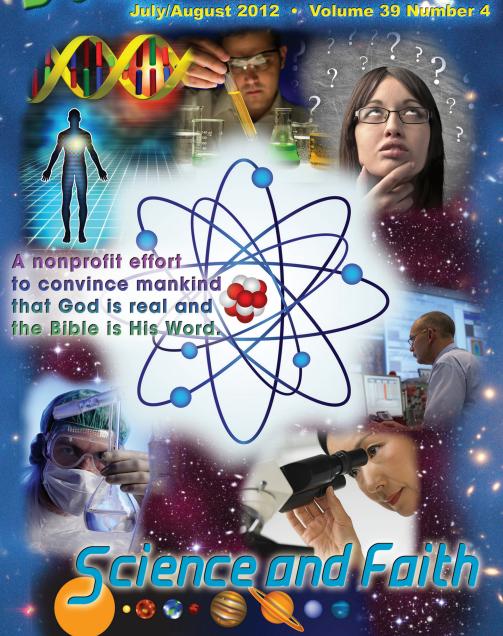
DOES GOD EXIST



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In the beginning God created the heavens and the earth.

Genesis 1:1

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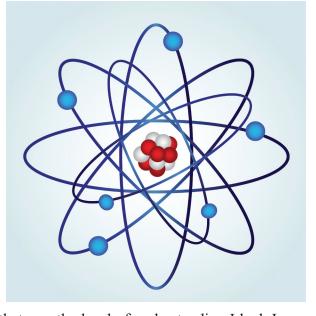
Levels Of Understanding In Science And Faith

There are many sources of misunderstanding in matters related to science and belief in God. In this journal we try to explore some of the misunderstandings that we feel qualified to discuss. There are many areas that I do not feel qualified to deal with either because I lack education in those areas or because I am still struggling with my own understandings. In all areas of science this is the case, and it is not just the limits of an individual that is involved. Man's understanding of very basic things has evolved through the years to where it is today, and

this evolution continues.

A wonderful example of this that has taken place in my lifetime has been what an atom looks like. When I was a child in the 1940s an atom was considered to be a positively charged nucleus made up of protons and neutrons with electrons going around that nucleus in specific orbits.

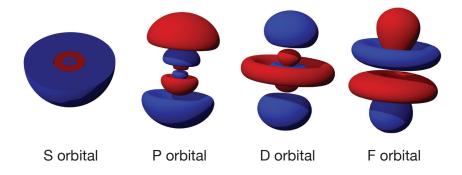
The atom looked very much like



a solar system and that was the level of understanding I had. I saw diagrams which supported that view. When I learned about the spectra of various elements, my level of understanding increased. The different electron orbits had different energies and the further out from the nucleus they were, the more energy they had. These orbits were given letters—K, L, M, N, etc. Many things in chemistry could be explained by using these orbits. Each level held a specific number of electrons—K had 2, L had 8, M had 18, N had 32, etc.

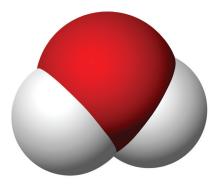
When I started teaching chemistry in 1959 this level of understanding was what the textbooks presented. As I took graduate work in chemistry and physics, I realized that what I was teaching my students was grossly oversimplified. The questions asked by my better students demonstrated that they saw the problems, too.

During those years research had shown that the atom was mostly empty space. If the nucleus of an atom were the size of a marble, the first location of electrons would be miles away. In addition, the electrons were not like little marbles orbiting a central core. In fact, the electrons had wave properties, and what our drawings actually represented were the probabilities of locating an electron at a certain position. Electrons had magnetic properties and spun on their axes like a top. That meant they strove to be paired and a magnetic field would affect them. Besides that, their paths around the nucleus were not neat circles or ellipses. Some traveled in figure eights, some in clover leafs with spectral names being applied to the shapes:



This new level of understanding was wonderful. It explained why water was a polar molecule. Its oxygen atom had a P orbital with

electrons arranged at a 90 degree angle between two of the arms so that the two hydrogen atoms that attached to form the water could only be attached at 90 degree angles (bent to 105 degrees by the repulsive force of the two hydrogen atoms). The old K orbit with two electrons was actually a pair of electrons in a spherical orbital. The L orbit was actually two electrons in the second orbit in a spherical orbital, and six electrons in a P orbital.



Water Molecule

The point of this oversimplified discussion is that the level of understanding of the atom has changed as better information has become available. The original understandings were oversimplified, and I would frequently tell my students that.

A similar discussion could be given concerning what science considered light to be. Because light could be broken up into different colors by refraction or diffraction science considered it to be factual that light is a wave. Because waves cannot travel through a vacuum, space was said to be filled with a substance called "ether" (aether) which allowed light to travel through it. This perception of light is still taught today in many elementary classes. In the late nineteenth and early twentieth century experimental evidence showed that light behaved as a particle. It could knock electrons out of some crystals showing it had momentum, a property of particles. It could pass through a man-made vacuum. It could change energy when it collided with another particle. These are all mass properties. If you were to shine it on a black cloth which absorbed most of the light, the cloth did not gain mass. That did not fit the physics definition of what a particle is. The scientists had to move to a new level of thinking which could accept some things that violated their previous understandings.

The two examples from science that we have used have come about as scientists have gained information and understanding. In both of these examples there were reputable scientists who opposed the new understanding for a variety of reasons. Often their objections were

merely resistance to something they did not fully understand. The concept seemed to violate their previous understandings and their common experience. Rather than try to achieve a new level of understanding they simply rejected it.



My point is that in both science and faith it is easy for us to reject new evidence which seems to contradict our preconceived notions. Both scientists and Christians are still human and our human prejudices create false conflicts between science and faith. Science and faith are friends—not enemies. (See also "Science Fraud" on page 29.)

—John N. Clayton



For over forty years, I have been involved in a ministry designed to promote faith in God. Some of our work has been with Christians who had doubts, but did not want to admit it. Some of our work has been with people who flatly stated that if they had any doubts they would not become Christians because it would require too much of a change in their lifestyles. Some of our work involved working with Christians who were bothered by the fact that there were questions they could not answer—which they felt was a lack of faith on their part. They were particularly disturbed by passages in the Bible that linked faith to action on God's part (see Luke 17:19 and Acts 14:9).

Doubt is an important property of sentient beings. What makes us human is not our physical body. We have learned in recent years that our bodies and even our genes are not that different from other forms of life. It has been widely reported in the media that humans and chimpanzees are over 90% identical genetically, so it is obvious that our physical makeup is not what makes humans unique. The factor that makes us unique is being created in the image of God—our spiritual makeup.

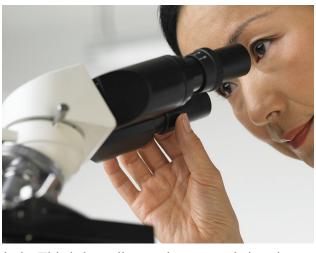
There are many ways in which this uniqueness is manifested such as our capacity to create art and music and our ability and desire to worship something higher than ourselves. We are also unique in our capacity to feel guilt, to be sympathetic, and to show compassion.

Our concept of self and our ability to be taught to think are also manifestations of our uniqueness. None of these things are functions of our physical makeup. In this journal we have previously discussed these characteristics and the evidence that they are unique to humans. Another part of this uniqueness is our capacity to doubt.

Doubt is necessary to science. Renowned philosopher Michael Polangi points out, "Complete objectivity as usually attributed to the exact sciences is a delusion and is in fact a false ideal." John Polkinghorne explains this, "Facts always come with interpretations. People of science are motivated to believe certain things as they proceed with their experiments, and people of faith are motivated to believe certain things as they proceed with their beliefs. Living with doubt leaves one open to additional discovery, both in science and faith." (Both quotes are from *USA Today*, August 29, 2011, page 7A).

When I was in college in the 1950s, we were told that the fundamental building blocks of matter were protons, electrons, and neutrons. We were led to believe that these particles could not be broken down into smaller units. During my college years we learned that a neutron could be broken down into a proton and an electron, but that a new, virtually invisible particle was emitted when this happened which was called the neutrino. It took many years to find evidence for that particle. Scientists suggested that if a particle existed that could explain charge, that it could explain other things that had previously not been understood. This theoretical particle was called a quark. Steven Weinberg

expresses it this way, "We don't believe in quarks because we have seen them. We believe in quarks because the theories that have quarks in them work." Many people believe that quarks can also be broken down, and other scientists have doubts about the



quark theory as a whole. This is how discoveries are made in science, and many of the great discoveries in science have been made because people doubted current beliefs.

Jesus challenged people in his day to doubt the traditions that had been imposed upon them by the religious leaders. The traditional view of human justice at that time was "an eye for an eye and a tooth for a tooth" (see Exodus 21:24 and Matthew 5:38–42). In Luke 17:3–5 Jesus tells his followers to forgive even if they were sinned against seven times in one day. His disciples had doubts about this total break with religious tradition and they responded "to the Lord, 'increase our faith.'" The whole life of Jesus and the whole thrust of his teaching involved doubting the teachings of their religious leaders. The reason he incurred the wrath of the Pharisees was because he instilled doubt in people's minds about what they were teaching. In the Sermon on the Mount in Matthew 5–7 Jesus says over and over "You have heard that it was said to the people long ago ... But I tell you ..." (see Matthew 5:21–22; 5:27–28; 5:33–34; 5:38–39; 5:43–44).

On September 28, 2011, Barna Research released a written summary of eight national studies of young people and why they leave the church. Six reasons young people leave were given. "The church feels unfriendly to those who doubt" was one of the six. The other five were all areas where doubt is involved: (1) Churches seem overprotective; (2) Experience of Christianity is shallow; (3) Churches come across as antagonistic to science; (4) Church experiences related to sexuality are often simplistic and judgmental; and (5) The exclusive nature of Christianity. (See page 10 for more thoughts on these.)

Doubt is important for a young person. If people do not resolve doubts then the hard questions of life are not resolved. Then when the harsh realities of life come around people are set up to have their faith destroyed. In Mark 9:14-29 we find the heartwrenching story of a man who has son who is afflicted. When Jesus comes into the picture he says to the father, "Everything is possible for him who believes." The father responds by saying, "I do believe; help me overcome my unbelief." All of us have that same plea today. We learn and grow by doubting and then resolving that doubt. One way of resolving doubts is by looking at the evidence. To have doubts and not search out answers to those doubts is to be willing to

doubts and not search out answers to those doubts is to be willing to wallow in the destructive pit of faithlessness. To find answers to the questions that plague us is to grow and be strengthened in our faith. Do not apologize for having doubts. Doubt is a good thing. At the

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same time, do not allow those doubts to paralyze you in what you do and how you live. Look for answers by using materials like those offered through this ministry. Our materials are all available free of charge on loan, and there are other sources of information in other ministries available as well. Look for answers by talking to people who have had the same doubts you are having and yet have resolved them.

In Matthew 17:20; Mark 9:23; and Luke 17:6, Jesus talks about



the power of faith. To get that faith, we have to have doubts and grow by resolving the questions that plagueus. The mountains of doubt will move—even if more slowly than we would like.

—JNC

HERE ARE SOME WEBSITES
WHERE YOU CAN FIND
INFORMATION TO HELP YOU
RESOLVE YOUR DOUBTS.

DoesGodExist.org



WhyPain.org



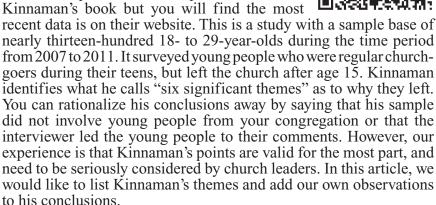
WHY DO YOUNG CHRISTIANS LEAVE THE CHURCH?



Our title for this article is actually the title of a book by David Kinnaman, who has written several books on this subject in recent years including *You Lost Me* and *UnChristian*. (For a review of *UnChristian* see our September/October 2010 issue, page 23, or online at doesgodexist.org.) Kinnaman's material comes from surveys by the Barna group, a research organization that has been gathering and publishing data on religion since 1984. You can go to their web site at www.barna.org (or scan the QR code below) for more information on their work. According to Barna, across the broad spectrum

of "Christianity" fifty-nine percent of Christian young people are leaving the church. Some are becoming atheists, some are embracing New Age or Eastern religions, but a majority are simply becoming "nones"—not embracing any religious or anti-religious position.

Several periodicals have printed data from Kinnaman's book but you will find the most



REASON 1—CHURCH SEEMS OVERPROTEC-

TIVE. Kinnaman says that much of the experience of young people was fear-based, and twenty-three percent of the sample said that everything outside of the church was demonized, and twenty-two percent said the church ignored the problems of the real world. "Hell fire and damnation" preaching may be the source of some of this, and in some denominations that may be an issue. Where we have seen this problem in our work with young people is in their concept of what God is like. Every week we get e-mails which say that the reason they have left the church is that they cannot serve a God who allows innocent people to suffer and die in horrible ways when he could prevent it.

You cannot scare people into long-term service to God, and you must answer the big "why" questions about human pain and suffering. A large percentage of our e-mails from searching young people are about the issue of why bad things happen to good and/or innocent people. We find that passages such as Ephesians 3:9–11 and 6:12 which talk about the spiritual battle we are in and our purpose in existing are not passages young people have considered. Job's experience is frequently studied from a literary standpoint, but not a practical viewpoint.

It is also important to look at what Christianity has done to address the "problems of the real world." We have not done enough to show young people the positive things that have come to humankind from Christianity. I have found that Alvin J. Schmidt's book *Under the Influence*, which does this in a good way, has pretty much flown under

the radar of most churches (reviewed in this journal March/April 2003, archived at doesgodexist.org). The story of Liberal, Missouri, and what happens when the influence of the church is removed has not been widely publicized and yet is well documented ("Is Your Faith Growing Or Dying," July/August 1989). Many congregations have involved young people in work in foreign fields and in poverty-



stricken and depressed areas, and the benefit to the young people is as much of a justification for such mission works as what it does for the mission field itself.

REASON 2—THE EXPERIENCE OF CHRISTI-

ANITY IS SHALLOW. Thirty-one percent of the departing young people said that "church is boring." Twenty-five percent said that church was not relevant to their career or interest. Twenty percent said, "God is missing from my church experience." If the only experience that a person has with "church" is to walk into an auditorium

and hear a sermon, all of these statements are understandable. Christ never said that the sum total experience of being a disciple was to sit and listen. When Jesus presented material to his disciples, his methods involved things like washing their feet and telling them to do likewise. Jesus posed questions to his listeners and engaged them in dialogue on relevant questions about life. Jesus pushed his students to move out of their comfort zone and deal with the real world. We need to follow his example and use his methods in reaching out to our own children and their peers.

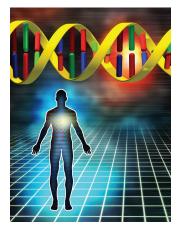
REASON 3—CHURCHES SEEM ANTAGONISTIC TO SCIENCE. The Barna data shows that twenty-nine

percent of young people leaving the church consider the church to be out of step with the scientific world in which we live, and twenty-five percent say that Christianity is "anti-science." The study found that young people whose professional calling was in a science-related industry felt that it conflicted with their faith.

As a public high school science teacher, I found this to be the case when I started teaching science in 1959. I was looked upon somewhat dubiously by many adult church members because I was involved in

science. However, many young people felt that my combination of science and belief in God and the Bible as the Word of God was attractive and something that they wanted to have themselves. This was what started the **Does God Exist?** ministry in 1968 as I began to make presentations in coffee houses, campus centers, and churches.

The Bible challenges mankind to look at the evidence and act on what the evidence shows. Romans 1:19–22 encourages us to "know there is a God through the things he has made." The Psalmist repeatedly made reference to the world



around us to reinforce our faith and relationship to God. "When I consider your heavens, the work of your fingers, the moon and the stars, which you have set in place, ..." (Psalm 8:3). "The heavens declare the glory of God; the skies proclaim the work of his hands" (Psalm 19:1). Proverbs 8 talks about the role of wisdom in various aspects of the creation. Theologians and philosophers have created a climate of animosity between science and faith, and the casualties of that climate are young people with an aptitude and interest in science.

Churches need to turn away from negative approaches to science and science-related questions. Twenty-three percent of the young Christians in the Barna study said that they had been turned off by the evolution/creation debate. There are definite conflicts between naturalism and faith in God, but naturalism is a philosophy or a belief system which uses science in an unfortunate way. Christianity needs to be informed about science, and approach the issues of evolution in a positive way, looking for points of agreement and cooperation, and not looking for things to attack. Out of context quotes, inaccurate quotes, and quotes of people not trained in science are destructive to the faith of young people. Atheists are quick to use these unfortunate mistakes by fundamentalists. The recent claim by a leading creationist that Darwinism caused the Crusades is a classic example of how bad some approaches are to the evolution/creation question. Foolish claims destroy the faith of bright young Christians who are interested and informed in science.

REASON 4—CHURCH EXPERIENCES RELAT-ED TO SEXUALITY ARE SIMPLISTIC AND JUDG-

MENTAL. My own experiences with church leaders and parents on the subject of sexuality has been that sex is either presented as something evil or something that is too private to talk about. When Richard Pettus wrote his book *As I See Sex Through the Bible* in 1973 I thought it would revolutionize the church's approach to sexuality. Instead, I was chastised for recommending the book, even though it was written by a Christian doctor, and very accurate and biblical in virtually every way. Sex is a creation of God. It is a beautiful thing and the concept of oneness in marriage is a biblical concept that is the foundation of family life. In recent years there has been a number of other books written to help Christians with this subject, but they have not been best sellers even though they were dealing in practical ways with this vital subject. Some of them like Gregg Jantz's book Too Close to the Flame (Howard Publishing, 2003) dealt with the need of youth workers and ministers to pay attention to their own sexuality and how to deal with temptation.

On a practical level, the church must have classes that deal accurately and completely with sex. Homosexuality needs to be discussed and explored from a biblical, not homophobic, perspective. Our job as Christian adults is to help young people deal with their feelings. That means knowing where the feelings come from and why God has given us a way of expressing our sexuality that is positive. We have had articles in this journal over the years on this subject. (See our indexes for complete articles or use the search engine on our doesgodexist.org web site in the bimonthly section.) Classes, workshops, retreats, and seminars can help as well. Masturbation, oral sex, anal sex, the effects of drugs including alcohol on sexual behavior, and

sex in marriage need to be explored openly, completely, and honestly.

One of the issues in this subject area is that there have been some unfortunate statements by people who have misused the Bible in the past. Some have taken Genesis 38:9 where an ejaculation is "spilled on the ground" as a condemnation of masturbation. The condemnation in that passage is for Onan avoiding having children with his brother's widow as God had commanded, not for the fact that his semen was wasted. The Bible teaches positive things about recreational sexual experience between a husband and wife. Proverbs 5:18–19 tells a man to be satisfied with his wife's breast. First Corinthians 7:3–5



tells Christians to not deprive each other of sexual pleasure. Hebrews 13:4 tells us outright that what happens in the marriage bed is pure. God created and designed sex for our enjoyment and pleasure and gave it to us in his word in a way that brings maximum joy to the participants. The tragedy of promiscuous sex is not only the issue of disease and unwanted

children, but the fact that it reduces a beautiful, holy thing created by God to a mechanical meaningless act of selfishness. Young people need to see that and have it explained by mature Christian leaders in a way that glorifies what God has given us—not in an evil or naïve framework.

REASON 5—THE EXCLUSIVE NATURE OF

CHRISTIANITY. We live in a pluralistic culture which tends to teach our young people that all belief systems are equally valid. We also tend as a nation not to see the difference between tolerance of all views and accepting all views as valid. We seem to have forgotten a statement by a statesman of the past who said, "I may not agree with what you say, but I will defend to the death your right to say it." Twenty-nine percent of the departing young Christians said that they felt the church was afraid of other beliefs. If the statement read that churches are afraid of the consequences of following other beliefs, it would be accurate. Another old statement from an unknown source is, "You shouldn't have to put your finger into the fire to know it is hot."

All religions and political parties are exclusive. No one would believe that a single candidate would be a front-runner in both the Democratic and Republican parties at the same time. Most Muslims and most Jews are very vocal about their belief that their religion is the only true religion. The Koran speaks disparagingly about "the people of the book" (Christians and Jews). Story after story in the Old Testament tells of the consequences of "following after other gods." Gentiles in the New Testament were sometimes described in negative tones because of the pagan practices they were involved in.

While Jesus said, "I am the way and the truth and the life. No one comes to the Father except through me" (John 14:6), there are also incredibly tolerant teachings in the New Testament. The early Christians were taught, "There is neither Jew nor Greek, slave nor free, male nor female, for you are all one in Christ Jesus" (Galatians 3:28). In the Sermon on the Mount in Matthew 5 through 7 Jesus talked about turning the other cheek, about not returning evil for evil, about going the second mile, and about loving your enemy. It is important that these teachings be brought to the attention of our young people.

Twenty-two percent of the young people said that churches are like a country club serving only insiders. It would seem to this writer that this is a reflection on what we are doing in worship and in church activities. We cannot out-entertain Disney, Hollywood, and rock concerts. When Jesus washed the feet of his disciples in John 13 and told them to do likewise, he was not talking about entertaining one another, but of real service to others in a general sense. It is important for churches to engage young people in serving others outside the walls of the church building. Every city has people in need. Delivering food, helping people with their property, visiting nursing homes and hospitals, participating in community service projects, learning to sign for the deaf, and helping care for people with disabilities of all kinds are all ways that young people can see the concept of serving others in action. This is not to say that we cannot entertain one another, but that cannot be the sum total of our Christian experience.

REASON 6—THE CHURCH FEELS UNFRIEND- LY TO DOUBTERS. Instead of being unfriendly to doubters we must be ready to answer doubter's questions. That is what **Does God Exist?** is all about. For more on this read the previous article beginning on page 6.

I hope that it has been obvious in this discussion that there is not any one issue that is causing the erosion of young people from the church. It is not that there is not evidence for God's existence and for the validity of the Christian system. We believe these causes are ones that can be addressed and that the church can build a healthy base of young people to reach out to a lost and dying world by answering the questions and addressing the needs that young people are conveying to us.

SCIENCE AND THE BIBLE: ALLIES OR ENEMIES?

by James M. Lowery, Jr.

Editor's Note: Every year the **Does God Exist?** ministry gives \$1000 scholarships to anyone planning to go on to higher education. The basis of the awarding of the scholarship is an essay that is written on the compatibility of science and faith in God. The winner of the fall scholarship in 2009 was incarcerated and yet was able to write an excellent essay. We hope you enjoy his insights which fit the theme of this issue.

"In the beginning God created the heaven and the earth" (Genesis 1:1). Nothing in this world can cause more conflict between the scientific and religious communities than this one verse of Scripture. For

atheists in the scientific community this verse is nothing more than primitive man's feeble attempt to explain how the universe came into existence. For the religious community this verse is God's declaration that he exists and that he created the universe. Some in both the scientific and reli-



gious communities have become dogmatic in their belief of how the universe came into existence and are unwilling to put their egos aside and discuss the topic. As far as they are concerned, science and the Bible are mortal enemies. But nothing can be farther from the truth. While the Bible is not a scientific textbook, it is not a mortal enemy of science. In fact, science and the Bible are compatible, especially concerning how the universe came into existence.

"In the beginning God created the heaven and the earth." In this verse we are told that God created the universe sometime in the distant past, not how he created the universe. Or is there more to this verse than the English translation gives? In the original language of the Old Testament Hebrew, the word translated as "created" is *bara*. *Bara* means to create something from nothing, from that which did

not exist. This verb is only used with "God" as its subject. Only God can create in the sense implied by *bara*. The verb expresses creation on a cosmic scale: "In the beginning God created the heaven and the earth" (Genesis 1:1; cf. Genesis 2:3; Isaiah 40:26; 42:5). This is further supported by Hebrews 11:3 which states, "Through faith we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear." This verse, along with Isaiah 45:12, 18; John 1:3; and Colossians 1:15–17, indicates that the source of the universe is God, that there is a beginning to the universe, and that it was created out of nothing—*ex nihilo*. All of this raises the question, "How does this agree with science?"

Scientists tell us that approximately 14 billion years ago the universe was created when an explosion, called a singularity, took place. This is known as the big bang theory. According to science this "great outward explosion of [matter/energy] at the 'big bang' was a factory of creation." From this explosion of matter/energy the universe expanded into all that we see today. Yet, "if the universe did in fact begin in a hot big bang, debris (both matter and radiation) from that explosion should now lie all around us. The matter is pretty obvious:



you can now see planets, stars, and galaxies, and the unformed matter of interstellar gas and dust among all of these." The big bang theory is further supported by the discovery of cosmic background radiation as well as the expansion of the universe.

Evidence of a cosmic explosion was discovered by two men from Bell Laboratories, Arno Penzias and Robert Wilson. In 1965 they found "cosmic microwave background radiation everywhere, filling all space." An explosion on the cosmic scale would leave residual radiation and this background radiation that is so evenly dispersed throughout the universe is probably the most important evidence of the hot big bang.

The expansion of the universe is also evidenced by the Doppler effect. The first Doppler shift was measured by Vesto M. Slipher in 1912. Between 1912 and 1945 he observed 41 galaxies and "all

but three exhibited redshifts in their spectra."⁵ By observing these redshifts he was able to ascertain that the galaxies are moving away from us. Scientists have also been able to determine that the galaxies are all moving away from each other. Furthermore, the more distant galaxies have a greater redshift which indicates that they are moving faster than nearer galaxies. This information now raises the question, "How does this agree with the Bible?"

The Bible has stated for over 3,500 years what scientists have just recently learned—that the universe is not static, but is actually expanding. This can be seen by following one of the basic rules when reading the Bible—Scripture interprets Scripture. With this said, when reading Genesis 1:1 there is one word that we must look at and compare its usage throughout the Bible. The word is *shamayim*, which is translated as "heaven" in Genesis 1:1 and is used in reference to the universe. It is used eleven times in the Bible in connection with another Hebrew word, *natah*, which means "to stretch forth, spread out, stretch down, turn aside ... This verb may also mean 'to extend' in every direction ... This act and its result is a figure of God's creating the heavens" (cf. Job 9:8; Psalm 104:2; Isaiah 40:22; 42:5; 44:24; 45:12;



Cluster of galaxies with ring of dark matter.

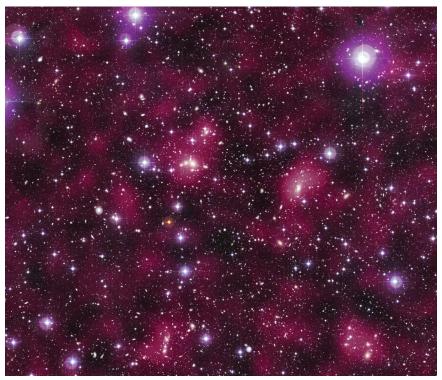
48:13; 51:13; Jeremiah 10:12; 51:15; and Zechariah 12:1). When the noun *shamayim* is used with the verb *natah* it is used to denote a continuous action. This usage of *shamayim* with *natah* indicates that the universe is not static, but is expanding.

Science and the Bible, mortal enemies or allies? I believe that the evidence supports allies. While the Bible is not a scientific textbook it does agree with science concerning the creation of the universe.

The Bible states that there was a beginning—so does science. The Bible states that the universe was created out of nothing—so does science. The Bible states that the universe is not static but is in fact continuously expanding—so does science.

Despite this evidence many refuse to believe that the Bible and science are compatible and are actually allies. Science is the search for truth and knowledge. The Bible supports this search for truth and knowledge. Proverbs 3:13 states, "Happy is the man that findeth

wisdom, and the man that getteth understanding." Is it not amazing that as we search for truth and knowledge we are always being led back to God?



Dark matter distribution in supercluster Abell 901/902. NASA Hubbel

Notes

- 1. W.E. Vine, Merrill F. Unger, and William White, Jr., *Vine's Complete Expository Dictionary of Old and New Testament Words*, (Nashville: Thomas Nelson Publishers, 1996), 51.
- 2. Richard Fortey, LIFE: A Natural History of the First Four Billion Years of Life on Earth, (New York: Vintage Books, 1997), 27.
- 3. Michael Zeilik, *Astronomy: The Evolving Universe*, (New York: John Wiley & Sons Inc., 1994), 484.
- 4. James B. Kaler, *Astronomy*, (New York: Harper Collins Publishing, 1994), 523.
- 5. Ibid., 492.
- 6. W.E. Vine, Merrill F. Unger, and William White, Jr., *Vine's Complete Expository Dictionary of Old and New Testament Words*, (Nashville: Thomas Nelson Publishers, 1996), 248-249.

Editor's Note: Our thanks to Tihomir Dimitrov on the nobelists.net website for quotations from many of the founders of modern science who were also fundamental believers in the God of the Bible. As we share these quotations we are reminded that being a good scientist is not at odds with belief in God.

JOHANNES KEPLER 1571-1630

German Mathematician and Astronomer Discovered the Laws of Planetary Motion which later provided a foundation for Isaac Newton's Theory of Gravitation

"O Thou, who through the light of nature increasest in us the longing for the light of Thy Grace that through it we may come to the light of Thy majesty, I give Thee thanks, Creator and God, that Thou hast given me this joy in Thy creation, and I rejoice in the works of

Thy hands."

"The World of Nature, the World of Man, the World of God—all three fit together. We see how God, like a human architect approached the founding of the world according to order and rule, and measured everything in such a manner."

"Since we astronomers are priests of the highest God in regard to the book of nature, it befits us to be thoughtful, not of the glory of our minds, but rather, above all else, of the glory of God."



Portrait of Kepler by an Unknown Artist

Photo: Patty Gibson

Cynthia's Corner

REASONS TO BELIEVE

The Bible definition of faith is "being sure of what we hope for and certain of what we do not see" (Hebrews 11:1). God never calls us to blind faith, meaning faith without reason. In fact, God



expects us to be prepared to give the reason for the hope we have (1 Peter 3:15). I am thankful that God gives us many reasons to be sure and certain of him, his Son, and his Word. The Bible is full of evidences to support our belief in a personal Creator who made us, loves us, and has a purpose for us (Hebrews 1:1–3; 1 Peter 1:3–9).

As a non-scientist and non-academic, I am thankful the Bible was written for the common person. Even though I do not have a PhD, I can understand the simple message of God's love for mankind and his involvement in our lives. I understand that he wants us to know him, love him, and have a relationship with him through his Son Jesus. This consistent message has been revealed by many different writers over 1,600 years with such clarity, brevity, beauty, wisdom and accuracy that even I can see divine inspiration in the writing. The Bible was written by men who were directed (inspired) by the Holy Spirit (1 Peter 1:12). Second Timothy 3:16 says that "all scripture is God breathed." Galatians 1:11 says it is "not something man made up," and 1 Thessalonians 2:13 says "you accepted it not as the word of men, but as it actually is, the word of God."

The Bible was written to bring us to faith in God and Jesus (Romans 10:17). John 20:30–31 says "Jesus did many miraculous signs ... but these are written that you may believe that Jesus is the Son of God." The Bible writers talk about evidence as "proofs" (Acts 1:3). Jesus did many miracles to prove that he was the Son of God (John 10:38; Acts 2:22). The ultimate "proof" was his resurrection (Acts 17:31). The apostles did miraculous signs and wonders to confirm that their message was God-given (Acts 14:3; Hebrews 2:3–4). Throughout the Bible God has confirmed his message by miracles (Deuteronomy 34:10–11), by the fulfillment of his prophecies (Matthew 26:56), and by eye-witness accounts (1 John 1:1–3).

As a person not trained in apologetics, I may not understand all the scientific evidences which support what I read in God's word; but I can understand from God's word who he is, who Jesus is, and his purpose for me. My faith is not blind, and evidences are helpful to me; but, ultimately, my faith rests on God's word and in my personal relationship to the One who died for me on the cross.

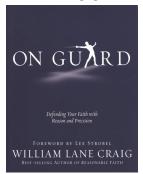
—Cynthia Clayton



The books that are reviewed in the Book Review section are not available through us, but can be obtained from a local bookstore or through many online bookstores.

On Guard

by William Lane Craig, David C. Cook Publishers, ©2010, 286 pages, \$16.99 (paperback), ISBN-13: 978-1-4347-6488-1



One of the most capable apologists of the current age is Dr. William Lane Craig. Dr. Craig is noted for his many debates with modern atheists such as Richard Dawkins, Frank Zindler, Sam Harris, and the like. He is also the author of a number of books, some of which we have reviewed in this journal in the past (see *Reasonable Faith*, March/April 2009). Craig is a philosopher, and this book like his other books leans heavily on philosophical arguments. The positive nature of this book is that he explains

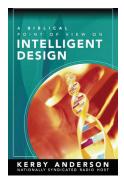
the process of philosophical arguments very carefully before making his case and that greatly increases the usefulness of the book.

This book has 10 chapters with two interludes in which Craig discusses his own journey to faith. What makes this book strong is that he takes atheist arguments and turns them around and shows how those arguments support faith in God better than they negate such a claim. The book begins by explaining what apologetics is, and then approaches the question of why the universe exists and how it shows God's creative wisdom. Craig then turns to the question of morality and suffering and then explores the claims about who Jesus was, how we know he rose from the dead and why we believe that Jesus is the only way to God.

This is a great book for a college freshman or sophomore—especially if he is enrolling in a philosophy course. It gives answers to questions that frequently throw students who are away from home for the first time. The side bars, questions for discussion, and flow sheets make it very useful for a college class and give the book flexibility for teaching at the college level. We recommend it highly.

A Biblical Point of View on Intelligent Design

by Kerby Anderson. Harvest House Publishers, ©2008, 141 pages, \$10.99 (paperback), ISBN-13: 978-0-7369-2291-3



Probe Ministries has been around for quite a while, and has published a lot of materials. Kerby Anderson is the director of Probe, and hosts a nationally syndicated radio talk show called "Point of View." Anderson writes well and is informed about the issues. He is not a scientist, but quotes extensively from people who are scientists and who have written materials themselves. The book contains massive references to the works of Jonathan Wells, Michael Behe, William Dembinski, and other believers as well as the works of famous

atheists like Richard Dawkins and Michael Ruse. If a person wants to understand the issues without having to read all the books and arguments that are out there, this is an excellent book.

Anderson's approach avoids taking a position and getting labeled. He deals with young earth creationism (YEC) by explaining in two pages what YEC advocates believe. He points out some strengths and weaknesses and then goes on to progressive creation and theistic evolution. The treatment is very brief and thus quite superficial. The approach made to intelligent design and evolution contains more discussion and lots of quotes from people on both sides, but it is still a very basic and understandable treatment.

The book is divided into ten chapters. The first four chapters deal with the history of the conflict. Darwin's work, evolution, and various attacks on evolution are explained. The next five chapters deal with intelligent design and how it has been promoted and criticized. The last chapter deals with origins and various Christian approaches to origins. Each chapter is organized into subjects by questions. For example, in chapter eight titled "Is Intelligent Design Science?" there are four questions asked: "Is intelligent design science?" "Is origin science different from empirical science?" "Is intelligent design falsifiable?" and "Is intelligent design religion?" These are answered from a believer's viewpoint, with numerous quotes of experts on both sides, but favoring the believer's view.

This is a good book for young believers. It would be very useful with bright junior high and high school students. It would not be very useful with a scientist or a well-educated atheist, because of its brevity and incompleteness. It will be useful in many apologetics classes in churches and Christian schools.

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DANDY DESIGNS

SEVENTEEN-YEAR CICADAS

by Rob Robinson

My wife and I began noticing an unusual whirring sound that seemed to come from the northwest part of our yard. We discovered that it was the mating call of the 17-year cicada. Along with a similar insect, the 13-year cicada, this bug is adapted to its environment in a strange and unusual manner that includes its large size, its ability to sustain a loud noise, and an extremely long (for insects) life cycle. Perhaps equally peculiar is the literally "odd" number of years of the creature's period: 13 and 17 years. Those are prime numbers. Prime numbers cannot be divided evenly by any integer other than 1 and itself. This means that the cicada cannot have a major predator, unless it keeps the same crazy schedule, which is not going to happen. Could this be an indication of design?

This merger of mathematics and entomology is fascinating to me. Here we have a bug that lives underground for 99% of its life and manages to keep up with what year it is for 17 years. It has the genetic programming and the biological mechanism to accomplish such a task and does not need a calendar! You must grant a lot of respect for an insect that burrows into the ground immediately after it is hatched, sucks roots for food and then emerges at precisely the right day 17 years later. Does not the Creator of such a fascinating creature deserve some recognition? There is no mathematician or entomologist who understands these things like our Creator does. To him we say. "Wonderful are Your works: And my soul knows it very well" (Psalm 139:14, NASB).





Use this QR code to learn more about cicadas, or go to DandyDesigns.org/id48.html

MORE ON SPIDER SILK



We have had a number of articles on spiders over the years, with special attention being given to how they produce and use their webs. In *Nature* (February 2, 2012) is an article by Markus J. Buehler of M.I.T. concerning new research on the webs of common European garden spiders

(*Araneus diadematus*) and the fact that their webs react differently to different kinds of stress.

In a light wind the material that makes up the web softens allowing it to lengthen but retain its overall structure. When the same web material has a larger force applied at a specific point the web becomes stiffer and breaks but only the most extended silk threads become severed. When this happens the web as a whole becomes stronger. When a tenth of the threads were removed, for example, the structure could carry up to ten percent more weight. That makes the material superior to steel that just shatters when similar conditions exist.

These properties are well-designed for the spider catching its prey. When an insect hits a web it will not bounce out because the web softens and stretches under the impact. Engineers are interested in copying this ability so that structures that are impacted in a storm could sustain some damage without the whole structure being compromised. There are even applications in the Internet where a local node would be sacrificed during an attack to keep the whole system from going down. Carbon nanotubes, carbon molecular structures used in carbon-fiber golf clubs and baseball bats, may lend themselves to copying the spider's techniques. Once again we see man copying something in nature to make a superior structure for his own use.

Velcro came about that way as have a number of common materials. God's design in living things is always complex, but once we understand it, the applications are massive.

Use this QR code to learn more about spider webs, or go to DandyDesigns.org/id41.html





BIRDS AND QUANTUM MECHANICS. We have discussed the migratory abilities of animals many times in our "Dandy Designs" segment of this journal. Studies have linked polarized light, sound, magnetism, and celestial navigation to bird migrations and the abilities of homing pigeons. German researchers have now suggested that the



birds detect navigational clues at a subatomic level using pairs of molecules that are entangled with spin. The idea is that this spin is affected by a magnetic field thus giving a sense of north. The subtitle of an article in *Smithsonian* (May 2012, page 22) is "Birds must be geniuses because they use quantum

mechanics to navigate." We would suggest the genius is in the Creator of the bird, not the bird itself.

BEES AND FACES. In a similar vein, researchers have now shown that bees can recognize human faces. By placing faces above

bee feeders with the same face always being above a sugar solution while other feeders were just water, researchers were able to show that bees quickly learned to go to the feeder where that face was placed no matter



how scrambled the arrangement of feeders was. Source: *Creation Moments*, March 8, 2012.

VOYAGERS LEAVING SOLAR SYSTEM. On August 20, 1977, a spacecraft was launched which is expected to leave the solar sys-

tem some time this summer. That will happen when the particles from the sun and the particles from other stars in space stop each other and all effects of the sun on the spacecraft will essentially cease. The "Voy-

ager" spacecrafts (there were two of them launched together) are eleven billion miles from earth—so far that their radio signals take 16 hours to reach the earth. What outer space is really like is one question that the spacecraft will answer, because up until now we have



had no way to tell. Every discovery Voyager has made (and there have been literally dozens) has supported the biblical message that there was a beginning to the creation, that it was caused, and that reliable wisdom and design is built into its construction. It is exciting to live in a time of incredible discovery and know that new knowledge will help us better understand ourselves and the creation in which we live. Source: Smithsonian.com, May 2012.

MARIJUANA AND DRIVING. Recent studies of marijuana use and driving accidents show that when drivers had smoked marijuana their rate of accidents was doubled within a few hours of the marijuana use. Marijuana supporters point out that texting increases accident rates by a factor of eight, but the question is whether any impairment should be tolerated. The studies are in the *British Medical Journal* and can be seen at www.bmj.com/content/344/bmj.e536 but are ref-

erenced in *Occupational Health and Safety* (April 2012, page 10). Another interesting marijuana note is that workers in the Dallas County Jail tell us that heavy marijuana users there develop puss pockets in the breast area that have to be removed. Any recreational drug will have a number of negative consequences associated with its use, including alcohol and marijuana.



MORMON ISSUE ON BLACKS REOPENED. The US presidential campaign has opened an old debate about the role of blacks in the Mormon church. Randy Bott, a professor at Brigham Young

University, was interviewed by the *Washington Post* and defended Abraham 1:21–27 in the *Pearl of Great Price* in which Blacks are said to be the descendants of Noah's son Ham and were thus barred from the Mormon priesthood. Mitt Romney and the Mormon church are trying to distance themselves from that position, but the ban which

ended in 1978 is still a part of Mormon history. Manmade religions always have a human weakness in their doctrine and practices, and the Mormon church is no exception. For more on this subject see the April 2012 issue of the *Salt Lake City Messenger* available from Utah Lighthouse Ministry, 1358 S. West Temple, Salt Lake City Ut 84115 or at www.utlm.org.



THE RISE OF ATHEISM. This is the title of an article with a fair amount of data in *The Week* (April 20, 2012, page 11). In the article there is a distinction between "Hard Atheism" which makes up only a maximum of four percent of the American population and "Nones" which are people who deny any association with organized religion and make up 19 percent. We would agree with David Silverman, president of American Atheists who claims "nones" as members of his belief system. "If you don't believe in God, you're an atheist. It doesn't matter what you call yourself." Silverman's group had a rally on the National Mall the first week of April in which 20,000 people came to what was billed as "The world's largest secular event." The article says that within 20 years one fourth of the American public will call themselves atheist. We wonder how long church leadership will continue to ignore this segment of our population.

HOLDING YOUR BREATH—A GREAT MYSTERY. There are so many things about the human body that speak of design that

we never run out of examples. In *Scientific American* (April 2012, page 76) is an article by Dr. Michael Parkes discussing what is called a mystery that "still eludes science." The article explains how the brain and diaphragm interact to allow us to do the simple act of holding our breath. David's statement



in Psalm 139:14, "I am fearfully and wonderfully made," becomes more meaningful as our knowledge about our own bodies increases.

BEING IN AN ORPHANAGE REDUCES BRAIN SIZE. *Science News* (March 10, 2012, page 9) contains a study of brain ab-

normalities of children who spent their first two years in a Romanian orphanage. The study by Charles Nelson of Harvard Medical School not only showed developmental problems that most of us would anticipate, but also showed lower volumes of gray matter in the brain. In addition the MRI images showed that the volume of white matter (tissue that carries nerve cell signals around the brain) was lower. God's plan for the home remains the only good way to raise children, and now we have evidence that even the volume of brain tissue and brain support is negatively affected when children are forced to grow up in an institutionalized environment.

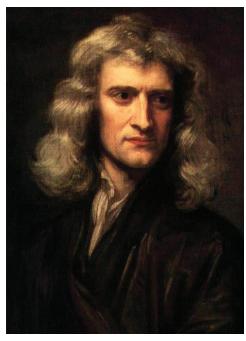
SCIENCE FRAUD. The media will take any misconduct by a religious figure and splash it across the front page of a newspaper. When a scientific figure fakes data or misrepresents something, the media does not see it as news-worthy. Apparently religious figures are more interesting to the public than scientific figures when they err. In *Discover* magazine (April 2012, page 72) there is an interesting article by Eric Powell about science fraud. According to the article, National Institutes of Health finds an average of 2,300 cases of misconduct among its supported researchers each year. The article also lists famous researchers who it says have altered or misrepresented data. They include Freud, Pasteur, Darwin, Gregor Mendel, Sir Arthur Conan Doyle, William Summerlin, Stephen Breuningh, John Darsee, and Marc Hauser. Just as we can have bad theology we can have bad science. Human egos, fund raising problems, and the drive for success can cause even the best minds among us to be less than honest. Both preachers and scientists need to remember that there is an ultimate Being to which we must answer.

CLAIM OF NEW LIFE FORM WITH NEW CHEMISTRY

FAILS. In December 2010, researchers announced that they had found a microbe that could substitute arsenic for phosphorus. The claim was that this creates a whole new basic biology for life since phosphorus is vital in the formation of DNA. In *Science News* (February 25, 2012, page 10) there is a rather detailed historical account of this whole incident. The conclusion is that there is no microbe that can substitute arsenic as a building block for its life process. The whole subject of alien life forms is interesting, but not of a great apologetic significance. Our suggestion is that God used what is best for life, and that multiple life forms do not exist in space. That does not mean that all life forms have to be exactly like us, but the chemistry seems to be clearly carbon/oxygen-based, and a radical new chemistry does not seem too promising for the future.

ISAAC NEWTON'S WRITINGS RELEASED. Israel's national library has made the writings of Isaac Newton available. What most

people do not know is that this famous scientist wrote more about God than about science. The library has some 7,500 hand-written pages, most of which are Bible studies and predictions of a religious nature. The written works had been donated to the University of Cambridge, but since they were nonscientific the university did not want them so they were auctioned off in 1936. The Jewish library inherited them from the purchaser and has now made them public. Newton was interested in latter-day prophesy and took a dispensational approach to the subject. We have had a column in this journal for a number of years with quotes from scientists and Nobel



Portrait of Newton by Godfrey Kneller, 1689

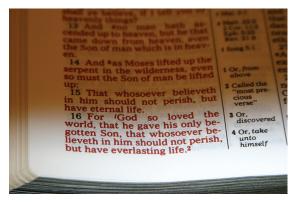
Prize winners about their faith, and Newton's faith is perhaps better known than any other great scientific mind.

ABORTION ISSUE ADVANCES IN VIRGINIA. One of the most disturbing aspects of the abortion issue in this country has been the fact that people were making decisions who had not taken the time to learn the background information related to an abortion decision. When does a human become an individual? Is it at birth? Is it when the sperm meets the egg? Is it somewhere in between? In a religious sense the issue would be when the individual has a soul. It is scientifically invalid to suggest that a fetus is just an extension of the mother's body as some have maintained. We have pointed out in this journal that morning sickness is because the mother's body recognizes the baby as not a part of her body. Her body's defense system reacts and must be controlled. At the time I am writing this, Virginia passed a "Personhood" bill, by a vote of 66–32, recognizing a fertilized egg as a human being. If such a law comes into existence, states will have to decide whether they wish to endorse infanticide, not whether they embrace abortion. Source: The Week, February 24, 2012.

AMERICAN IGNORANCE OF THE BIBLE ON DISPLAY.

Tim Tebow, a believing professional football player, threw passes for

316 yards in a playoff game, and that has spawned a whole new discussion about the Bible. It turns out that 32 percent of all Americans could not tell you what the 3 in signs that say John 3:16 is referring to, and some believers attached special significance to Tebow's yardage. Wikipedia



had 103,923 searches for John 3:16 after the game. Interest was stimulated when Focus on the Family ran an advertisement plugging John 3:16 during the game.

LEARNING FROM NATURE BOOKLET. A beautiful booklet using wonderful color pictures is circulating showing how biomimicry works. What the booklet does is to take situations in nature that



have been used to produce superior products for human beings. Most of us know that Velcro came about by looking at natural objects that used small hooks to connect things together. There are countless examples, and the booklet shows a dozen other examples. There

is an evolutionary slant to the material, but the design features



of biological examples are obvious. It is available at interfaceflor.com/schools or InterfaceFLOR, 1503 Orchard Hill Rd., LaGrange, GA 30240. Their telephone number is 877-696-8453.

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!



Periodicals

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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It's scientists vs. preachers, not science vs. the Bible.

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