

The Search for Adam

Many people regard the story of Adam and Eve as a myth. But scientific evidence is mounting in support of a single shared ancestor, indicating not only that Adam existed, but that he was also a pretty amazing guy.

With the crack of his whip, the anthropologist snagged an overhanging branch, swung his khaki-clad body over the ravine, then hacked his way through the jungle growth before reaching the clearing. There he greeted a tall, well-muscled man who was wearing only a fig leaf. "Adam, I presume?"

Of course, this Indiana Jones fantasy isn't going to happen. The Bible tells us that Adam lived for 930 years, but that was still a long time ago. And, yet, in a very real sense, modern-day explorers are closing in on mankind's ultimate ancestor. They're more likely to wear white lab coats than khaki, and they use microscopes rather than machetes. But in laboratories around the world, scientists are finding clues that point to Adam-the original "new man."

Most people know very little about Adam, other than that he wore a fig leaf and should have been more careful about his diet-at least on one occasion. But research by archaeologists and anthropologists suggests that Adam was an amazing guy.

"The scientific evidence is increasingly indicating that indeed Adam existed," says Dr. Fazale Rana, a biochemist and vice president of science apologetics at Reasons to Believe, a creation science organization. Rana's new book with astronomer and Reasons to Believe founder Dr. Hugh Ross, *Who Was Adam?* (NavPress), looks at the scientific evidence supporting the Bible's story of man's creation.

One of the most intriguing pieces of evidence comes from the

world of genetics.

Molecular anthropologists study mankind's origins by looking at DNA, the molecule that contains our genes, which in turn form a sort of blueprint used by our bodies to build new proteins-the building blocks of life. Over time, DNA's structure can mutate through physical or chemical events or by errors during cell division. Unlike the world of comic books, these mutations won't turn you into The Incredible Hulk. Most mutations are harmful but don't get passed on to future generations. But neutral or beneficial mutations are passed along. Studying DNA sequence variations among population groups lets scientists learn about human origins and migrations.

Over time, a population becomes more genetically diverse through breeding and mutation. Molecular anthropologists studying mankind's origin find that human beings show much less genetic diversity than any other species. Regardless of race or geographical location, human beings have far more in common with one another than do other species-an observation that fits with the Bible's story of animals being created before mankind.

Furthermore, by tracking the small genetic differences between groups of people, scientists find that some groups show more variation than others, suggesting that some people groups are older than others. Mapping the changes in degree of genetic variation suggests that mankind originated from a single location-probably in Africa or the Middle East.

Scientists call the idea that mankind originated in a single location the "Garden of Eden Hypothesis." Rana explains, "What's going on is that the similarity between what the data is indicating and the biblical story are so apparent that they're evoking biblical imagery."

One of the most common techniques for studying human origins

won't help us find Adam-but it might point to Eve. Mitochondrial DNA (a circular piece of DNA found in mitochondria, which are in almost all cells in the body-especially muscle cells) is a favorite for study because of its simple inheritance pattern and quick mutation rate. But mitochondria comes only from the mother-the father doesn't contribute any mitochondrial DNA to his child.

The amount of variation in this DNA acts as a sort of molecular clock and lets scientists peer back in time to a day when there was no variation. Repeated studies of mitochondrial DNA in the last two decades suggest that humanity originated from one woman who probably lived in Africa. Scientists call her "mitochondrial Eve."

Mitochondrial DNA won't lead us to Adam, but study of DNA associated with the Y chromosome might.

Women have two X chromosomes, while men have an X and a Y (leading some to hypothesize that when God took Adam's rib to make Eve, the key raw material involved was Adam's X chromosome). The Y chromosome is what makes a man a man. It's behind all things male, from the inability to see dirt on bathroom surfaces to a preference for movies in which the characters relate to one another primarily through gunplay and high-speed chases. And it's passed from father to son, like a prized chili recipe.

Studies of variation in Y-chromosome DNA suggest that mankind originated from a fairly small population, probably somewhere in Africa or the Middle East. Sound familiar?

But there's a problem. Remember that in addition to using DNA to trace genetic variation back to a common ancestor, molecular anthropologists use it as a clock to place that ancestor in time. Most researchers in this area place mitochondrial Eve somewhere between 150,000 and 200,000 years ago.

But those same scientists find Y-chromosomal Adam at a much more recent date-perhaps 40,000 to 60,000 years ago. Every guy has probably been late for a date at some point, but this is ridiculous. Was Adam married to an older woman?

Setting a date for the birth of mankind is a contentious issue-not just between evolutionists and creationists but also within the world of creation science. Most creationists believe that the world is less than 10,000 years old. These "young earth" creationists also generally believe that the creation events in the first chapter of Genesis took place over seven literal 24-hour days. Other creationists (including the folks at Reasons to Believe) see the "days of creation" as poetic language covering longer periods of time and thus are open to an earth that is much older-perhaps millions or billions of years.

Differences between the two views sometimes involve the reliability of different techniques used to set dates. And setting dates based on mutation rates is problematic at best, involving a number of new techniques and unproven assumptions. Still, the same assumptions and techniques provide significantly different times for the first man and first woman. What gives?

To explain this difference, scientists theorize that for some reason males living before Y-chromosomal Adam failed to pass their genes along. Some sort of "genetic bottleneck" must have killed off other men. But what?

Ross says the answer should be clear to anyone who is familiar with Scripture. "You consistently see an earlier date for mitochondrial Eve than for Y-chromosomal Adam, and this is called the 'younger Adam' paradox-but it's exactly what you'd expect from biblical history," he insists.

Noting that a lot of genetic lines came to an end during the great flood, Ross says, "On Noah's ark all of the men were

related by blood to Noah. So you'd expect a bottleneck-not at Adam, but at Noah. Their wives were not related to one another, so the mitochondrial DNA variations would go back farther. Only from a biblical perspective would you predict such a difference."

While all of our Y-chromosome DNA may go back to Noah, he got it originally from Adam -the father of us all. So what kind of guy was Adam?

"From the archaeological evidence we can begin to gain some understanding of what the first humans were like in their behavior, and by implication what Adam was capable of doing," Rana says.

Evolution teaches that man developed from ape-like creatures, slowly becoming more sophisticated. But Rana notes: "When you start seeing humans appearing in the fossil record, there is this explosion of modern human behavior. When modern humans appear, the tools are very sophisticated; there's sophisticated art that just shows up rather than evolving. It's the same thing with music-there have been recent discoveries of the oldest musical instruments and they show fairly complex manufacturing techniques. You see jewelry use and hunting practices that are very sophisticated."

Put it together, and a picture of Adam begins to emerge. "Adam would have been a consummate hunter, an artist, an artisan and craftsman," Rana says. "He would have been the first Tim Taylor from the Tool Time TV program. There's an obsession with tools and manufacturing. He was a man's man, but also a Renaissance man capable of art and musical expression. You can imagine Adam conveying his love for Eve by giving her jewelry."

Some of the early productivity we see from Adam and his sons might be attributed to their long life spans. The Bible tells us that before the flood, people lived for centuries, giving

them time to accumulate skills and knowledge. Creationists theorize that a more benign radiation environment before the flood might have slowed the aging process.

While there are sharp differences within the creation science community on a number of issues, all agree that Adam was an astonishing man. Evolution sees Adam as a primitive creature with potential, but creationists believe that Adam began as a perfect creation by God and that things went downhill from there.

Ken Ham, president of Answers in Genesis, explains: "From a biblical perspective we started perfect, but because of sin and mutations in our genes things deteriorated. From the evolution perspective, man learned to grunt and then talk, learned to use stone tools and then learned other things. But from a biblical perspective, man started out very intelligent-he had the ability to commune directly with God! I would say if you take the most talented people today-the most talented musicians and carpenters and scientists and artists-and put them together, you're probably getting closer to what Adam and his early descendants were like."

Dr. John Morris, a geologist and president of the Institute for Creation Research, agrees. "Evolutionists believe that man developed from animals, so man's morals and social interaction would have come from animal instincts," he says. "But I think man was different at the start. He had the ability to communicate, and he talked with the infinite God on a face to face basis. I don't know that we could do that today. Adam started out as what God intended man to be. Adam probably had full use of his brain. The Bible says that on the day Adam was created he had the ability to understand, categorize and name the great volume of animals he came into contact with. He was an incredible man-not a half-ape in any sense."

Morris continues: "Before the curse, Adam was a superman. Intellectually and in every sense he was probably vastly

superior to us. After the curse, I suppose he was in our league, but still quite brilliant. Within just a few generations we're seeing that his descendants went from having no technology to doing metalworking and agriculture and making musical instruments."

Dr. Don Bierle, president of Faith Studies International, notes that Scripture is largely silent on life for Adam and Eve in the Garden of Eden. "That's unknown," he notes. "But we can speculate on what it would be like for a human being to live without sin. They were in fellowship with God. And even then they were stewards of the earth. I think they would have carried out their roles as stewards of the earth in a way that was good for the earth and that glorified God. They would have done many of the things that we do, but they would have done it perfectly while we do things in a flawed way."

Bierle notes that being made in the image of God means that we have minds that can learn and are capable of abstract thought. "Adam would have operated at optimum efficiency, but might not have been so different from us. Adam and Eve were still humans and finite, but they could fellowship and learn from God," he says. "We were made with minds to think, and we can learn from God forever."

While many people—including some Christians—regard the story of Adam and Eve as a myth, scientific evidence is mounting in support of a single shared ancestor. But does it matter? Is it important for Christians to believe in a literal Adam?

"Yes, it does matter," insists Dr. A.J. Monty White, chief executive of Answers in Genesis for the United Kingdom and Europe. "A literal Adam is the only one that makes sense. The necessity of redemption by the second Adam, the Lord Jesus Christ, only makes sense when the story of the fall as a result of the sin of one man, Adam, is taken literally. The whole doctrine of salvation depends upon a literal historical Adam sinning. If you do not accept a literal historical Adam,

then the gospel does not make sense, and there is no explanation for why there is sin, suffering and death in the world.”

White concludes, “There are a number of scriptures in the New Testament that compare Jesus Christ with Adam and these verses do not make sense unless Adam was a literal historical person. It does not make sense to compare an historical Christ with a mythical Adam. For example, 1 Corinthians 15:22 tells us that in Adam we all die and in Christ we shall all be made alive. This verse is nonsense unless Adam and Christ are real people. Later on in this chapter, the Lord Jesus Christ is called the last Adam. How can you have a last Adam without a first Adam? The gospel message of Christ’s dying for Adam’s helpless race is nonsense unless Adam is a real person.”

What could Adam tell us if he were alive today? He could remind us that sin in our lives has consequences for us and our families. He could tell us that while we were built with incredible abilities, it’s important to remember that we’re not God. He might be tempted to name-drop a bit (“When I was talking with God in the garden a few years back ... ”). But he’d be able to tell us from personal experience that God exists and that we were created for something much grander than the world we see around us.

And, maybe he’d tell us exactly how he kept that fig leaf from falling off.

Creation Questions & Answers

Question: How did Adam look?

Answer: One thing’s almost certain: He wasn’t white. The chief executive of Answers in Genesis for the United Kingdom and Europe, Dr. A.J. Monty White, explains, “I think that one of the most common misconceptions that Christians have about Adam (and Eve, for that matter) is the color of his skin.”

He adds: “Most people in the West tend to think of Adam and

Eve as having fair or white skin. If you think about it, if Adam and Eve had pale skin, you would not have dark-skinned people because they would not have the genes for producing dark skin. On the other hand, if Adam and Eve were dark-skinned, you would not have fair-skinned people as their genes would not have the ability to produce light-colored skin. Adam and Eve must have been mid-toned (perhaps mid-brown) in order for us to have all the shades of brown exhibited by humans on the earth today.”

That idea fits with growing scientific evidence supporting the idea that all humans share common ancestors. This has forced scientists to abandon the “multiregionalist” theory which supposed that modern humans developed simultaneously in different parts of the world. “That was the traditional view, and what motivated it was trying to explain racial differences,” says Dr. Fazale Rana of Reasons to Believe.

While racists once used notions of separate evolutionary tracks to support notions of white supremacy, it’s beginning to look like we’re all descended from an African man. “I think he was African in the sense that it’s clear to me that the oldest populations are Africans,” Rana says. “Geneticists are reconstructing what they think that ancestral DNA sequence would have looked like, and the closest would be the oldest African population.”

Rana adds: “In a sense we, as human beings, are all coming from the same stock. There’s really no basis for racism. There really should be brotherhood among men.”

Question: Where did Adam live?

Answer: The second chapter of Genesis provides a few clues, noting that a river flowed out of Eden and broke into four rivers: Pison, Gihon, Hiddekel (now called Tigris) and Euphrates. And it tells us that the first three rivers flowed out to Havilah, Ethiopia and Assyria, respectively.

It's practically a road map, right? Turns out it's not that easy.

If you paid attention in geography class, you know where the Tigris and Euphrates are. But the Pison and Gihon are nowhere to be found on the modern map. Things are made more complicated by the fact that names change over time, and that rivers sometimes go dry and disappear. Plus, if you believe in Eden you probably also believe in Noah's flood, and any flood that big is going to do some serious rearranging of geographical features.

Dr. Juris Zarins, an archaeologist from Southwest Missouri State University in Springfield, believes the Garden of Eden is currently covered by the waters of the Persian Gulf. He believes that before the end of the last Ice Age, most of what is now the Persian Gulf was dry land-irrigated by the Tigris, Euphrates, Gihon and Pison. Zarins says he's found the Pison in LANDSAT images from space, which identify a "fossil river" which once flowed through northern Arabia along now-dry beds. And the Gihon, he says, is the Karun River, which rises in Iran and flows toward the Gulf. Eden, he says, was swallowed by rising sea levels thousands of years ago.

Another effort to locate Adam's original home comes from archaeologist David Rohl, author of *Legend: The Genesis of Civilization*. Rohl says the secret identities of the Pison and Gihon were revealed by little-known scholar Reginald Walker. The Gihon, claimed Walker, is actually the Aras River on the border between Turkey and Iran. There's also a Uizun River that Walker claims is another name for Pison. With these clues and others, Rohl visited the region and believes he's found the location of Eden, a little south of Tabriz in Iran, in a valley near Mount Sahand.

Question: How did Adam talk?

Answer: While evolution insists that the human race developed slowly, beginning with grunting apes, every Stone Age tribe

that's been discovered has a fully developed language. Some languages from pre-industrial societies are more complex than modern languages.

This suggests that language was created rather than evolving. This fits with the Bible's story of Adam communicating directly with God in the Garden of Eden, since it's hard to imagine those conversations being conducted in grunts and snorts.

Not only do many modern linguists believe that today's languages descend from a single mother tongue, but many also place the geographical origin of the proto-world language somewhere in the Near East-location of the Bible's Tower of Babel.

The story of the Tower of Babel in the Bible states that all of mankind once shared a common language.

For much of history it was assumed that this pre-Babel language was Hebrew. Jewish tradition holds that Hebrew was the original language. Columbus brought a Hebrew interpreter on his voyage, since it was assumed that the people in the New World would speak Hebrew. Noah Webster's original dictionary traced many words past Latin, Greek or French roots to "Shemitic" origins. In fact, the Continental Congress considered making Hebrew the language of the new nation.

When evolution came into vogue in the new man-centered Age of Reason, many scholars dismissed the notion that Hebrew was the mother tongue. But a loud counterargument came in 1989 with the publication of Isaac Mozeson's book *The Word: The Dictionary That Reveals the Hebrew Source of English* that links more than 23,000 words to Hebrew origins.

If you can wrap your mind around the idea that Hebrew is the original language, you may find it easier to accept the idea that it will also be the ultimate language. Zephaniah 3:9 says, "For then will I turn to the people a pure language,

that they may all call upon the name of the Lord, to serve him with one consent.” The Bible doesn’t specify what that language will be, but it’s a safe bet that it won’t be pig latin!

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