The picture on the cover of this issue is a beautiful portrayal of one of the most beautiful natural wonders of the world in which we live. When water freezes, the ice produced seems to be very hard. The fact of the matter is, however, that it behaves as a fluid. When ice is put under pressure it flows. Take a small piece of ice and put it between your teeth in the back of your mouth and bite carefully on it—not hard enough to break it (or a tooth), but gradually increase the pressure. When you do this, you will feel the ice start to give and behave like soft candy. I used to have my students do this in my earth science classes. You can imagine the look on my principal’s face when he came into a room full of kids biting on ice and looking at it as they gradually changed its shape. The ice in the picture on our cover has done the same thing. As snow piled up on top of the bottom snow, it turned the bottom snow to ice and the ice began to flow, gradually moving down the side of the mountain like toothpaste squeezed out of a giant tube. This flowing ice has many messages to tell us. Like all of the creation, it speaks of God’s wisdom and design. There is history, science, biblical support, and prediction all recorded in the message of the ice. When you look at the bottom ice, it is the most beautiful shade of blue you have ever seen—another testimony to the beauty God has built into every nook and cranny of the creation. Let us look at some of the messages of the ice.
There Is and Has Been Global Warning. Those of us with some background in science have for the most part watched with amusement the attempts of politicians and the media to make global warming an issue they can use for personal agendas. If you have even a general awareness of what the history of North America has been, you know that there have been periods of cold and periods of warmth. This is true of every part of Earth. When ice piles up in glacial formations like the one on the cover of this issue, it begins to flow starting at the bottom of the ice pack. This flow has massive force behind it, and it acts like a huge bulldozer pushing rock and sediment in front of it carving and plowing through the area. The valley you see on our cover was produced by the ice pushing down through the area during a colder time. As the ice moves it leaves grooves and scratches in the rock. This tells us which way the ice was moving. It leaves tell-tale piles of rock where the ice stops called moraines. The picture was taken from the top of such a moraine.

All of these features are seen in the United States as far south as the Ohio River. In Central Park in New York City there are well-known glacial groves and striations in the granite that makes up the bedrock of that park. There are literally thousands of examples like this all over the world. I have been involved in the past in studies about Lake Michigan with an oceanographic ship from the University of Michigan called “The Inland Seas.” We have taken cores from Lake Michigan that tell of the history of the lake. In all cores there are long sections with no organic material and no microscopic organisms. Most cores have dark lines which contain massive biological material and the remains of many forms of life, but there were large sections representing long periods of time which were devoid of life. There is a great deal of evidence that the lake was covered with ice year-round for many years. All of this says to us that the earth has been much colder in the past than it is today.

Between the layers that are sterile in the cores we have been talking about, there are layers full of the muck that contain the remains of biological material. Some of the items found in these dark areas are semitropical plants and animals. It must have been much warmer during times between the glacial periods—in other words, periods of global warming. Whether or not mankind can cause or increase the severity of these periods of warming by greenhouse gas emissions is an area that needs study, but the fact of global warming cannot be disputed—either now or in the past.

Uniformitarianism is Not True. Another interesting message that can be seen in the ice is that one of the main assumptions of neo-Darwinism is not true. Neo-Darwinism assumes that the processes operational today on the earth are the only processes that have ever functioned on the earth. The textbooks usually express it “the present is the key to the past.” The idea is that all of the earth’s history has been molded and shaped by erosion, volcanos, weathering, glaciers, landslides, etc.—processes we see working today. This is an area where the biblical record takes exception, because the Bible clearly tells us that there have occasionally been events which are not happening today. These events are rare, but they do have a significant effect on what the earth is like. The flood of Noah, the plagues in Egypt, and the events surrounding the death of Jesus are all examples of things that are not uniformitarian in nature.

It is important to emphasize that glaciers, volcanos, and landslides are all uniformitarian because we see them operational today. Ice cores taken in places where the ice is miles thick have shown us that there have been events totally unlike those happening today. In some places we see cores that tell us that there has been a time when ice covered the whole planet—not just continental or mountain glaciers. There is evidence of volcanic eruptions that blanketed the whole planet with large amounts of ash indicating an eruption far beyond anything we have ever seen happen in today’s world. Cores have shown that on rare occasions there has been a strike upon the earth of asteroids or comets that deposited large amounts of iridium, osmium, and
rhenium—elements found in astronomical objects like these, but not found in significant concentrations in volcanic eruptions on the earth. The age of one of these deposits matches well with the age of a crater in the Yucatan that appears to be one place where such an object struck. Other sediment studies show that a similar process may have caused the extinction of the dinosaurs.

The Bible indicates that consistency is the rule of things in God’s plan. Hebrews 13:8, for example, says “Jesus Christ the same yesterday, and today, and for ever” and while that speaks of the teachings and love of God it is also the lesson of biblical history. Events like the flood of Noah are the exception, not the rule. When they do happen, however, they have a profound effect on the affairs of mankind.

The Earth is Not 6,000 Years Old. In our day of wild erroneous teachings about the rapture, the tribulation, and the physical political reign of Jesus on David’s throne for 1,000 years in Jerusalem, the question of time continues to be an issue. The Bible does not give us the time frame in which things happen, and continues to attempt to pry us away from political thinking and understanding that Jesus’ kingdom is “not of this world” (John 18:36). Whether the earth is old or young is not a biblical issue and is not answerable from the Bible without making assumptions that are invalid.

Ice cores make it clear that the earth is older than 6,000 years. When snow falls in the winter in cold climates it leaves a clean thick layer of ice and the snow on top compresses the snow underneath. The beautiful blue ice seen in glacial ice is simply compressed snow—something we can duplicate in the laboratory. During the summer months the snow does not melt much, but the top of the snow that fell during the last snowfall of winter gets very dirty. Pollen, dead bugs, feathers, dust, leaves, mold, and a variety of other biological and seasonal debris can make the snow black by the end of the summer.

When snow falls again the next fall it will cover this black layer and put a new layer of ice on top of it. In Alaska I have seen road cuts made through areas where hundreds of black lines indicating summers are alternated with the white bands of winter.

Ice cores taken in Antarctica and other very cold places can be thousands of feet thick. Scientists have been studying these cores which reveal many things about the past. The ice traps gases so the history of the earth’s atmosphere can be studied. Pollen tells us what plants lived in the past, and tropical plant pollen found in ancient cores again tells us that this is not the first time this planet has experienced global warming. The number of black lines containing bugs and pollen numbers far more than 6,000—in some places the number is far in excess of 100,000 telling us that 6,000 years for the age of the earth is a human tradition without scientific support or biblical support.

New Species of Life Come and Go. These cores and the insects and pollen trapped in them also tell us that one part of the design of this planet is that species of plants and animals come and go as time passes. We see insects in ice cores that do not exist on the earth today. Many pollen samples do not fit any known plant of the time in which we live. In many cases these insects and plants seem to be related to forms we do recognize, but they have clearly gone through change allowing them to survive in an earth that was different in many ways than what we see today. Those who cry out in alarm that global warming may cause some forms of life to become extinct need to look at the history of this planet. God has designed life so that as the climatic conditions change, life can adapt. Racial characteristics of humans speak of the same wisdom, because every racial characteristic—from skin color to eye shape to hair texture—is a design feature suited to a certain environment. Animals or plants that cannot adapt become extinct, and are replaced by life forms that can adapt.

We need to point out that what we have said here is in no way a biblical issue. These kinds of changes and adaptations are shown in the Bible. What Jacob did with Laban’s flocks in Genesis 30 is this same kind of control—in this case exerted by man. The biblical word “kind” and the way it is used in the Bible does not contradict this fact of change. First Corinthians 15:39 defines the word “kind” for us and is stated in very broad terms. “One kind of flesh of birds” for example does not mean blue jay, stellar jay, canadian jay, etc., but rather refers to the group. Changes that would produce the more than 142 different varieties of chickens that we have in the world today are not at odds with the kinds the Bible talks about. Species and kind are not the same thing. New species may come into existence, but new kinds do not.

God’s Wisdom and Planning is Incredible. The more we learn about ice and the more messages we see in ice layers, the more amazed we have to be at the wisdom and planning of God. Not only is the ice itself an incredible tool in sculpting the planet and storing water for us, but it reveals wonderful messages about God’s wisdom and planning in the world in which we live. It lends a whole new meaning to statements like “have you entered the storehouses of the snow or seen the storehouses in the hail?” (Job 38:22, NIV).

—John N. Clayton
It is difficult to pick up a newspaper or a scientific journal these days and not see an article that in some way deals with the size of the cosmos. Scientific discoveries in space continue to come at us in a bewildering stream, mainly due to better instruments like the Hubble telescope, new satellites that use modern technology, and a better understanding of what the data from the past means. More and more observations are proving that the cosmos is accelerating in its motion, that matter/energy we cannot detect or see with our senses is a major force in the cosmos, and that the size of the cosmos is in reality greater than anyone could have imagined in the twentieth century. We now know that Pluto has three moons—Nix, Hydra, and Charon and that these objects are just a small part of a vast belt of objects orbiting the Sun. We are able to watch stars explode and galaxies change in places we can measure to be millions of light years away. In our own galaxy we continue to watch the aftermath of Supernova 1987A, a star that we watched explode in 1987 and which is 160,000 light years away from us.

There are many ways that people deal with these new discoveries, and many ways that people explain away the huge distances and sizes that are a part of them. Some people simply deny the evidence. The position of these folks is that it cannot be true because they have a belief system that does not allow it to be true. The data and the reports are viewed as either a clever plot to destroy their belief system by distorting information or a lie perpetuated by dishonest people.

Another view held by some religious people is what is called “The Belly Button Syndrome.” This view is that God has faked the whole thing, and what we are seeing and measuring has been created as a great illusion by God. In our September/October 2006 issue of this journal, Al Maxey showed why such a position is logically impossible on a biblical basis but it remains a position that many people accept.

A third approach is to invent a scientific explanation that attempts to explain how these huge sizes and distances are not what they appear. Gerald Shroeder, for example, has used relativity to explain away these sizes. There are those who have maintained that the speed of light has changed and continues to change attempting to explain away the sizes. There have also been those who maintain that the shape of space is so curved that what we are looking at are loops in the curvature of space/time and that the cosmos is in reality very small. The analogy would be that if you walked around the earth at the equator you could walk forever making repeated traverses around the circumference of the earth.

The fact of the matter is that all of these attempts to explain away the size of the cosmos are at odds with the evidence. It is also a fact that most young people have had classes in what we will be describing in this article and know that the explanations that we have described so far are incorrect and in fact impossible.

**Methods of Measuring Distance in Space**

It is important to understand that there are many reliable methods of making measurements in space, and that they all show us that the size of space is very large. Most of us know something about trigonometry—even if we have never taken a course in it. This is a part of mathematics that allows distances to be measured using triangles. If you can measure the distance between two points, and can measure the angle to a third point from each of them, you can calculate how far away the third point is. In the diagram on the next page, let us suppose that points A and B are known and the distance between them is known. What we want to know is how far away point C is. From point A you measure the angle from B to C. From point B you measure the angle from A to C. There are simple formulas in trigonometry that allow you from this information to calculate the distance of either A or B to C. This mathematics is used to survey in real estate and to calculate and build huge structures like bridges and skyscrapers.

Now look at the next drawing. Here we have the earth orbiting the sun. We want to know how far away the star is from the earth. The way we do this is to measure the angle from the sun to the star
when the earth is at point A, and then measure the angle from the sun to the star when the earth is at point B. We know how far we are from the sun so we know the base of the triangle. Doing the same mathematics as above, we can calculate how far away from us the star is.

This method of measuring distances in space is very accurate and very reliable. The only problem we have is that if the object is very, very far away, the angle between the sun and the object gets to be so close to 90 degrees that we cannot measure it. That means other methods have to be used.

Another method of measuring distances in space involves measuring the brightness of something and how it changes with distance. If you see a car coming toward you and if the lights are very bright you know the car is close to you. If it is very far away the head-lights will not be very bright. In physics we have an equation which describes this. It simply says that the brightness is equal to how strong the light is divided by the distance the light is away from us squared \((E=I/x^2)\). If you take a 100 watt light bulb and place it 5 meters from you, the brightness would be 100 watts divided by 5 squared or 4. Conversely, if the brightness was 4 and you know the bulb is 100 then it must be 5 meters away (100 divided by 4 and then take the square root.) (Adults, if you are having trouble with this have your sixth grader explain it to you, because this is part of the modern sixth-grade math curriculum).

There is a special kind of star we see all around us in space that is called a Cepheid variable star. These stars pulse or flicker. The faster they flicker the brighter they are. That means that if we measure their flicker, no matter where they are, we know their brightness. We see these Cepheid variable stars in other galaxies, and we can measure their brightness as seen here on Earth. Using the simple mathematics above, we can calculate how far away the galaxies are. A third method of measurements in space is called interstellar reddening. When a bright light is close to you, the higher energies of blue and violet will get to your eye and you will see them. The further away you get, the more these higher energies are refracted and scattered away from you. When the blue and violet energies are taken out of the light, the light will appear to be red. This is called reddening. When the sun is right overhead and its rays come right straight at us, it is very white and bright. At sunset or sunrise when the distance has changed and the light rays have to go through more air to get to us the sky gets red. As we look out in space, we see some objects that are very red indicating that the light has come a great distance through a lot of debris in space. This can be used to estimate how far away something is in space.

A fourth method of measuring distances in space relies upon the fact that exhaustive measurements have been taken of galactic speeds in space. We can measure the speed of something in space by the shift in the colors of the light it sends out. If you are standing by a railroad track and a train comes by with its horn blowing, you hear the pitch of the horn drop as it goes by. Race cars also give us that drop in the pitch of their engines as they pass us in a race. There is a formula used by the police for catching speeders that allows the speed of the car to be calculated. This is used in race
cars, studies of trains, and the motion of things in space. The further out in space things are, the faster we measure their speed to be going. If a race car goes by you and you do not hear the drop in pitch, how fast was it going? If you hear a huge drop in pitch, what do you know? Measuring the speed of a galaxy in space tells us how far away it is according to an equation known as Hubble’s Law which says the speed is equal to a constant known as Hubble’s constant multiplied by the distance from Earth the object is located.

We have given you these simplified explanations of how measurements in space are done to help you understand how good these methods are. Young people learn about these methods in physics, earth science, math, and physical science classes. The mechanics of how specific numbers are generated can be complex, but the basic concept of these methods are very simple and easy to understand.

Attempts to Deny These Measurements Do Not Work

There are religious groups and pseudoscientific groups that have tried to find ways around these measurements. Suggesting that the speed of light is changing and that this change invalidates these measurements for example, is not a good response to these measurements. In the first place the speed of light is easy to measure and measurements from the time of Michelson and Morey in the nineteenth century to now do not show the speed of light to be changing—especially enough to invalidate distance measurements in space. Trying to suggest that the cosmos was moving close to the speed of light and that, as it has slowed down, all of these measuring devices changed does not work well either. Changes in speed do not just affect time. They also effect mass, and if things were traveling close to the speed of light when the creation was first completed the masses of everything would have been so huge that the whole system would have collapsed into a gigantic black hole. There are many huge factual problems with this explanation.

Suggestions that the cosmos is curved so sharply that all of the measuring devices are in error is something not supported by the evidence. If the cosmos was curved so sharply, then light rays would not travel parallel to one another and would not allow distances to stay constant in space. All measurements show that unless there are massive gravitational anomalies in the area, light rays do travel in essentially parallel rays.

The basic curvature of space is so small that our current measuring devices cannot detect any curvature at all. In short, all attempts to deny the massive size of the cosmos and the distances involved in the cosmos fail every observational and scientific test that can be applied to them. Andromeda is in fact two million light years away from the earth, and Supernova 1987A is in fact 160,000 light years from us in our own galaxy. That means the light from this explosion that we have watched happened, left there 160,000 years ago.

Making Apologetic Sense of These Distances

Why is the cosmos so big? How do these distances relate to the biblical account. The answers to these questions reside in three basic problems many people have: (1) Their God is too small, (2) God’s purposes are too large, and (3) Human tradition is too short-sighted.

Many atheists and believers alike have a concept of God that is inconsistent with a large cosmos or a spiritual existence. If you understand God to be a human with human physical attributes and limitations, then any suggestion that the cosmos is massive in size is unacceptable. God created time, space, and energy. The statement of Genesis 1:1 that there was a beginning maintains that time, space, and energy came into existence by a process that is not physical. Every description of God and of that process in the Bible indicates that God functions differently than we do. Quantum mechanics supports this notion and says that the laws of very small things like atoms and quarks are different than the laws of the physical world in which we live. Both atheists and believers have been guilty of creating a god in their own image, and this makes the concept of massive distances and sizes difficult to grasp.

The purposes of God are spelled out in the Bible in passages like Ephesians 3:9-10; 6:12 and Job 1 and 2. The struggle between good and evil and the agencies involved in this struggle reach beyond our physical existence. Is this struggle being carried on elsewhere in the physical cosmos? If it is, we will never know it in this life, because the distances are so huge that no contact is possible between us and them. That in fact may be the reason for the massive distances in space, but we will never know it in this life. The majesty and power of God are attested to in the magnificence of His creation. In our own lives and on our own planet we can see the terrible war between good and evil being played out. Denying that it could be taking place elsewhere is going beyond what mankind can know, but the evidence is certainly that the size of the cosmos can accommodate such a reality.

Human tradition wants to trivialize God and his purposes. Atheists want to make God a nonfactor, and maintain that all there is to our existence is what we can see and experience in the physical. The problem
with this is that it ends up having to deny the existence of good and evil (See Richard Dawkin’s statement in Out of Eden, page 133), and puts our entire moral code on the basis of survival of the fittest. Many creationist go to the other extreme, making our existence so unreal that common sense and clear observations have to be denied to maintain a human theology. The Bible avoids both of these pitfalls, describing man’s existence in very real terms and in such a way that the facts we observe in the cosmos fit all we experience and understand.

The Does God Exist? program offers free courses and materials to allow you to explore the magnificence of not only the cosmos in which we live, but in the spiritual journey which we experience as well. Look at the evidence and it will give you powerful reasons to believe in God, powerful evidence to accept the Bible as His word when it is taken literally (not traditionally), and the power to find meaning and purpose in life that brings fulfillment and value to all you are and all you experience. “‘To whom will you compare me? Or who is my equal?’ says the Holy One. Lift your eyes and look to the heavens: Who created all these?” (Isaiah 40:25-26.) —JNC

Editor’s Note: One of the things that has come out of the battle between extremists in the evolution/creation controversy has been a flow of literature from atheists claiming that good scientists and intelligent, educated people do not believe in God. This is simply not true. Tihomir Dimitrov has compiled an e-book on http://nobelists.net of quotations of Nobel Prize winning scientists. In each issue of this journal we hope to quote statements from some of these.

Max Planck—Nobel Laureate in Physics

“There can never be any real opposition between religion and science; for one is the complement of the other. Every serious and reflective person realizes, I think, that the religious element in his nature must be recognized and cultivated if all the powers of the human soul are to act together in perfect balance and harmony. And indeed it was not by accident that the greatest thinkers of all ages were deeply religious souls.”

“[Science and religion] do not exclude [each] other; rather they are complementary and mutually interacting. Man needs science as a tool of perception; he needs religion as a guide to action.”

“...it is no wonder, that the movement of atheists, which declares religion to be just a deliberate illusion,…eagerly makes use of progressive scientific knowledge and in a presumed unity with it, expands in an ever faster pace its disintegrating action on all nations of the earth and on all social levels. I do not need to explain in any more detail that after its victory not only all of the precious treasures of our culture would vanish, but—which is even worse—also any prospects at a better future.”

“It is the steady, ongoing, never-sackening fight against skepticism and dogmatism, against unbelieving and superstition, which religion and science wage together. The directing watchword in this struggle runs from the remotest past to the distant future: ‘On to God!’”

ADDRESS CHANGE? To remain on our mailing list, please give us both your old and new addresses with both zip codes at least six to eight weeks before the move, if at all possible. Thanks!
Editor’s Note: I have always had a strong feeling about prejudice and injustice. When I read the story of Jesus and the Samaritan woman at the well in John 4, I realize that Jesus Christ also had those same feelings and reached out to people who were rejected by his peers. My experience started early when my father was a professor teaching in an all black college in Talladega, Alabama. I remember threats to us and a cross burning in our front yard and my mother telling me, “this is what Christians do.” I was about five years old and did not understand the atheist faith of my parents or why we were threatened because my father taught in the college. Later in life, I remember my mother telling the story of me having my tonsils out at six years of age and how the doctor wheeled me out on a rolling surgical table, pushing me with blood all over me towards my mother and telling her “Here, nigger lover, you clean him up.” My resistance to racial prejudice grew from that beginning, and through the years I have continued to fight this cancer in our society. Several years ago I began to have a study over e-mail with Sonnie Hereford. I did not know anything about him, but he had a lot of questions and was honest, intelligent, and we spent a lot of time studying together. Sonnie attended Notre Dame, and after his graduation, he served on the board at Notre Dame here in South Bend. The first time I personally met him was when he came up for one of these board meetings. He had been baptized into Christ, but he still had some questions so I asked him to stay with us. He came to our house and asked questions for several hours while he and his wife stayed with us. Our love and friendship has continued to grow as the years have gone by.

It was later when I became aware of the fact that he was the first black child to attend a previously all-white Alabama public school. In the Spring 2007 issue of Notre Dame Magazine, Sonnie’s remarkable story was told. We have reproduced it here for your reading. I am sure it will amaze you, and I hope you will be encouraged. It will also make you wonder where the Church was in all of this, and point out how hard it is to break free of the traditions and prejudices of your ancestors. It also makes the acts of Jesus Christ all the more amazing, and will challenge all of us to be more like Jesus, free of the selfishness and unjust beliefs and practices of the past and willing to step out for Jesus even when society and family oppose us. Our thanks to the Notre Dame Magazine for allowing us to print this article. (www.nd.edu/~ndmag)

When I arrived for my first day of school as a first-grader in Huntsville, Alabama, in 1963, my entrance was blocked by the governor. In fact, George Wallace closed all the Huntsville schools that day rather than have a black boy enroll at one. The governor relented a few days later, but only after my family had made another visit to federal court in Birmingham, allowing me—on September 9, 1963—to be the first black child to attend a previously all-white primary or secondary public school in the State of Alabama.

My desegregation experience began with my father’s experiences—conditions he was determined his children would not live under. My father was born in 1931, grew up in Madison County, Alabama, and went to school in the ’30s and ’40s when “separate but equal” (a description that was only half true) was the law of the land. My father walked seven miles to school. School buses ran along parts of his route to school, but black children were not allowed on them. Instead, the buses would kick up dust into the faces of the black children, and white children would sometimes spit out of the windows and throw things at the black children.

My father’s school was surrounded on three sides by the Huntsville City Dump. Given the climate of north Alabama and the lack of air conditioning that often made it necessary to open the windows, one can only imagine the odors the black students had to endure. This was then the only school for black children in Huntsville, and it had very little lab equipment, no gym, no playground equipment, no lunchroom and no library. Black citizens were not allowed to use the public library, even though their taxes, too, helped support the public library—and, for that matter, the school buses.

In high school, my father decided he wanted to become a doctor. He wrote to the University of Alabama to obtain a catalog for their pre-med curriculum. The university obliged, and he later applied there. His application was rejected, even though he was valedictorian of his high school class. The problem may have been that he had checked the “Colored” box indicating his race. But knowing what classes made up a pre-med curriculum, he took them at a local black college and was accepted into medical school after only two years.

In 1954, two years before my father began his medical practice, the Supreme Court’s unanimous decision in Brown vs. Board of Education (brought against the Topeka, Kansas, school system) struck down the “separate but equal” segregation plan. But public schools and other
facilities in Alabama did not immediately begin to desegregate. Challenges by courageous and determined people would be needed.

My father began his medical practice in Huntsville in 1956. At Huntsville Hospital the black doctors—both of them—were not allowed to eat in the hospital cafeteria. Only one room was available to black patients; it served as the delivery room, the operating room and the emergency room. A patient who had been prepped for surgery would sometimes have to be taken off the table and wait while an emergency, such as a woman in labor, was attended to. This was true even though some facilities on the “white” side of the hospital frequently went unused.

Separate but not so equal. The beginnings of major social changes came to Madison County in 1962. At that time all public schools were segregated. There were no black policemen, firemen or bank tellers. There were no bathrooms for blacks at stores. Blacks were not allowed to go to the downtown public park, nor were they allowed to go to bowling alleys, professional sporting events or concerts. The Madison County Courthouse had restrooms for white men, white women, colored men and colored women. Restaurants that served blacks at all would only do so through a side window. When I was about 4 or 5 years old, my father had to explain to me why we couldn’t walk into Shoney’s Big Boy restaurant and order a meal. I knew there was food inside because of the large statue outside of the boy holding a hamburger up high.

A white gentleman had moved to Huntsville from St. Louis, and was a violinist in the Huntsville Symphony Orchestra. His belongings had not yet arrived. He found out my father owned a very expensive violin. The gentleman asked to borrow the violin to play a solo in a concert, and my father agreed. My father remembers thinking later, “My violin is good enough to go to the concert, but I am not.”

Some whites in northern Alabama assisted the civil rights movement. One such group was referred to as the “Block Busters.” At a time when real estate agents would not even show a home in a white neighborhood to a black family, the Block Busters would buy a home then sell it to a black family who wanted to buy it. There was also a white pediatrician who signed bonds for black students arrested at demonstrations and sit-ins. Even though many of his fellow white physicians refused to refer patients to him, he continued to sign the bonds. The Unitarian Church in Huntsville was the only white church that supported the civil rights movement in our area. None of the white Christian churches formally supported the movement, although I’m sure a few individuals from white Christian churches did.

Often repercussions were worse for whites who supported the movement than for blacks. I have always thought that no matter how racist a person is, at some level he or she can understand a person fighting for his or her own equal rights. But whites who did not support the movement considered whites who were sympathetic to the cause as traitors to their own race.

In spring 1962, in spite of appeals to public officials, poster-walk demonstrations, lunch counter sit-ins and other efforts, little progress had been made in the civil rights movement in Madison County. The movement had lost much of its momentum, and organizers decided to bring someone influential to the area to help the cause. So in March 1962, Dr. Martin Luther King Jr., at that time not nearly as famous as he became, came to Huntsville. My father, as one of the principal organizers of the movement, met King at the airport and escorted him to his speaking engagements. King emphasized voter registration, school desegregation and nonviolence. His rousing speeches included an early version of the “I Have a Dream” speech. He generated enthusiasm, and by attracting regional attention to the situation he helped shine a light on the circumstances in northern Alabama—a light local politicians and leaders were not eager to see.

Poster-walks and sit-ins continued, as did negotiations with local officials. People from Huntsville even picketed at the New York and Chicago stock exchanges, discouraging potential investors from supporting companies that operated in Huntsville. Progress was slow. My mother, who was eight months pregnant with my second sister, was arrested for sitting at a Walgreen’s lunch counter. Gradually, as a result of these and other efforts, local officials began allowing the integration of public facilities, restaurants, hotels and entertainment facilities.

The court case. Still, in summer 1962, Huntsville city schools remained segregated. There was an all-white school a few hundred yards from my family’s home. The all-black school was about a mile and a half away. My father initiated a lawsuit in my name to allow me to go to the nearer school. The case was heard in federal court in Birmingham, and the lawyers for the school system tried everything to keep me out of that school. Their four-point argument was: (1) it would be dangerous for me to cross such a wide street to get to the school; (2) such a thing had never been done before; (3) admitting me (and three other black children) would completely disrupt the Huntsville school system; and (4) officials had turned the state capital, Montgomery, “inside out” and could not find a copy of my birth certificate.

Readily dismissing the first two points, the judge—assessing the third point—commented that he found it difficult to believe that the Huntsville Board of Education had such poor control of their schools that four young children could completely disrupt the entire system. As for the fourth point, I must assume they were trying to prove I didn’t really exist. They must have been more than a little embarrassed when it was explained to them in court that I was born in Indiana.
At the conclusion of the arguments, the judge did not retire to deliberate; he ruled from the bench. He said this case could be decided based on the Brown vs. Board of Education ruling. Consequently, in spite of the efforts of Alabama Governor Wallace, I became the first black child to attend a previously all-white public school in Alabama. Even then I was something of a survivor. At one point during the civil rights movement in Madison County, about 35 black families had offered to have their children be a part of the first wave of school desegregation. Because of threats of physical violence and property damage and destruction, and threatened dismissals from employment, only four families remained at the time of the court’s decision.

Between the brief time of the court case decision and actually starting first grade (kindergarten was not required in those days), it was the Unitarian Church of Huntsville that put together a “playschool” for me, three other black children and about a dozen white children. The purpose of the preschool was to enable us to get used to going to school together—to show us that children were just children.

Bad experiences. For me, being in a large school with only white children was mostly uneventful. At that age, for the most part we simply thought of each other as children, classmates and playmates. However, two experiences stand out in my mind and will be with me forever. In first grade, I remember being in the cafeteria lunch line next to a little white girl who was not tall enough to get her tray down off the stack. I got her tray for her and attempted to hand it to her. As I did she said, “Oh, no, my mother told me never to take anything from a nigger.” Amazingly, I took something positive from that experience. Even at age 6, I realized this little girl did not know what she was saying. She had not been born with these sentiments; this was her mother speaking through her. Throughout my life, this incident has given me hope that, with time, fewer and fewer parents will teach this kind of bigotry to their children.

The other experience occurred in second grade at the same school. I was on the playground, and another second grader named Roger started calling me names. I’ve never had a quick temper; I merely told him to leave me alone. Roger saw he wasn’t getting under my skin, so he decided to throw some dirt on me. That was more than I could take. We got into a fight, and I got him down and sat on his chest. I then scooped up dirt and put it all over him, head to toe. We were soon separated by one of the playground monitors and dragged into the principal’s office. She asked us what had happened. I told her the story exactly as it had occurred, and Roger didn’t dispute any of it. Our principal decided I would be the only one punished for this incident “because of the amount of dirt Roger had on him.” I guess I had failed to understand the concept which President Reagan would later refer to as a “measured response.”
A few years later, still as a grade-schooler, I went with family and friends, both black and white, to the only ice skating rink in Alabama at that time, which was in Huntsville. I remember the person collecting admission telling the white members of our group they could come in but telling the blacks we could not. Many years later that rink had been closed, and a new rink was opened in Huntsville, run by the same family. When I was about 30 years old, I went skating and recognized the gentleman who had been in charge of the rink when I had been denied access all those years earlier. I told him about my earlier experience. He said that must only have been because of the person at the ticket window that day. He said he would never have had such a policy at his place. Right.

I also remember receiving an autographed picture of Governor Wallace at the time of my graduation from high school in 1975. Quite ironic considering how he had tried to keep me from ever entering first grade at the school around the corner from my home.

Still, today, when I look at Huntsville and Madison County in 2007, it is clear that tremendous progress has been made. Institutionalized racism is practically nonexistent. However, I’m afraid racism in people’s hearts will last for many more generations—as long as parents and others keep teaching it to children.

Every year I am asked to speak to several groups about my desegregation experiences. One particular teacher has me speak each year to her 4- and 5-year-old students. Of course their attention spans are much shorter, and one must use smaller words. But they have a basic understanding of right and wrong, and of being mean or being nice. Once, after I had finished speaking to this group, a little girl raised her hand to make a comment. She said in her family they have a white dog and a black dog. When they take their dogs to the vet, he treats the dogs just the same. This little girl got it; why do adults have such difficulty?

The photo of Sonnie Hereford is by Glen Campbell. He is a software engineer at Freedom Information Systems and supports the NASA Marshall Space Flight Center in Huntsville, Alabama.

This I Have Learned about Life

➡️ That you cannot make someone love you. All you can do is try to be someone who is not difficult to love.
➡️ That sometimes it takes years to build up trust, but only seconds to destroy trust.
➡️ That it’s not what you have in life, but who you have in your life that counts.
➡️ That you are responsible for what you do, no matter how you feel.
➡️ That you are in control of your attitude. You choose your attitude!
➡️ That heroes (the really great people of this world) are the people who do what has to be done, regardless of how they feel and regardless of the consequences.
➡️ That maturity has more to do with attitude, dependability, and taking responsibility for your life than the number of birthdays you’ve had.
➡️ That no matter how good a friend is, you are going to hurt each other every once in a while, and forgiveness is essential to lasting friendships.
➡️ That forgiving others is sometimes easier than forgiving yourself.
If you want a book that will challenge you no matter how strong your academic background is, this is the book for you. Written by a well-known physicist who is a professor of mathematical physics at Tulane University, this book comes at quantum mechanics and multiverse theory in a strong apologetic way using these disciplines to support the Christian perspective.

The book begins with a brief historical outline of modern physics briefly explaining quantum mechanics, relativity, and particle physics. As a physics teacher I found this discussion interesting and current but I sincerely doubt that non-science readers will understand a lot of it. From that introduction Tipler shows Earth’s fate in terms of event horizons and time flow. The ultimate conclusion is that Earth will end and that it had a beginning in a cosmological singularity, which Tipler contends is God. If you are familiar with modern views of cosmology and singularities, you will find this section very useful.

Tipler then explores miracles contending that in terms of modern physics, miracles do not contradict physical law. The Star of Bethlehem, the Resurrection, and the Virgin Birth are all fitted into multiverse explanations. The book concludes with some discussions about anti-Semitism, evil, and free will. At the end of the book, Tipler summarizes what he has tried to develop in the book. Quoting his own statement of the five points he develops may be useful: (1) God is the Cosmological Singularity, (2) Miracles never violate physical law—the laws are just adjusted, (3) The incarnation is true and can be explained, (4) The Virgin Birth is true and can be proven, and (5) The Resurrection can be explained using baryon-annihilation processes.

There are some parts of this book that are very useful and interesting. There are other parts that are very dubious. Tipler accepts the Shroud of Turin as valid and as a means of proving some of his points about the Resurrection. We have pointed out in this journal that the Shroud is most certainly a fraud. Tipler’s science is on the front edge of theory, and in some cases is very debatable as verification has not been done of some of what he uses as fact. Quantum mechanics and multiverse theory are very young sciences. We recommend this book for readers who have strong academic backgrounds and are interested in modern physics and quantum mechanics. For most general readers the book will tend to be confusing and hard to understand.

The Gay Debate

This book is actually a tract, being only 31 small pages in length. We feature it as a book because we feel it is perhaps the most useful thing to come out on the issue of homosexuality in a very long time. Stanton Jones is the chair of the psychology department at Wheaton College. He answers three questions in this booklet: (1) What is the Christian position on homosexuality and why? (2) Why is it an important issue? and (3) How should we live out our response?

Jones begins by a quick review of how gay activists handle various biblical passages. Included are Leviticus 18:22; 20:13; Deuteronomy 23:18; Genesis 19; Romans 1; 1 Corinthians 6:9; and Timothy 1:10. He responds to these and then presents the biblical concept of what sexual intercourse is supposed to be in God’s plan. A discussion of whether God’s plan is fair to gays with several quotes from gay activists relating to the wisdom of monogamy and whether it fits the gay agenda. The remainder of the book deals with the Christian community’s response to these issues and what should happen in this area of work.

This is a very useful book for Christians who are in discussions with people promoting homosexuality. It is not homophobic, but does not condone homosexuality either. Because of its brevity, it is not a dissertation on the gay issue, but it has useful insights and is accurate and biblical. The aggressiveness of gay activists has caused a great deal of polarization both in the gay community and in the religious community. A lot of statements are being made about the Bible and about homosexuality that are not accurate and do not really address the problems involved. For many people this has been very disturbing. This booklet will not solve all of that, but it is a very useful tool to use in trying to improve dialogue and provide better understanding of both sides of the issue. There are also a number of references given for additional material that those who are interested in this area will find useful.
One of our advisers in this work is David Strong of Phoenix, Arizona, who owns METL, a lab that tests materials for industry. Dave has been sending me articles from *Advanced Materials and Processes*, a magazine that talks about advances in materials science. In the January 2006 issue (page 121) was an article on Toucan beaks.

The Toucan has a beak made of bony fibers and drum head-like membranes, which are sandwiched between keratin. Keratin is the protein that makes up your fingernails and your hair. It is also found in the horns of many animals.

In the Toucan beak, the boney fibers are made into a kind of foam which is very lightweight. This material has a hollow space in the middle, and it is all held together by the exterior layer of keratin. When Dr. Marc Meyers ran a computer model of the beak he found it was “optimized to an amazing degree for high strength and very little weight.” He goes on to say, “It’s almost as if the Toucan has a deep knowledge of mechanical engineering.”

It is interesting that, as man’s technology continues to grow and his tools become better and better for evaluating what God has done in the creating of His creatures, we find the level of engineering and technology is incredibly high. This leads people in materials science to continue to look at the world around us and copy the design features that are there to make better materials and processes for our own well-being. Again and again the message of Romans 1:20 comes back to us that we can know there is a God through the things He has made.

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**Shark Skins and Boat Skins**

Dr. Anthony Brennan is a University of Florida professor of materials science. He tells the story of being in Pearl Harbor and seeing a navy submarine go by with its hull covered with algae. He then noticed a shark swimming by whose skin was completely free of algae. As he thought about what he had observed he recalled that sharks never seem to have barnacles, sea lettuce, or clams or any of the growths of plants and animals that seem to bother all man-made structures in the sea. This has led to the invention of “Sharklet,” a patented marine coating that is based on shark skin.

If you have ever run your hand over the skin of a shark, you know that it is bristly to the human touch. The scales of a shark have a regular pattern of raised riblets which are diamond-shaped and are called placoids. These structures are about one-tenth of a millimeter wide and do not allow any biological glue or attachment method to hold to them. The result is that the shark skin has no turbulence as the shark swims through the water. Dr. Volkmar Stenzel at the Fraunhofer Institute in Germany has developed a method of using silicon film to produce Sharklet for boats. It has taken many years to find a way to duplicate shark skin, using the most complex tools known to man to do it. The question of how such structures come about by chance is one that seems at the limits of man’s imagination. The more we learn about the natural world the more we see that a wonder-working hand has gone before.


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The word “listen” contains the same letters as the word “silent.”

Humility is a lot like underwear—essential, but indecent if it shows.

Forbidden fruits create many jams.

Most elephants weigh less than the tongue of a blue whale.
**Creationist Museum.** On Memorial Day of 2007, Ken Ham of “Answers in Genesis” opened his 27 million dollar museum to the public. Visitors pay $19 to get in (children are $9) to see displays that support denominational creationism. We have discussed this teaching and its dispensational millennial background in this journal many times. The museum has walk-through displays of the Garden of Eden complete with humans and dinosaurs living in friendly symbiosis, the Tower of Babel, Noah’s Ark, and a variety of exhibits in astronomy and geology. If you want to see an elaborate presentation of young earth creationism, this 60,000 square foot museum in Kentucky is an elaborate way to do it. We would suggest that the problems scientifically and biblically with this denominational view outweigh the positive publicity for faith that the museum presents. Dr. Mark Noll writing in *Christianity Today*, said it well, “…it’s possible to honor God scientifically without recourse to creation science.” If you are interested in our response to young earth creationism, you might wish to read our booklet *God’s Revelation in His Rocks and His Word*—available on our web site (doesgodexist.org)—or it can be borrowed or purchased from us for $2.00 ppd.

**Militant Atheism Seizing Europe.** Muslim violence and hypocrisy and immorality in leaders of organized religion have provided a platform for a surge in militant atheism in Europe. Led by Michel Onfray’s lecture series titled “Hedonist Philosophy,” atheists are getting free time on state radio stations and holding public lectureships all over Europe. A recent lecture in London sold out some 2,000 seats at $40 a seat. The first Muslim atheist group called “The National Council of Ex-Muslims” has been founded by Mina Ahadi and has grown astronomically. *The Wall Street Journal* (April 12, 2007, page A1) titled their description of new planets being found around other stars “inventive.” Some of those same attitudes exist to this day, but hopefully it will let us see that any human can be misguided in his understandings. —Source: *Smithsonian*, July 2007, page 12

**Embryonic Stem Cell Firm Quits.** We have attempted to point out for a long time that the embryonic stem cell dispute was a misguided debate, because the nature of embryonic stem cells did not lend these cells to uses to cure diseases. One of the leading biotechnology firms, E S Cell International, has announced that they are ending their attempts to use embryonic stem cells for clinical therapies. The reason given is that “the likelihood of having products in the clinic in the short term was vanishingly small.” Adult stem cells by the way, are being used now to treat more than 70 diseases and ailments and over 1500 clinical trials are in operation for adult stem cell treatments. Embryonic stem cells can be used to understand the design of the body, but adequate supplies are available for that use. Trying to use them for treatment of disease is a misguided attempt. The American College of Pediatricians has called for an end to embryonic stem cell research. Michelle Cretella speaking for the group says “Not only does embryonic research require taking the life of human embryos, it also prolongs needless suffering by delaying the development of more promising adult stem cell treatments and cures.” —Source: *MCNews*, August 2007, page 7, LifeSiteNews.com, May 14, 2007

**Linnaeus the Bigot.** Most of us have learned somewhere along the line that Carl Linnaeus developed the taxonomy system used in biology today. This system is based on evolution, and in some cases is not very good science. One interesting fact that few are aware of is that Linnaeus showed his prejudice by grouping humans into four categories using the same techniques he used in developing his taxonomy system. Remember that this was done in the 1700s and in 1758 he groups humans as follows: “Americanus was ‘obstinate,’ Asiaticus ‘avaricious,’ Africanus ‘indolent,’ and Europeanus ‘inventive.’” Some of those same attitudes exist to this day, but hopefully it will let us see that any human can be misguided in his understandings. —Source: *Smithsonian*, July 2007, page 12

**Media Distortions of Earthlike Planets.** If you read the newspapers and their description of new planets being found around other stars you might come to the conclusion that scientists are finding earth-like planets everywhere. A good example was a recent report in *Astronomy* (August, 2007, page 20) that star Gliese 581 “harbors the most earth like planet ever discovered.” Here are the facts: (1) Gliese 581 is a red dwarf. Any star has a zone where water will exist as a liquid, but a cold star will have it close to the star and that is the case here. (2) The planet is about 1.5 the earth’s radius, so it is fairly small, but its mass is five times that of the earth, so its gravity would be huge and its atmosphere would be toxic. (3) It takes the planet 12.9 days to orbit the star and it is only 6.8 million miles away from that star.
This would not allow any earth-like properties to exist. There may be an earthlike planet somewhere, but so far what has been learned is that a planet like ours is incredibly rare and the natural processes that produce other solar systems make it increasingly less likely that accidents can produce what we see in the world around us.

**Galactic Catastrophism.** One of the assumptions of evolutionary theory that is rarely discussed is the assumption of uniformitarianism. This is the belief that the only processes that have ever been operational on the earth are the processes in operation today. The problem is that if catastrophic processes occur (like the biblical flood) then evolutionary theories are highly stressed to explain the biodiversity that we see, so catastrophism has been pretty much ignored even though it is clear that uniformitarianism is not generally true. A new study at the University of Kansas has shown that the north side of the galaxy (as viewed from Earth), has a cosmic ray wind that would be catastrophic to life forms on Earth. It appears that the solar system migrates into the area periodically and the effects would have enormous implications for all theories of the history of life. The Bible agrees with the fact that the earth is generally uniformitarian (God is the same today, yesterday and tomorrow according to the Bible), but also tells us that there have been occasions when history was punctuated with a major catastrophe. You can argue about the cause, but it is clear that uniformitarianism is an oversimplification of the earth’s history.

—Source: *Science News*, April 21, 2007, page 244

**Herod’s Burial Place Found.** Ehud Netzer of Hebrew University in Jerusalem has located the burial place of King Herod—the king who ordered the death of all children under two in Bethlehem. Josephus had observed Herod’s funeral procession and sarcophagus, and Netzer has found the remains just as Josephus described them. Good archeological research is always a friend to the Bible, but sorting through the scams and con artists can be difficult. This seems to be a find that no one is contesting. —Source: *Discover*, July 2007, page 13

**Appalling Numbers.** Of the six and one-half billion people living on the earth, 1.2 billion live on an average of 23 cents a day and 2 billion have no electricity. Every 16 seconds someone dies of hunger. Last year 105 billion dollars was spent on alcohol and 11 billion on ice cream in Europe alone, and 17 billion was spent in the USA and Europe on pet food. Atheists attack God on the basis that God should not allow pain and suffering in the world, and yet the tools to eliminate hunger and suffering are available to mankind. The selfishness that permeates those on the planet who have a surplus of resources prevents it from happening. Human politics and a “survival of the fittest” mentality is the cause of poverty and need on the planet—not God. We have been given the resources to meet the needs that exist. It is interesting that yesterday we got 26 soliciting letters from Christian organizations all addressing poverty and illness on the planet, and not one atheist solicitation—even though we are on many atheist mailing lists. Source of data: World Challenge Inc. at www.worldchallenge.org

**Homosexuality and Politics.** The appointment of the U.S. Surgeon General is a political appointment, nominated by the president and approved by Congress. The recent nomination of Dr. James Holsinger by George Bush has caused a major furor because Holsinger has in the past written positive papers on the design of the human reproductive system, and on the health hazards of gay sex. From John Edwards to the *Boston Globe* there has been an outcry that Holsinger is “bigotry masquerading as science” (the *Washington Post*), even though everyone who knows Holsinger (including some homosexuals) agrees that he is “fair, professional, and compassionate.” The Bush administration has not defended Holsinger, but has said that the papers were his beliefs at the time he wrote them and that this should not be used against him. Politics is such a massive force in our culture that truth and accuracy are forced under the table when political expediency is at stake. The fact is that there are health hazards that are unique to gay sex just as there are health hazards in multi-partner heterosexual behavior, drinking, and smoking. The fact is that the human reproductive system is incredibly sophisticated and a reflection of God’s wisdom and intelligence. Advocating truth should not be a political liability.

—Source of Data: *Christianity Today*, August 2007, page 20

**Cancer and miracles.** A regular question that comes to us from a variety of readers is how we explain claims of miraculous cures of cancer. It has been our experience that a huge number of the claims are either false, or cases where the person never really had cancer. There are, however, those cases where someone who had cancer is healed, and in *Discover* (September 2007, page 540) is an interesting article about cases where people had terminal cancer and the body’s immune system attacked and destroyed the cancer when death seemed inevitable. The immune system itself is a beautiful example of God’s wisdom and design in our bodies. What it takes to get that system to attack and destroy cancer is still poorly understood. We would maintain that God can perform miracles, but modern miracle workers are misinformed or fraudulent. They do not have that kind of power.
This journal is a part of a program of service titled Does God Exist? The purpose of the program is to provide thinking, seeking people with scientific evidence that God does exist and that the Bible is His Word. It is our conviction that all men can logically and rationally believe in God. In addition to this bimonthly journal, the Does God Exist? program offers DVDs and video tapes, CDs and audio tapes, courses, books, and other materials. These materials are offered on a loan basis or at our cost. We also are more than willing to correspond with you and answer any specific question(s) you might have. If you would like further information on borrowing or purchasing these materials, we would be glad to send it to you. Check the boxes below to describe what you would like and mail it to us. We will get it right out to you.

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