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MOLECULAR BIOLOGIST JOINS ICR STAFF

ICR GRADUATE COMES HOME



Some eighty students have graduated from the ICR Graduate School since its inception in 1980. Another fifteen could graduate this summer. Most are employed in industry, teaching in public and Christian schools, or teaching in Christian colleges. Several have continued on to receive their Ph.D. degrees from major universities.

One such graduate, Dan Criswell, graduated from ICR in 1994 with his M.S. in Biology. Dan's conviction that Genesis is literally true was a gradual

process, since he was raised in a church denomination that taught theistic evolution. His first exposure to creation-science came in 1980 during a debate he attended at the University of Utah with ICR's Dr. Duane Gish on the side of creation. It was not only his first contact with ICR but also the first time he had met a scientist who held to a literal interpretation of Genesis.

After graduating from Weber State University (in Ogden, Utah, 1982), he started teaching at Portland Christian High School in Oregon, and began reading and studying creation literature and evidences. Dr. Henry Morris's books, Scientific Creationism, and Biblical Creationism became the key in his understanding of origins, and by his third year of teaching he was teaching a literal interpretation of Genesis as the only legitimate record of origins. After teaching ten years at Portland Christian, he took a sabbatical at ICR, completed his M.S. in Biology, worked for Dr. Richard Bliss in the Good Science program, and then returned to Portland Christian High School for two years as the Science Department Chairman. (As well as football coach.)

His passion for biology, however, specifically creation research in biology, remained. In 1998 he enrolled in the Ph.D. program at the University of Montana, in the field of Molecular Biology, a specialty exploring how genes are expressed. This field seeks to decode and understand the genomes of plants, animals, and humans. Although evolutionists had predicted that exploring the genome would finally "prove" evolution, it has done nothing of the sort. The genes, it is now known, do not hold the key to life or evolution, and so attention has turned to the encoded proteins underlying and regulating the functioning genes. Thus the newer field of "proteomics" was born and Criswell got in on the ground floor.

His doctoral research investigated the causes, nature, and effect of mutations in single-celled organisms. His conclusion? The mutations which are observed are not capable of producing true, macroevolutionary changes. He joined the ICR faculty earlier this spring. His wife, Leona Diane, and their children joined him as soon as school in Montana let out.

He will assist Dr. Ken Cumming in the Biology Department teaching and thesis supervision, and in finalizing several papers for publication. His immediate desire is to research and publish on the subject of mutations and the lack of a mechanism for evolutionary change. In a longer-range sense, ICR has identified this field of genomics/proteomics as its next big research thrust, and Dr. Criswell will play a large role in it.

Please join the ICR staff and faculty in welcoming Dr. Criswell on board, and praying for him and his research in this vital area. ICR is convinced that research in general comprises the longrange winning strategy for creation, and this area of genomics/proteomics is perhaps the most promising.



From a book reader in Colorado

I have kept forgetting to thank you for the wonderfully interesting book, *The Remarkable Wisdom of Solomon*. I have learned so much from it, so many treasures of wisdom, so easily understood.

A thank you card from California

Thank you so much for such a wonderful, wonderful, ministry! I get so much out of *Acts & Facts!* A & F is so enjoyable as well as informative! Thank you for that! God bless and best wishes!

From a devotional reader in Idaho

For some time I have intended to write to you expressing our deep appreciation for your ministry and exhortation and encouragement through the *Days of Praise* daily devotionals. Where would the Christian community be without them? It is the premier Christian devotional available today, with interesting insights and depth in the Word.

From Michigan

We enjoy the *Days of Praise* devotional booklet. It has impacted our lives with solid Biblical teaching. May God continue to bless you all at ICR.

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ARE HISTORIC LAVA FLOWS A "KEY TO THE PAST"?

by Bill Hoesch

Geologists are recognizing that extremely big volcanoes of the past have shaped the earth we see today. One need only compare the largest lava flow in recorded history with flows recorded in the ancient rock record.

The largest basaltic lava flow known in recorded history was the Lakigigar flow of Iceland in 1783.1 For eight days severe earthquakes shook the island, and then, on June 8, 1783, explosive eruptions were followed by the opening of a 17-kilometer-long fissure that issued floods of lava from 22 identified vents over the next 50 days. The lavas effused from these vents at rates on the order of 5000 cubic meters per second, or roughly twice the rate of discharge for the Rhine River. Peak discharges were estimated at ten times this value. The flows continued episodically for a total of eight months and in the end resulted in 12.3 cubic kilometers of new rock. This would be enough to pave the entire U.S. Interstate system to a depth of eight meters. Remarkably, there was no direct loss of life, but the caustic gases associated with the lavas scorched Iceland's grasses, starving livestock. The famine that resulted took 10,521 lives, or approximately one-fourth of the island's population. No wonder it is known as Iceland's greatest tragedy.

No historical records exist for prehistoric eruption of the Columbia River Basalts in the northwestern U.S., but the rock record testifies of 311 individual lava flows comprising a total rock volume of 174,356 cubic kilometers.² Because lava cools rapidly, the enormity of the basalt layers testifies of staggering

rates of emplacement.3 Individual flows tens of meters deep advanced, in some cases, 300 kilometers in seven days, across the Washington and Oregon landscape.4 Some of these were as large as 2000 cubic kilometers in volume. The Columbia River Basalts are dwarfed by a similar prehistoric deposit in India, known as the Deccan Traps, which represents a succession of lava flows with a total rock volume in excess of one million cubic kilometers.5 And on the Pacific Ocean floor is the Ontong-Java Plateau, estimated by some to be as huge as 65 million cubic kilometers in volume.6 Its emplacement had to have been rapid, and the impact on marine biota would have been staggering. Reputable scientists are suggesting that in the past there was a catastrophic overturn of the entire earth's mantle,7 some say in under one year.8

In other words, the floors of the world's ocean basins may have *all* been molten lava at the same time at one point in history. The only safe place on earth may have been inside Noah's ark!

This earth has been shaped by catastrophic forces. It is difficult for geologists to escape the testimony of ancient basalt lava flows.

Endnotes

- Thorarinsson, S., 1970, The Lakagigar eruption of 1783: Bulletin Volcanologique, series 2, vol. 33, pp. 910–929.
- Tolan, T. L., S. P. Reidel, M. H. Beeson, J. L. Anderson, K. R. Fecht, D. A. Swanson, 1989, Revisions to the estimates of the areal extent and volume of the Columbia River Basalt Group: Geological Society of America Special Paper 239, pp. 1–20.
- 3. Effusion rates for some giant fissures that are today found as dikes are estimated by some to have been as great as one million cubic meters per second (Ernst, R. E., J. W. Head, E. Parfitt, E. Grosfils, and L. Wilson, 1995, Giant radiating dike swarms on Earth and Venus: *Earth Science Reviews*, vol. 39, 1–58).

- Ager, D. V., 1993, The New Catastrophism: The Importance of the Rare Event in Geologic History: New York, Cambridge University Press, 231 pp.
- Choubey, V. D., 1973, Long-distance correlation of Deccan basalt flows, central India: *Geological Society of America Bulletin*, vol. 84, pp. 2785– 2790.
- Tarduno, J. A., W. V. Sliter, L. Kroenke, M. Leckie, H. Mayer, J. J. Mahoney, R. Musgrave, M. Storey, and E. L. Winterer, 1991, Rapid formation of Ontong Java Plateau by Aptian mantle plume volcanism: *Science*, vol. 254, pp. 399–403.
- 7. Weinstein, S. A., 1993, Catastrophic overturn of the earth's mantle driven by multiple phase changes and internal heat generation: *Geophysical Research Letters*, vol. 20, pp. 101–104.
- 8. Austin, S., J. Baumgardner, D. R. Humphreys, A. Snelling, L. Vardiman, and K. Wise, 1994, Catastrophic plate tectonics: a global flood model of earth history: in S. Walsh, ed., *Proceedings of the Third International Conference on Creationism*, Pittsburgh, PA, Creation Science Fellowship. The article is posted online [http://www.icr.org/research/as/platetectonics.html].



1000+ MILES FIELD TRIP!

Sixteen students from Jackson Hole Bible College recently spent a day at ICR, touring the museum and hearing lectures by several ICR scientists.



Mary Jo and Dave Nutting pictured above, (bottom right) with students and Dr. Morris (back row, second from right).

JHBC, located in Jackson Hole, Wyoming, is a one-year Bible school with a strong creation emphasis. The visit to ICR was part of a two-week creation science field trip led by Dave and Mary Jo Nutting, graduates of ICR Graduate School in geology and biology respectively. The Nuttings also teach a week of creation science at the school each fall and lead the students on a fall field trip in the Northwest, looking at evidence of catastrophic flooding and volcanism.

The Nuttings are currently founders and directors of Alpha Omega Institute, a creation ministry based in Grand Junction, Colorado. They and their staff provide creation seminars, family camps, Vacation Bible School programs, and field trips around western Colorado and eastern Utah. For more information, contact Jackson Hole Bible College [www.JHBC.edu] or Alpha Omega Institute [www.discovercreation.org].



Origins Issues

MENDING MISTAKES—THE AMAZING ABILITY OF REPAIR

If someone were to ask a creation scientist for evidence of creation, he may very well reply, "The DNA molecule." Everyone has heard of this "molecule of life" found in virtually every cell in our body. DNA is organized into chromosomes (people have 46) upon which many thousands of genes (units of heredity, comprised of nucleotide bases called T, G, C, and A) are found.

The amazing Human Genome Project continues to fine-tune both the mapping of specific genes (we only have about 34,000) and sequencing the enormous DNA "ladder" of base-pairs. The ravages of time and environmental factors such as cigarette smoke and ultraviolet (UV) sunlight—along with other carcinogens and cytotoxic compounds—guarantees our DNA will be damaged. A majority of these changes are momentary however, because the Creator has designed specific molecules and systems to repair the genetic damage. This is what is collectively known as DNA repair. It has been known for some time that DNA possesses the incredible ability to repair itself when damaged. But how did such self-repair come about—time and chance or special creation? It is difficult enough for the secularist to explain a Darwinian step-by-step description of the origin of a functional DNA molecule from raw chemicals. But how did the 130 known DNA repair genes of people evolve that help with. . . . DNA repair? Surely as DNA was evolving from lifeless chemicals, it would need the attention of DNA repair molecules that could only evolve later on—having been programmed by DNA!

God has designed a number of DNA repair systems and proofreaders (enzymes), each to take on different repair problems. For example, there are enzymes involved with mismatch excision repair (MMR) that recognize wrongly paired bases, and nucleotide excision repair (NER), which is a universal "cut and patch" repair mechanism. NER operates to remove the mistake—called a lesion—and fill in the gap with new DNA. One may liken this to a dentist drilling out decay and replacing the hole with a filling (the "filling" in DNA repair is a functional nucleotide). There are also tiny molecular motors (see "Origins Issues," Acts & Facts, April 2004) called helicases (e.g., DnaB helicase and other multimeric motors) that literally unwind DNA from the normal double-stranded state into two single strands. Helicases accomplish this by rapidly breaking hydrogen bonds between the nucleotides (the "ladder rungs" portion of the molecule) in a manner somewhat like the way inchworms move. Other specially designed enzymes must immediately keep the two single strands apart once they are separated. From there, efficient repair of the DNA continues. Occasionally this amazing repair mechanism fails—as all of our systems eventually do—and a permanent alteration or change in that portion of the DNA results. This is called a mutation. Of course, mutations in critical areas can be deadly to an organism.

Here's the point. DNA repair systems work hard to *repair* changes that daily occur in the billions of nucleotide bases that make up plants, people, and animals. But evolution depends on these very changes (mutations) that supposedly lead to new structures and functions. This will be the subject in a later edition of "Origins Issues."

Radio Log

This month on "Science, Scripture, & Salvation":

Weekend of: Title/Topic:

June 5 Explaining Away the Miracles

We often enjoy reading miraculous accounts in the Bible, and Christians all over the world have experienced God's divine intervention in prayer. Why then do the secular media continually try to explain away Biblical miracles and cast doubt on God's Word? Tune in to find out!

June 12 Attack on Old Glory

Our American flag has been a symbol of freedom for 227 years. But if our flag is precious and if it really stands for liberty and justice for all, then why is it and its Pledge under such attack in the very country it represents? Stay tuned!

June 19 Freshwater Fish

Consider the variety of fish in streams, lakes, and aquariums. Whether they live in the great outdoors or in a tank in your living room, these fresh water fish survived the Flood, but how? We'll tackle this question. Stay tuned!

June 26 The Perfect Body

So many times we complain about our bodies not being the right size, or perhaps hurting too much. But have you considered how perfectly the body was made for our environment? Our wonderful Creator knew exactly what we needed for life on earth! Tune in!



ICR SCIENTIST AT ALBION COLLEGE

Dr. Duane Gish was the speaker at Albion College, Albion, Michigan, on the evening of April 5 at Norris Auditorium. The meeting was jointly sponsored by Campus Crusade for Christ, Athletes in Action, and InterVarsity Christian Fellowship and was arranged by a student, Jonathan Leazenby. Dr. Gish gave two lectures, presenting the scientific evidence from various fields of science. Following the lectures, Dr. Gish fielded questions from the audience. The lectures were warmly received and the students and professors were courteous. Dr. Gish also spoke at the Sunday morning service of the Rives Baptist Church of Rives Junction and at the Sunday evening service of Bethel Baptist Church of Kalamazoo.

GEORGIA LOOP TOUR

Jim Gardner, retired businessman, pilot, and family man, traveled throughout Georgia on an eighteen-day loop tour during this past spring. Many listeners expressed amazement that they had never heard such solid facts that support the literal Genesis creation. Several pastors said that they would use the sessions as springboards to preach and teach more on creation subjects. Jim said that he was both delighted and honored to speak to so many youth, which totaled about half of the entire audiences in the tour. His "down home," country style delivery on Biblical and creation topics set audiences at ease and made it easy for them to ask a multitude of questions. ICR thanks those pastors and school leaders for inviting Jim to share the lifechanging creation messages with their congregations and students. And Jim wants it known that he had a right fine time in Georgia, y'all. 🏇



DECENT ORDER

"Let all things be done decently and in order" (I Corinthians 14:40).

The obvious context of Paul's admonition to the Corinthian church was their conduct in their assembly. Yet that principle applies throughout the Scripture to many areas of our "normal" life. The Tabernacle furniture was to be kept in "order" (Exodus 39–40; Leviticus 24), the Lord commanded Hezekiah to put his house in "order" before he died (II Kings 20:1), the wise preacher was to "order" his words into powerful proverbs (Ecclesiastes 12:9), Luke was commissioned by God to "set forth in order" the events of Christ's life (Luke 1:1), Paul organized one of his main journeys into "order" (Acts 18:23)—well, perhaps the gist is clear.

PAYING THE BILLS

This portion of our "order" comes fairly easily! If we don't pay the utilities, or the mortgage, or the car payment . . . "things" get a little tense. It should come as no surprise that the Bible admonishes us to "owe no man any thing" (Romans 13:8), especially when augmented by the many principles of property ownership, indebtedness, etc., in the Old Testament. Keeping our financial obligations met is very important for our testimony and our faithfulness to God's Word.

STEWARDSHIP ORDER AND ACH HELP

Most of us are fairly "orderly" when it comes to exercising our responsibility to support aspects of the Kingdom. We usually write a check on a regular basis to our church (normally each time we get a paycheck), and we know that this kind of order is important (I Corinthians 16:1–2).

May we suggest that the same "order" is very helpful to those secondary ministries that you support? ICR is deeply appreciative of those who colabor with us on a regular basis. The banking world has made money transfer very safe and effective. You can take advantage of that "order" by designating an amount to be sent to ICR electronically. We could not function effectively without your help. Regular contributions help enormously. If you would like to explore that possibility with our ministry, write "ACH" on your response envelope.



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