that contemporary science rules out the possibility of a historical, *de novo* Adam and Eve as the ancestors of all people—with, again, many Christians willing and ready to reject the traditional doctrine and others vehemently insisting that the dilemma gives us good reason to reject evolution.

Also see Peaceful Science’s position statement on Adam and Eve: *“Is evolutionary science in conflict with Adam and Eve?”*

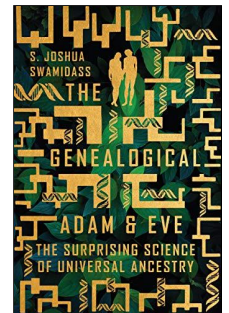


It turns out that evolutionary science is compatible with these two beliefs, even if Adam and Eve were in the recent past. Whatever we think of Genesis,

Entirely consistent with the genetic and archeological evidence, it is possible that Adam was created out of dust, and Eve out of his rib, less than ten thousand years ago. Leaving the Garden, their offspring would have blended with those outside it, biologically identical neighbors from the surrounding area. In a few thousand years, they would become genealogical ancestors of everyone.<sup>1</sup>

This is a claim about scientific evidence that is independent of how we *personally* read Genesis; it is true whatever we *personally* think about monogenesis and *de novo* creation.

Whatever our personal beliefs, a historical roadblock between many Christians and mainstream science is now gone. Correcting the science here is an important opportunity to build trust in religious communities.



*The Genealogical Adam and Eve* was one of the books that caused this change in BioLogos’s position.

## What is BioLogos?

The BioLogos Foundation is an important organization in the conversation between evolutionary science and the Church. Founded by Francis Collins, the director of the NIH, BioLogos has done a lot of good over the years. In particular, the organization has given voice to many Christians that affirm evolutionary science. They also have, rightly, emphasized that the scientific evidence seems to demonstrate that humans share common ancestry with the great apes.

On the scientific questions of Adam and Eve, however, BioLogos did not accurately represent the genetic evidence. In June 2011, *Christianity Today* published a cover article on genetics and human origins. NPR covered the story too.

BioLogos’s position on Adam and Eve was understood to reflect the scientific consensus. But BioLogos’ new position shows that many of the claims in their past position were incorrect.

1. S. Joshua Swamidass. *The Genealogical Adam and Eve: The Surprising Science of Universal Ancestry* (IVP, 2019).

A decade later, this June 2021, [BioLogos published a new position on what genetics says about Adam and Eve](#). This new position statement recommends [their theological position on Adam and Eve](#), which itself underwent [several revisions](#) in the last few years.

BioLogos also quietly deleted several articles from their website, and these deletions are equally important to understanding the organization's past and current position.

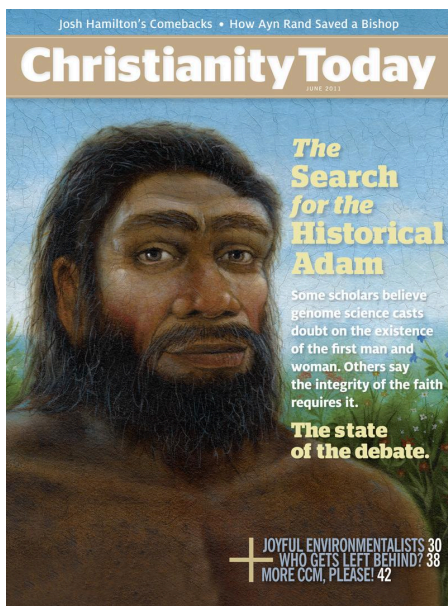
## Which Articles Were Deleted?

Shortly after [The Genealogical Adam and Eve](#) was published, in early 2020, BioLogos deleted the article covered in 2011 by *Christianity Today*.

1. Dennis Venema and Darrel Falk. [“Does Genetics Point to a Single Primal Couple?”](#). April 5, 2010.

The same day the new position was published, BioLogos quietly deleted a series of articles which explained the scientific claims they presented to *Christianity Today* and NPR in 2011.

2. Dennis Venema. [“Adam, Eve, and Human Population Genetics.”](#) November 12, 2014.
3. Dennis Venema. [“Vern Poythress, Population Genomics, and Locating the Historical Adam.”](#) April 7, 2015.<sup>2</sup>
4. Dennis Venema. [“Genetics and the Historical Adam: A Response to William Lane Craig.”](#) July 16, 2015.<sup>3</sup>



The June 2011 of *Christianity Today* issue included an [article that quoted several BioLogos scholars](#), and an [editorial](#) by the CT editors.

2. Poythress objected that effective population sizes were long-term average population sizes, not *minimum* population sizes. In this objection, Poythress was correct.
3. This article argues against William Lane Craig's affirmation of monogenesis. Craig made clear, even back then, that monogenesis means we all descend from Adam and Eve, but does not require Adam and Eve's lineage never interbred with others.

5. Dennis Venema. [“Adam & Eve, Apologetics, and Christian Witness.”](#) December 14, 2015.<sup>4</sup>

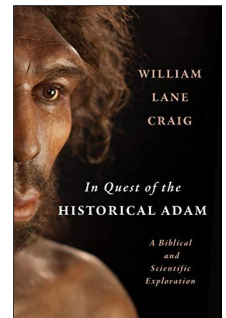
One article was revised substantially and placed back online, at a different address and with different conclusions.<sup>5</sup> [The note claimed the article's conclusion was “unchanged.”](#)

The history of changes to other documents is a helpful guide too. See, for example, the revision history of [their theological position](#) on Adam and Eve and [BioLogos president's 2017 response to Tim Keller](#) about the special creation of Adam and Eve.

## What Caused the Change?

Two recent books explain the science underlying these changes in an accessible way.

1. [The Genealogical Adam and Eve: The Surprising Science of Universal Ancestry](#), S. Joshua Swamidass (IVP, 2019).
2. [In Quest of the Historical Adam: A Biblical and Scientific Exploration](#), William Lane Craig (Eerdmans, 2021)



This book by William Lane Craig, also, caused the change.

Both these books are the culmination of several years of work,

3. William Lane Craig. [What Became of the Genetic Challenge to Adam and Eve?](#). Peaceful Science, 2020.
4. S. Joshua Swamidass. [BioLogos Edits Their Response to Keller](#). Peaceful Science Forum, 2019.
5. S. Joshua Swamidass. [Three Stories on Adam and Eve](#). Peaceful Science, 2018.
6. Richard Buggs. [Adam and Eve: lessons learned](#), 2018.
7. S. Joshua Swamidass. [The Overlooked Science of Genealogical Ancestry](#). Perspectives on Science and the Christian Faith, 2018.
8. S. Joshua Swamidass. [Heliocentric Certainty Against a Bottleneck of Two?](#). Peaceful Science Forum, 2017.
9. S. Joshua Swamidass. [A Genealogical Rapprochement on Adam and Eve](#). Peaceful Science, 2017.
10. Richard Buggs. [Adam and Eve: a tested hypothesis?](#), 2017.
11. S. Joshua Swamidass. [In Defense of Tim Keller](#). Peaceful Science, 2017.
12. S. Joshua Swamidass. [A Genealogical Adam and Eve in Evolution](#). Sapientia, 2017.

## What Was BioLogos's Position?

BioLogos' position, defended primarily by scientist Dennis Venema, was that **(A) the genetic evidence demonstrates our ancestral**

4. This article faults the skeptics for not accepting science, which we now know was overstated and often incorrect. The article ironically hopes for a day when Christians are a “reliable source of information about the natural world.”
5. This has the effect of obscuring the original URL, and therefore making the original version of the article very difficult to locate in archiving sites.

population size was never less than 10,000 individuals at any point in the last 18 million years,

Venema says there is no way we can be traced back to a single couple...And given the genetic variation of people today, he says **scientists can't get that population size below 10,000 people at any time in our evolutionary history.**<sup>6</sup>

As restated in one of the [recently deleted articles](#),

several of the converging lines of evidence that support the conclusion that our lineage became human as a population—one that has not numbered below about **10,000 individuals** over the last **18 million years** or more.

Whether our ancestral population size, in reality, dipped below 10,000 at any point is a different question. Here, Biologos claimed to have solid scientific evidence that demonstrated it never dipped that low.

Therefore, (B) Adam and Eve are not ancestors of us all,

Asked how likely it is that we all descended from Adam and Eve, Dennis Venema, a biologist at Trinity Western University, replies: 'That would be against all the genomic evidence that we've assembled over the last 20 years, so not likely at all.'<sup>7</sup>

This conclusion was [specifically presented to demonstrate that "monogenesis" was false](#).

Another firm position was that (C) **the genetic evidence is not compatible with Adam and Eve *de novo* or specially created without parents**. Their position stated,

the *de novo* creation of Adam and Eve is not compatible with what scientists have found in God's creation<sup>8</sup>

Therefore, (D) **"traditional" interpretations of Genesis conflict with the scientific evidence**. BioLogos defined "traditional" in [this way](#).

In one traditional view, Adam and Eve were created *de novo*—they were created by God as fully formed humans with no ancestors...Advocates of this view also typically maintain that all humans who have ever lived are direct descendants of this original pair.

The idea that "we all descend from Adam and Eve" is called "monogenesis," and it was BioLogos's position that this doctrine was in conflict with the evidence.

Traditional interpretations of Scripture should not be lightly dismissed, but neither is it responsible to ignore or dismiss the results of scientific inquiry simply because they conflict with traditional interpretations.

It is on the basis of conflict with science, originally, that their theological position statement dismissed traditional *de novo* interpretations of Genesis.

## Was BioLogos Wrong?

BioLogos has, one way or another, backed off of these four claims. Here is what Darrel Falk, former president of BioLogos, writes in [his endorsement of a book](#),

I am one of the many scientists who have maintained that the existence of Adam and Eve as ancestors of all people on earth is incompatible with the scientific data. In this book, Joshua Swamidass effectively demonstrates that people like me, stuck in a specific genetic paradigm, were wrong....**a traditional understanding of the Genesis narrative, including the sudden creation of Adam and Eve, is fully compatible with science.**

He also [writes in 2017](#),

science is silent on the question of Adam and Eve being ancestors of us all. It is even silent on the issue of whether Adam and Eve were created *de novo* in much the same way as the natural sciences are silent on whether there could have been a resurrection.

This is what [Deborah Haarsma](#), president of BioLogos, writes in 2020,

Over the years, we have removed old content from our website for many reasons, including articles...that overstated scientific claims, that unnecessarily excluded theological positions that are consistent with scientific evidence...we need to be honest when we overstate an argument.

Haarsma confirmed that this was meant to acknowledge that BioLogos made several claims about population genetics that never aligned with the scientific consensus. She also wrote [later in 2020](#),

However, in the discussion, some have made premature claims...that evolutionary science and population genetics rule out scenarios with a recent universal human ancestor or with a *de novo* created ancestral pair.

As it turns out, there are many traditional *de novo* interpretations of Genesis. Some are in conflict with the evidence. Others are entirely consistent with the evidence. Still, the way how Biologos first defined "traditional" *de novo* interpretations of Genesis, in fact, is consistent with the scientific evidence. In response, [BioLogos progressively narrowed the definition of "traditional"](#) in the organization's theological position statement.

## What is BioLogos's New Scientific Position?

BioLogos still rightly affirms the evidence that humans share common ancestors with the great apes, as well as the rest of evolutionary science.

About Adam and Eve, [their new position](#) works from within the same genetic paradigm, a paradigm which emphasizes a single-couple genetic bottlenecks—an esoteric idea that is nearly unstudied in population genetics.

6. This quote from the NPR piece makes their position clear. Barbara Bradley Hagerty. [Evangelicals Question The Existence Of Adam And Eve](#) National Public Radio, 2011;

7. This articles faults the skeptics for not accepting science, which we now know was overstated and often incorrect. The article ironically hopes for a day when Christians are a "reliable source of information about the natural world."

8. This has the effect of obscuring the original URL, and therefore making the original version of the article very difficult to locate in archiving sites.

But now, (A') the genetic evidence only rules out a single-couple genetic bottleneck going back just 500,000 years. So 18 million years is now 500 thousand years, and a minimum population of 10,000 is now a minimum of a single couple. Almost all the genetic evidence they presented in the past was demonstrated to be invalid, and it is no longer referenced in support of this conclusion. The most rigorous evidence they cite is scientific work reported, outside the scientific literature, in 2017.

Most of the evidence the presented in support of BioLogos's past position was not valid. This is one reason why so many of their past articles were deleted. In the past they claimed, incorrectly, that "effective population size" estimates established a *minimum* population size, but "effective population size" is a long-term *average*, not a *minimum*. So that evidence is not appealed to in this new position.

Moreover, (B') even a far more recent Adam and Eve can be ancestors of us all. Though the science behind recent universal ancestry is not discussed or referenced in their position statement. This single disclosure at the end of the article hints at this, now, well established option,

Options include...postulating that Adam and Eve were a special, historical pair who were indeed the ancestors of everyone alive today, but who were part of a larger population with whom their descendants could mate.

Additionally, (C') there is no evidence against the *de novo* creation of Adam and Eve, without parents. On this point, other statements by BioLogos have been more clear. But the new position statement still includes this sentence,

our observed diversity is consistent with the usual scientific picture, in which our ancestors evolved gradually as a large population, but by itself it does not *rule out* special creation.

Also, the statement that "the *de novo* creation of Adam and Eve is not compatible with what scientists have found in God's creation" was deleted from their theological position in 2018.

Unstated, but visible in the history of revisions to BioLogos's theological position, (D') some "traditional" readings of Genesis (as BioLogos once defined them) *can be compatible with the evidence*. In response to this finding, the organization substantially narrowed what they mean by "traditional," which is now defined as:

Adam and Eve were created *de novo*—they were created by God as fully formed humans (*Homo sapiens*), roughly 6,000 to 10,000 years ago. God made them quickly and completely as fully formed humans with no biological ancestors. In this traditional *de novo* view, Adam and Eve are "sole progenitors": they were the first two humans, and they alone gave rise to all other humans.

Without directly stating so, this definition intends to exclude interbreeding between Adam and Eve's lineage and others. In that case, Adam and Eve would, indeed, need to be far more ancient than 10,000 years ago. But defining "traditional" this way is a theological and historical claim that is subject to debate and to which science does not speak.

BioLogos's statements merit further discussion and cannot not be taken as the final say. For example, I am skeptical of the specific line of scientific evidence on which they focus, though I expect that conclusion (A') still holds up due to other evidence. Leaving out the science that supports recent universal ancestry is surprising, and it seems to be a material omission.

Still, these changes are an important step in the right direction.

## What is BioLogos's Theological Position?

The possibility of *de novo* creation, of any sort, is not mentioned in BioLogos's theological position on Adam and Eve. This omission reflects several theological reasons, outside of science, that BioLogos maintains for disfavoring *de novo* creation.

The theological position statement still claims conflict between one reading of Genesis and the scientific evidence as reason to "dismiss" all traditional *de novo* readings of Genesis. This conflict depends on tightly narrowing how "traditional" interpretations are defined.

There is disagreement about which readings of Genesis are "traditional" or not. But this is a debate about history and theology, not science. The Genesis tradition, as it turns out, includes a great deal of speculation about interbreeding between Adam and Eve's lineage and others. Just as important, several theologians committed to monogenesis allow for interbreeding.<sup>9</sup>

This is a theological debate that matters to science. If our goal is to advance science in religious communities, we would hope that traditional beliefs can be defined to include readings of Genesis compatible with evolution.

## One Step in the Right Direction

BioLogos's new position is one important step. Though the story is not yet complete, this is a good movement in the right direction.

In all these edits and deletions, a relational component is missing. Even if these mistakes were made in good faith, a lot of unnecessary conflict was created. Over the years, BioLogos spoke against many specific people, including Vern Poythress, William Lane Craig, Tim Keller, Fazale Rana, and many others. What is BioLogos' response to these individuals?

Nonetheless, BioLogos's new scientific position is a step in the right direction.

September 5, 2021, the section "what caused the changes" was moved earlier in the document.

August 31, 2021, the title of this article was changed, captions to the books were added, and an second article by Richard Buggs was added to the list of articles that caused the change.

9. See, for example: Kenneth Kemp. Science, Theology and Monogenesis, American Catholic Philosophical Quarterly, 2011.

## References

- S. Joshua Swamidass, *The Genealogical Adam and Eve* (Intervarsity Press Academic, 2019).
- S. Joshua Swamidass, *The Overlooked Science of Genealogical Ancestry* Perspectives on Science and Christian Faith, 2018.
- Richard N. Ostling, *The Search for the Historical Adam* Christianity Today, 2011.
- Editors, *No Adam, No Eve, No Gospel* Christianity Today, 2011.
- Barbara Bradley Hagerty, *Evangelicals Question The Existence Of Adam And Eve* National Public Radio, 2011;
- Stephen Schaffner, *What Genetics Says About Adam and Eve*, BioLogos, 2021.
- BioLogos, *Were Adam and Eve historical figures?* BioLogos.
- S. Joshua Swamidass, *The BioLogos Statement on Adam and Eve*, Peaceful Science Forum, 2019.
- Dennis Venema and Darrel Falk. *“Does Genetics Point to a Single Primal Couple?”* BioLogos 2010.
- Dennis Venema. *“Adam, Eve, and Human Population Genetics.”* BioLogos 2014.
- Dennis Venema. *“Vern Poythress, Population Genomics, and Locating the Historical Adam.”* BioLogos 2015.
- Dennis Venema. *“Genetics and the Historical Adam: A Response to William Lane Craig.”* BioLogos 2015.
- Dennis Venema. *“Adam & Eve, Apologetics, and Christian Witness.”* BioLogos 2015.
- William Lane Craig. *In Quest of the Historical Adam: A Biblical and Scientific Exploration*, (Eerdmans, 2021)
- William Lane Craig. *What Became of the Genetic Challenge to Adam and Eve?*. Peaceful Science, 2020. <https://doi.org/10.54739/e7r9>
- S. Joshua Swamidass. *BioLogos Edits Their Response to Keller*. Peaceful Science Forum, 2019.
- S. Joshua Swamidass. *Three Stories on Adam and Eve*. Peaceful Science, 2018. <https://doi.org/10.54739/3doe>
- Richard Buggs. *Adam and Eve: lessons learned*, 2018.
- S. Joshua Swamidass. *Heliocentric Certainty Against a Bottleneck of Two?*. Peaceful Science Forum, 2017. <https://doi.org/10.5281/zenodo.1328247>
- S. Joshua Swamidass. *A Genealogical Rapprochement on Adam and Eve*. Peaceful Science, 2017. <https://doi.org/10.54739/9mu3>
- Richard Buggs. *Adam and Eve: a tested hypothesis?*, 2017.
- S. Joshua Swamidass. *In Defense of Tim Keller*. Peaceful Science, 2017. <https://doi.org/10.54739/p9cc>
- S. Joshua Swamidass. *A Genealogical Adam and Eve in Evolution*. Sapientia, 2017.
- S. Joshua Swamidass. *The Humility of Our Scholars*. Peaceful Science, 2019. [science.org/articles/humility-of-our-scholars/](https://science.org/articles/humility-of-our-scholars/),
- Deborah Haarsma, *Truth Seeking in Science*, BioLogos 2020.
- Thomas H. McCall, *Will The Real Adam Please Stand Up? The Surprising Theology Of Universal Ancestry* BioLogos 2020.
- Daniel Gordon Ang, Jon Garvey, David Kwon and S. Joshua Swamidass, *“Is evolutionary science in conflict with Adam and Eve?”* Peaceful Science, 2021. <https://doi.org/10.54739/qg9m>