



“The heavens declare the glory of God” (Ps. 19:1)

REASONS TO BELIEVE - SEATTLE AREA CHAPTER

NEWS AND VIEWS

OCTOBER 2002

CHAPTER INFORMATION

Smashing Success!

Over 1,200 people attended Dr. Ross' presentations during his September visit to the area. We plan to sponsor another visit in the spring. Contact us if you are interested in having him speak to your church or group at seattle@reasons.org.

Get Involved

Join us in spreading the word that science and the Bible agree! We're looking for people who want to make a difference in their local communities. If this interests you, contact us at seattle@reasons.org.

Free Training

Reasons to Believe's Science and the Bible Apologetics Training Course is now available free through the chapter on CDROM. For more information, contact us at seattle@reasons.org.

RTB Conference

Mark your calendar for Reasons to Believe's next international conference, entitled "Who is the Designer?" June 26-28 in Cypress, California. The speakers will include Dr. Ross, Fuz Rana, Ken Samples, Ron Nash and many others. Much more information to come on this!

ARE WE ALONE?

SETH COOPER

Dr. Hugh Ross's latest book, *Lights in the Sky and Little Green Men*, confronts the extraterrestrial hypothesis (ETH) by considering potential places where extraterrestrial life could survive. Ross uses a process of elimination that examines: (1) the number of planets in the observable universe; (2) the probability that any planet possesses the necessary life-support characteristics; and (3) the availability of sites other than planets where life might reside. The results do not fare well for the ETH.

Ross points out that "fewer than 2 percent of the stars in the Milky Way have access to enough heavy elements (i.e., heavier than hydrogen and helium) to produce planets that could support life." Of those stars, over 65 have a planet orbiting them. However, none of those planets can be considered candidates for life because they orbit stars that are too young to provide stable solar systems with the right mix of rocky and gaseous planets. Ross also notes that our galaxy is unique because it contains so many young stars. In most galaxies, "star formation shut down so long ago that they contain *no* metal-rich stars." Thus, 94 percent of all galaxies can be eliminated as possible sites for hospitable planets.

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In examining the necessary life-support characteristics, Ross refers to the well-established finding that for life forms to exist, they must be carbon-based. Why is that important? According to Ross, "The conclusion that all conceivable physical life forms must be carbon-based permits scientists to develop an extensive list of planetary characteristics that must fall within a limited range for a planet to be capable of life support." That list has been growing as scientific data accumulates and now includes over 140 different parameters. Many of those parameters must be maintained within very specific limits and for very long time periods for life to exist.

See ARE WE ALONE?, next page



Finally, Ross explains that exotic sites such as “moon homes” and “starless planets” will not suffice. Moons orbiting giant planets cannot sustain life for many reasons, including the balance that must be struck between the seasonal temperature fluctuations of a distant orbit and the tidal forces and climatic instability of a close orbit. Starless planets are also problematic. If a planet with enough surface warmth were to be successfully ejected from its planetary system, it “would not last long enough within the life-support range of temperature and other conditions” to function as a home for intelligent life. Both sites would also be subject to intense cosmic bombardment.

Applying statistics, Ross calculates that the probability that any planet in the universe is capable of supporting life is approximately 10^{-194} (a decimal followed by one-hundred ninety-four zeros before the one). Sound convincing? Interestingly, not all astronomers agree.

Many scientists are anxious to accept the idea of extraterrestrial life because they hope it will answer the question of how life began on Earth. At the recent Origin of Life Conference in Mexico City, scientists concluded that life couldn't have begun in a prebiotic soup because there was no such soup. They also ruled-out “panspermia” (Sir Fred Hoyle's proposition that life originated elsewhere and was transported to Earth by solar winds) because light intense enough to push particles through space “would include enough ultraviolet radiation to kill a microbe in a matter of just a few days.” Now some have proposed “directed panspermia” – that an advanced civilization seeded the early Earth with life.

Evolutionary scientists find themselves at a dead end. They can't explain how life appeared so suddenly on Earth through random, natural processes. They can't explain how life was exterminated by numerous large impact events yet quickly reappeared. And given Ross's calculations, they can't attribute life to aliens. Perhaps they should consider Ross's conclusion – life must have come from an Intelligence not within, *but beyond* the universe. After all, that is what the Bible has stated for thousands of years.

Seth Cooper is a trained apologist and member of the chapter steering committee. He is a third year law student at the Seattle University School of Law and president of the S.U. Christian Legal Society.

FINDING HARMONY

JOSEPH FIGUEROA

I grew up in a Christian household in sunny Puerto Rico with parents who nurtured my natural curiosity of the world. I was a precocious adolescent and, while my classmates enjoyed choosing the latest fashions to wear, I enjoyed wrapping my mind around Einstein's relativity and the concepts presented in Roger Penrose's, *The Emperor's New Mind*. The topics included universal Turing machines, quantum mechanics, Godel's incompleteness theory, and many others. However, I segregated my beliefs in science from my beliefs about the Bible and I thought that I would never be able to harmonize the two. That is, until late one night when I was in 11th grade.

That evening my father was watching the Trinity Broadcasting Network and I was reading in my room. He called me into the TV room and said: “you've got to see this guy. He's an astronomer and he's giving scientific evidence for the God of the Bible.” (Of course, it sounded totally different because my dad said it in Spanish.) I sat down and for the first time in my life I heard a scientific apologetic of the Bible. It was Hugh being broadcast 6,000 miles to my TV in Puerto Rico! Among the things he talked about were the gargantuan odds against having a life-sustaining planet evolve from naturalistic phenomena. As I listened I could feel the conceptual barriers between my theology and scientific knowledge dissolve. The intellectual cacophony had finally become a harmony.

This newfound harmony has helped me grow closer to God and has better equipped me to answer questions from atheists and agnostics. I put my knowledge to the test a few months ago in an online debate with a number of staunch, well-educated atheists. While I debated them I found myself going to reasons.org for research material with increasing frequency. There I saw the Seattle-Area Chapter information and contacted them enrolled in the Apologetics Training Course.

I can not begin to express how invaluable the course has been for my spiritual and intellectual development. It has emboldened me to talk to my family, friends, and co-workers about God and His creation. It has helped me love God with my mind as well as my heart. And my faith, not the blind kind, has aided me in opening the hearts and minds of those I've debated so they can see the Truth!

Joseph Figueroa was raised in San Juan, Puerto Rico, and is a member of the chapter steering committee. He leads a software engineering team at Microsoft and helped organize Dr. Ross' visit there.

...and there was Light!

PATRICIA LEWIS

When was the Sun created? Did God spend three creative days shaping our planet, including a flourishing plant life, before He made the Sun? It's easy to get confused because the Genesis account does not specifically mention the Sun, moon and stars until the fourth creative day. If they were not created until then, we have a problem: plants require sunlight, so how could they have existed before the Sun? For centuries, non-theists have attempted to use this issue to cast doubt on Genesis.

Some Christian thinkers have proposed fanciful solutions to this problem. Perhaps God temporarily created something resembling a sun and then removed it when the real Sun was put in its place. Or, maybe the plants were sustained directly by God's light, the *shekinah* glory, until the fourth creation day. Such strained interpretations are not Biblical or scientific and are not necessary. A better solution can be reached by taking a close look at the text of Genesis 1.

The first verse of Genesis provides a clue. It says, "In the beginning God created the heavens and the earth." Of what do "the heavens" consist? Surely this refers to all of the objects we see in the sky including the stars. All of these are light emitters. The core of every true star is a nuclear reactor in which photons of light are produced. Thus, starlight permeated the universe as soon as the stars were created.

Why should we doubt that our Sun existed from "the beginning"? After all, our Sun is simply a star and the benefits it provides include more than just light. It warms the Earth to make life possible and our safe, stable place in the universe is maintained because we are bound by its powerful gravitation. If no star were nearby, the Earth would be a lonely planet, lost in the frozen cold of space.

The reason some people believe the Sun was created after the Earth is the narrative of the fourth creation day. "God said, 'Let there be lights...to give light upon the earth' ...the greater light to rule the day, and the lesser light to rule the night: he made the stars also." But what does the text actually say? Observe that it does not say that God *created* the two great lights and stars *at this time*. The verb "made" (Heb. *asah*) denotes a past action and can be translated "he had made the stars also." The phrase "let there be lights" is not necessarily describing a creation *ex nihilo*. It can be translated "let the lights appear."

The heavenly bodies were created (Heb. *bara'*) "in the beginning" but we are told in Gen. 1:2 that darkness was upon the face of the deep (the water-covered Earth). Moses did not give the reason why darkness covered the Earth but modern astronomy can help us understand why. Scientists believe planets form by accretion out of rotating clouds of gas, dust and rocks surrounding young stars. Large telescopes reveal many such disk-like objects, for example, in the Great Nebula in Orion. In most cases we cannot actually see the star because its light is entirely blocked by dense cloud (although some are "seen" by infrared detectors). Our young solar system would have been surrounded by such a cloud and no light of the Sun, moon or stars would have penetrated it.

After the initial period of darkness, light reached the Earth's surface during the first creation day (verses 3-5). "God said, 'Let there be light,' and there was light." Slowly with the passage of time the dark cloud thinned. A time came when an observer on the surface of the Earth would have noticed periods of dim light alternating with periods of darkness, as the planet rotated. The text tells us that, "God divided the light from the darkness. And God called the light Day, and the darkness he called Night."

The events of the second, third and fourth days continued God's preparation of the Earth for habitation. On the second day (verses 6-8) He established the Earth's water cycle. The third day (verses 9-10) began with the formation of dry land where plants would eventually grow and, later that day, the sky gradually cleared until there was sufficient light to support plant life on the land (verses 11-12). On the fourth day, the two great lights and the stars could shine clearly upon the Earth (verses 14-18) and an observer on the surface of the Earth could see the Sun, moon and stars for the first time.

Thus we can see that the Genesis account is not self-contradictory but progresses with admirable logic from one creative step to the next. And our faith is nourished by seeing how science confirms and complements God's Word.

Patricia Lewis is a member of the chapter steering committee. She worked as a research technologist at the University of Washington School of Dentistry. Now retired, she is an avid amateur astronomer.

EARLY FUNDAMENTALISTS AGREED WITH AN OLD EARTH

JOHN A. BATTLE, TH.D.

Modern evangelicalism traces its roots to the modernist-fundamentalist controversy in the late 1800's and early 1900's. Today a "fundamentalist" often is considered a fanatical adherent of some extreme form of religion. However, originally the name "fundamentalist" was given to Christians who believed that there are certain "fundamental" doctrines of the Bible that one must believe to be a true Christian. These "fundamental" doctrines included the infallibility of the Bible and Christ's virgin birth, miracles, substitutionary atonement, bodily resurrection, and personal, visible return to earth. Fundamentalists defined themselves simply as genuine Christians who believed in the basic doctrines taught in the Bible and the church since the beginning.¹

The term "fundamentalist" seems to have been first used after a series of 12 booklets was published from 1909 to 1915. These booklets, entitled *The Fundamentals*, contained many articles written by conservative Christians. They defended the doctrines of Scripture that were coming under increasing attack by religious liberals. Many famous Christian scholars of the period contributed to this project, including James Orr, Sir Robert Anderson, W. H. Griffith Thomas, George L. Robinson, M. G. Kyle, James M. Gray, A. T. Pierson, Benjamin B. Warfield, R. A. Torrey, W. J. Erdman, Charles B. Williams, H. C. G. Moule, Philip Mauro, Charles R. Erdman, and George Frederick Wright. The booklets have been recently republished in four volumes.²

Three articles in *The Fundamentals* deal with the creation date issue. What's noteworthy is that while they strongly oppose Darwinian evolution, all three acknowledge and do not dispute the scientific evidence for an old earth. Two of the articles were written by James Orr³ the famous Christian apologist. The third was written by George Frederick Wright of Oberlin College in Ohio.⁶

Orr's first article argues that Genesis is compatible with the scientific age of the earth. "You say that there is the 'six days' and the question whether those days are meant to be measured by the twenty-four hours of the sun's revolution around the earth - I speak of these things popularly. It is difficult to see how they should be so measured when the sun that is to measure them is not introduced until the fourth day. Do not think that this larger reading of the days is a new speculation. You find

Augustine in early times declaring that it is hard or altogether impossible to say of what fashion these days are, and Thomas Aquinas, in the middle ages, leaves the matter an open question. To my mind these narratives in Genesis stand out as a marvel, not for its discordance with science, but for *its agreement with it*."⁴

Orr's second article argues that the creation days were long time periods. "The 'six days' may remain as a difficulty to some, but if this is not part of the symbolic setting of the picture - a great divine 'week' of work - one may well ask, as was done by Augustine long before geology was thought of, what kind of 'days' these were which rolled their course before the sun, with its twenty-four hours of diurnal measurement, was appointed to that end? There is no violence done to the narrative in substituting in thought 'aeonic' days - vast cosmic periods - for 'days' on our narrower, sun-measured scale. Then the last trace of apparent 'conflict' disappears."⁵

Wright's article argues that the term "day" is flexible in interpretation. "The world was not made in an instant, or even on one day (whatever period day may signify) but in six days."⁷ He also notes and does not dispute the scientific estimates of the earth's age (thought to be 30 to 100 million years⁸ old at the time) but merely argues that it was not enough time for evolution to work.

These views are typical of the early fundamentalists. Many, if not most, believed in the compatibility of science and the Bible. They either believed that the earth was very old or believed that the old earth view was permitted by Scripture.

John Battle is President and Professor of New Testament and Theology at Western Reformed Seminary in Tacoma. He is a trained apologist and serves on the chapter steering committee.

NOTES

1. See, for example, J. Gresham Machen, *Christianity and Liberalism* (1923; reprinted Grand Rapids, Michigan: Wm. B. Eerdmans Publishing Company, 1968).
2. *The Fundamentals: A Testimony to the Truth*, ed. by R. A. Torrey, A. C. Dixon, et. al. (1909-1915; reprinted in 4 vols.; Grand Rapids, Michigan: Baker Book House, 1988).
3. "The Early Narratives of Genesis" and "Science and Christian Faith," *The Fundamentals*, 1/228-240, 334-347.
4. *Ibid.*, 1/237.
5. *Ibid.*, 1/344.
6. "The Passing of Evolution," *The Fundamentals*, 4/72-87.
7. *Ibid.*, 4/72.
8. *Ibid.*, 4/79.

NEW EVIDENCE FOR JESUS

GREG MOORE

An inscription on an ancient burial artifact appears to provide the oldest archeological evidence of Jesus Christ. The artifact, called an ossuary, is a limestone box that was used by first-century Jews to store the bones of their deceased. On the side of this ossuary is carved an Aramaic inscription, "James, son of Joseph, brother of Jesus." The ossuary has been authenticated and dates to about 62 A.D.

This find is significant in a number of ways. The inscription is in Aramaic, as opposed to Greek or Hebrew, which fits what historians would expect from Jesus' background. The cursive writing style was only used only from about 10 to 70 A.D. and puts the inscription squarely in the time of the Biblical Jesus, James and Joseph. And, the mention of a brother is very unusual. Most ossuaries reference the father of the deceased but rarely other relations, unless that relation was a very significant figure.

The family relationships stated in the inscription help scholars ascertain that it very likely refers to the Biblical James, brother of Jesus. Although the names Jesus, James and Joseph were common in ancient times, the statistical probability of the inscription referring to three other individuals with those family relationships is extremely slim. It also supports the Protestant view that Jesus and James were maternal brothers, not cousins or step-brothers as some Christian traditions maintain.

Ancient inscriptions are usually found on royal monuments or tombs commemorating official figures. Jesus was the son of a carpenter so finding documentation of his family is totally unexpected. According to Hershel Shanks, editor of *Biblical Archaeology Review*, "The James ossuary may be the most important find in the history of New Testament archaeology. It has implications not just for scholarship, but for the world's understanding of the Bible."

For more information on this find, see articles in *Biblical Archaeology Review* http://www.bib-arch.org/bswb_BAR/bswbbar2806f1.html, *Christianity Today* <http://www.christianitytoday.com/global/pf.cgi?/ct/2002/141/11.o.html>, and *ABC News* <http://abcnews.go.com/sections/us/DailyNews/jesus021021.html>.

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APOLOGISTS TOOL KIT

Message of the Month

If you're serious about science apologists, the RTB "Message of the Month" is a must! For a contribution of \$20 a month, you'll support the RTB Ministry and receive monthly audio tapes that will strengthen your faith and keep you abreast of the latest scientific findings. For a free sample tape, contact the chapter at seattle@reasons.org.

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Weekly Creation Update

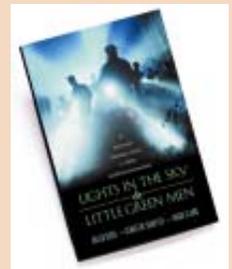
Join Dr. Ross and Fuz Rana every week for a two-hour dialogue about scientific discoveries that provide powerful evidence for the God of the Bible. Listen to the webcast and ask question live over the internet each Tuesday, 11:00 a.m. to 1:00 p.m. (PT) at www.reasons.org or www.oneplace.com/ministries/creation_update.

RTB Television Show

Watch or record the Reasons to Believe television show. It airs Thursday mornings at 3:00 a.m. (PT) on the Trinity Broadcasting Network (TBN). Recent shows are also archived on the RTB website at www.reasons.org.

RTB's Latest Book

Get "Lights in the Sky & Little Green Men" by Hugh Ross, Kenneth Samples and Mark Clark. It discusses UFOs, ETs and the possibility of extraterrestrial life. It is available from the Reasons to Believe webstore for \$11.95.



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