

Dialogue

WONDERFUL CONFERENCE



IN MONTANA

Few creationist conferences can boast the line up of eminent scientists that we saw at Bozeman, Montana, April 20-22, 2007. The speakers included John Baumgardner and Russell Humphreys, scientists who spent the major part of their careers at National Laboratories in the US; Andrew Snelling and Larry Vardiman, two other scientists eminent in their fields; Duane Gish, probably the best known creation apologist and winner of debates with evolutionists, and Henry Morris III, eldest son of Henry Morris (founder of Institute for Creation Research). The event attracted a

huge crowd of varied ages, indeed the auditorium in Grace Bible Church, a brand new facility, was filled to capacity with more than one thousand present. This was most impressive for a small city, but also a number of people traveled great distances to attend. The event was well worth the effort.

The objective of the conference was to communicate the results and significance of the RATE project to Christians and also to the academic community. Thus the bulk of the sessions were provided free of

charge in the church, but also two sessions were repeated on the campus of Montana State University (a campus where a lot of geological research is carried out.) Whether one is familiar with an issue or not, there is nothing like hearing a scientist discuss his work in person. Details which might have seemed obscure in written accounts, finally become clear. During the question period, the camaraderie of these scientists became apparent as well. We learned more than just plain scientific data and conclusions. We also learned the significance of this work, the unanswered questions which must yet be tackled and the importance of one's starting position (*a priori* assumptions or faith position) when approaching any kind of research project.

Dr. Morris spoke first. He paced across the platform with a broad smile on his face. He never glanced at the screen which projected his power point slides, or at any notes, but he provided an extremely interesting introduction to world views and one's handling of the Bible. Dr. Gish followed with a brief overview of the

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TAKE A HIKE OUTSIDE

by
Moxie

Now that the warm weather has finally arrived, most of us are more than willing to throw off the



winter coats and to head outdoors in less confining outfits. Jump, breathe in the air, open your eyes and your ears. What do you hear (besides traffic)? At our place the small birds (various kinds of sparrow, chickadees, juncos and robins) are all chirping loudly. The blue jays and magpies storm upon the scene, arrogantly forcing the small birds to take shelter in the nearby trees. As the bigger birds leave, the



small birds quickly resume their former activities. Bohemian waxwings have come

in large flocks and moved on. Occasional woodpeckers appear and then disappear again so quickly you are not even sure that you saw them.

Now is the time to make a list of all the birds that you have seen. Write down dates and places. Like any collector, you will be eager to collect more and more names for your list. But don't stop with mere lists. With practice you will have the opportunity to

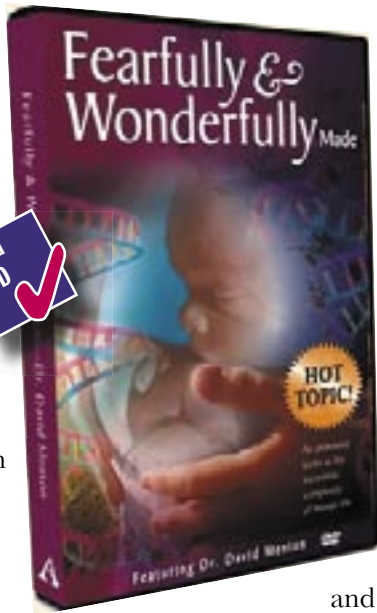
Continued on page 7

by
Margaret
Helder

Good Viewing, Great Information

After watching the video *Fearfully and Wonderfully Made*, I couldn't help exclaiming to my sister, husband, mother and anyone who would listen: "You *have* to watch this fascinating video!" As the mother of two young children, I was captivated by this video presentation which explores the miraculous complexities of life before birth. "Did you know?" I exclaimed as I referred to all sorts of details which I had either forgotten, or never knew, about the development of new life in the womb.

In this video, anatomist Dr. David Menton, leads us on a captivating journey through the human reproductive system as he describes the processes from the release of an egg, to conception, to birth. Through the steps necessary for new life, Dr. Menton discusses the many possible problems that are so wonderfully solved – these he points out are examples of irreducible complexity. A system which is "irreducibly complex," is one which will not work



if any one component is missing or malfunctioning. Without these clever solutions, new life would not be possible. Chance processes could never have resulted in the complex and carefully orchestrated system necessary for a baby to be born. Dr. Menton sheds light on the awe-inspiring design and declares that we are "fearfully and wonderfully made"

(Psalm 139: 13-14).

Not only is Dr. Menton an expert in this field, he has a Ph.D. in cell biology, has served as a biomedical research technician at the Mayo Clinic and as an associate professor of anatomy at Washington University School of Medicine, but he is also a dynamic and humorous speaker. In addition, diagrams, animation, ultrasound stills and scanning electron microscope images make the information easy to understand. (Female interior anatomy only is illustrated in ultrasounds images and diagrams.)

Anyone interested in human biology and, of course, in babies will find this video exciting. High school students, who are studying reproduction, will benefit greatly from watching the presentation. Biology teachers will find this to be a very useful and tasteful tool for inspiring students' interest in this area as well as communicating the concept of irreducible complexity.

Fearfully and Wonderfully Made. Answers in Genesis. 2005. DVD 63 minutes.



by
Tina
Bain



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WONDERFUL CONFERENCE

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geologic column and sudden appearances of organisms in the fossil record. Age and retirement have had little impact on this amazing gentleman.

Saturday morning Dr. Vardiman introduced the RATE (radiometric age of the earth) project. Dr. Humphreys followed with the topic “Helium diffusion dates rocks at 6000 years.” Next Dr. Snelling followed with “Rocks contain evidence for accelerated decay” and lastly Dr. Baumgardner finished off the morning with carbon 14 evidence in coal and diamonds. Just as everyone’s head was ready to burst from information overload, the church served pizza (two huge pieces each), fruit, home made cookies and beverages to the assembled throng. After lunch Dr. Vardiman discussed the impact and issues connected with the RATE project. After that Dr. Morris discussed the authority of God’s word. Next a panel discussion entertained written questions from the floor. The afternoon concluded with two more lectures, one on cosmology by Dr. Humphreys and one on Mount St. Helens by Dr. Snelling (based on work by Dr. Steven Austin.)

In the evening my husband and I attended the session at University of Montana. My husband initially read the program incorrectly and would have had us there at 7 in



IN MONTANA

Impressive table of speakers at Montana Conference

Left to right: Doctors Larry Vardiman, Henry Morris II, Russel Humphreys, Andrew Snelling and John Baumgardner

the morning for these sessions! There Dr. Humphreys presented his work on helium diffusion. The audience of about 80, included some faculty and students from the university as well as a few familiar faces from the conference. Following the presentation, Drs. Baumgardner, Snelling and Humphreys answered questions. The first question was from an irate faculty member. He questioned the integrity of these scientists whose names were included among the authors of science publications which cited long age estimates. Dr. Baumgardner explained that his model for plate tectonics can be applied in terms of fast processes or slow, so ages derived depend on input to the model. Anyone using his model however would usually put the designer of the model among the list of authors. The other panel members cited similar circumstances.

Two faculty members objected to the fact that more than a million dollars was raised from sympathizers to pay for the research. The questioners suggested that this was “lining the pockets” of these scientists rather than paying for expensive laboratory analyses. The questioners did not seem to feel that creationists should be allowed to raise money for research. Nobody discussed the helium diffusion project which had been presented. One man however wanted to know if it was appropriate to draw a supernatural conclusion from the study. The panel replied that as the questions asked in the project, and the predictions made, were based on this premise, and as there is no natural explanation, such a conclusion could scarcely be avoided. Michael Oard, one of the organizers later told us that some in the audience stayed long after the official session was concluded, so there was extensive dialogue between the ICR scientists and members of the university community.

On Sunday morning Pastor Bryan Hughes preached on Genesis chapter one. Later we heard Dr. Baumgardner discuss the status of natural selection as an explanation and mechanism for evolution. His lecture was largely based on the work of John Sanford (see review of *Genetic Entropy & the Mystery of the Genome.*) Altogether we had heard wonderful lectures on a wide variety of topics. Congratulations to all involved with this first rate RATE conference!



Ancient Computer Astounds Everybody

by Margaret Helder

As a society, it is obvious that we are very impressed with the sophistication of our modern technology. It is also evident that the theoretical basis for this technology is fancy mathematics. Not surprisingly then, although not everybody can do advanced math, we consider our society to be advanced both in terms of knowledge base and physical know how. At the same time however, we tend to be very disparaging of ancient societies. Evolutionary preconceptions certainly lend themselves to the idea that



ancient peoples were primitive, with few skills and even less understanding. Sometimes however we discover details about ancient peoples that

shake our feelings of superiority.

The discovery of an ancient analog computer (mechanical rather than digital), designed to calculate positions of the bodies in our solar system, is a case in point. When Dr. Derek J. de Solla Price, Avalon Professor of the History of Science at Yale University, announced in 1974 his interpretation of the nature of this mechanism, the academic world ignored his claims. He had studied the artifact for almost twenty five years, but 'informed' people knew he could not be correct. The mechanism, after all, was probably designed about 150 BC. Ancient people could not be that sophisticated, or could they?

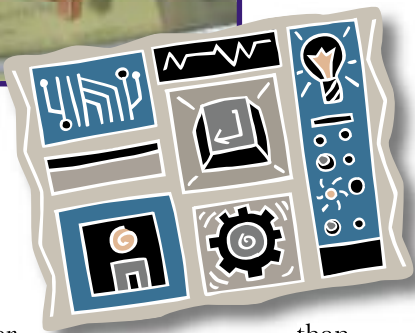
Maybe we should not be surprised by this new indication of ancient *savoir faire*. We are all famil-

iar with various wonders produced by the ancient world. The new discovery of ancient ingenuity came about as a result of the discovery of a shipwreck. During the spring of 1900, a Greek sponge diver discovered the remains of an ancient cargo ship in 42 m of water. This was near the island of Antikythera, halfway between the islands of Crete and Kythera which lies just south of the southern eastern tip of the Peloponnesus Peninsula. This wreck yielded a stunning collection of bronze, marble statues, pottery, glassware, jewelry and coins. Based on the coins, scholars estimate that the ship sank around 65 BC. Among the items recovered was a badly corroded and encrusted object which seemed to consist of gears.

The delicate process of cleaning the strange artifact proceeded slowly. It was not until the early 1950s that British science historian Derek J. de Solla Price began to investigate this artifact. He published several articles suggesting that the mechanism must be a clock or a computer. In the early 1970s he and Greek nuclear physicist Charalampos Karakalos, made X-ray and gamma ray images of the fragments. In 1974 Dr. Price published a major paper which argued that we should rethink our views on ancient Greek technology. The academic community however was not in the mood for such ideas. Many scientists were still contesting Immanuel Velikovsky's views on ancient history, so they greeted Dr. Price's paper with hostility or ignored it altogether. Dr. Price died in 1983, his work unappreciated. Interest in the mechanism however did not die out forever.

In the 1990s, Michael Wright, curator of the Science Museum in London, and Allan Bromley, a computer scientist at Sydney University (Australia) discovered a common interest in the mechanism. Bromley wanted to study the artifact with X-ray tomography, which produces a series of virtual cross-sections of the device from top to bottom. Wright built a crude tomography machine in Greece and 700 images were collected. Wright has been working on a reconstruction ever since.

More recently, Mike Edmonds, an astrophysicist from Wales, and Tony Freeth, an English mathematician turned film-maker, undertook to produce a documentary on the mechanism. They managed to secure support from the British firm XTEC, experts in computer-assisted tomography, as well as help from Hewlett-Packard. The latter company had developed a method for reading cuneiform tables so eroded that computer images



had to piece the parts together. In the fall of 2005, the fancy equipment arrived in Greece and images were collected. The results of this study were published in *Nature*, the Nov. 30/06 issue which includes two commentaries (pp. 534-38; 551-52) and the technical article (pp. 587-91). It turns out that this mechanism was indeed a computer of astonishing precision and beauty.

Research in ancient writings reveals that the Roman consul Cicero, in the first century BC, referred to such a device. He declared that it could be used to track the course of the sun, moon and five planets both across the sky and through time. For various reasons, scholars now conclude that this device was designed by Hipparchus of Rhodes about 150 BC.

According to the new study, the device consisted of 37 gears of various sizes. As a handle was turned, the ratios of the gear wheels would cause a pointer to indicate the varying motion of the moon relative to earth. The technical article declares that the mechanism “shows great economy and ingenuity of design. It stands as a witness to the extraordinary technological potential of Ancient Greece...” (p. 591) One of the sophisticated features was a pin and slot device which allowed one gear to move faster or slower relative to its position on another gear. One commentary points out: “As the bottom wheel turns, this pin pushes the top wheel round. But because the two wheels aren’t centred in the same place, the pin moves back and forth within the upper slot. As a result, the movement of the upper wheel speeds up and slows down.....” (p. 536)

Another remarkable feature was the number of teeth on the gears. This seems to have been precisely calculated. Two gears have 53 teeth

each, an awkward number to divide into the circumference of a circle (especially when the teeth are being cut by hand). This number however was specifically designed to dovetail with two differently calculated lunar cycles, the Metonic which consists of 235 lunar months (fitting into 19 years) and the Saros cycle (a period of 223 months). Four Metonic cycles less one day, or 940 lunar cycles, equal 76 solar years. The Saros cycle, on the other hand, was used to predict



solar and lunar eclipses. The 53 toothed gears fit both lunar cycles “which are the bases for all the prime factors in the tooth counts of the gears.” (p. 591) Nothing was left to chance or simple convenience.

Thus in the design of this mechanism, the ancients demonstrated detailed knowledge of astronomical cycles, fancy mathematics and precise workmanship. Modern scholars believe that the Antikythera Mechanism incorporated the theories of Hipparchus who lived in Rhodes about the time this device most likely was invented. This brilliant Greek astronomer and mathematician developed complex theories involving plane trigonometry to explain the relative motions of celestial bodies such as the moon. The interest of the ancients



seems to have been knowledge for its own sake, as a way to demonstrate and appreciate the beauty of the heavens. There does not seem to have been a specific practical use for the device.

Obviously there has been no evolutionary ascent of mankind. Indeed probably the reverse is true. Ancient mankind may well have been more fit and even more intelligent than we are. As John Sanford’s book suggests (see review), mankind has probably suffered a continual decline since the fall of man. The ancients managed to discover and invent amazing things in spite of the fact that they had little prior learning upon which to build their discoveries. Donald Chittick, in his book *The Puzzle of Ancient Man*, describes many wonders of the ancient world, including the Antikythera mechanism. (A new edition of this popular book is now available from CSAA).

An amusing postscript to this story involves the location of a unique model of this ancient mechanism. It turns out that a model of the Antikythera mechanism is displayed in a museum devoted to the development of the modern computer. This museum, located in Bozeman, Montana, traces the development of codes and the transmission of information. It begins with ancient hieroglyphics and proceeds to the printing press, mechanisms to automate patterns in woven fabric, typewriters, systems for solving encrypted messages, calculators, computers (and space travel), and finally the DNA molecule. This places our genetic code squarely in a category with other designed systems! So if you go to Bozeman, do not miss the American Computer Museum. You will learn a lot.

LEARNING FROM THE RATE PROJECT



One does not have to be a scientist with an advanced degree in physics or geology to appreciate the relevance of recent studies on the radiometric dating of rocks and biological materials. The book *Thousands... not Billions* and the DVD of the same name, are designed to communicate to the general public the results of recent research which fit a young age for the earth. Despite the fact that the book is written to communicate to interested but non technical readers, some additional help with the concepts cannot hurt. This is particularly true for junior high students who are studying earth science, or high school students who are studying chemistry. Thus the Institute for Creation Research has recently published a user friendly study guide to accompany *Thousands... not Billions*, written by Don DeYoung, also author of the book.

Each chapter in the original book is treated separately in the study manual. Chapter objectives and an outline of the material are provided in point form. This is followed by an overview of the chapter in paragraph form. Significant terms are listed and questions about the implications of the chapter and review questions on specific details follow. Answers immediately follow as well as recommendations for additional resources. For some chapters, activities (experiments) are recommended with forms to fill

in data. Where appropriate, graphs and diagrams from the research are included. This manual turns a popular discussion of a difficult but important subject into an interesting teaching tool and learning project. Recommended for educators and their students, and for all who want a user friendly guide to the book which discusses the results of the RATE project.

Don DeYoung, 2006. *Study guide: Thousands ... not Billions*. ICR. 64 pages. (see back page)

WHY EVOLUTION HAS NO FUTURE



Biology is a changed discipline since the advent of the human genome project. Now scientists have detailed molecular DNA codes for many important organisms. DNA, of course, is the genetic information which provides for inheritance, development and mature life processes of each organism. It is reasonable to ask what impact this new information has for our understanding of origins. Does the new information have any implications concerning evolution or creation and if so, what are they? John C. Sanford, a geneticist who spent his career in traditional plant breeding and also in biotechnology, is extremely qualified to discuss these issues. His recent book *Genetic Entropy and the Mystery of the Genome* answers these questions.

As with so many issues, this one

involves a discussion of details. The story is indeed in the details. The author however has developed some metaphors such as user manuals for little red wagons, cars, jets and a spaceship, which make it easier to understand the concepts. Nevertheless, the main significance of this book is for the university student and the reader educated in science, who has encountered (or soon will encounter) evolutionary arguments derived from genomic studies. It is obviously very important for everyone to understand what the issues are and where the evidence points.

Dr. Sanford's arguments are exceptionally clear. He discusses the nature of mutations, how selection works or does not work, and the future of humanity based on these processes. The picture he paints is one that is most discouraging to evolution. His discussion includes many papers from the establishment scientific literature as well as computer generated projections and graphs based on these data. He also discusses the major arguments which evolutionists use to deal with these data.

This book is a clear demonstration that the genome data fit the creation model and provide a strong argument against (some would say refutation of) the evolution model. A basic ability to handle mathematics as well as an understanding of population genetics are definitely assets when reading this book, but the message can also be understood in terms of instruction manuals for vehicles such as the spaceship "Phenome." It is to be hoped that this book is but one of a long string of books yet to appear, which will deal with specific topics in science.

J. C. Sanford. 2005. *Genetic Entropy & the Mystery of the Genome*. Elim Publishing, New York. 208 pages. (see back page)

TAKE A HIKE OUTSIDE

continued from page 1

Observe what the birds eat and how they behave. The robins in our backyard have been eating rotten crab apples.

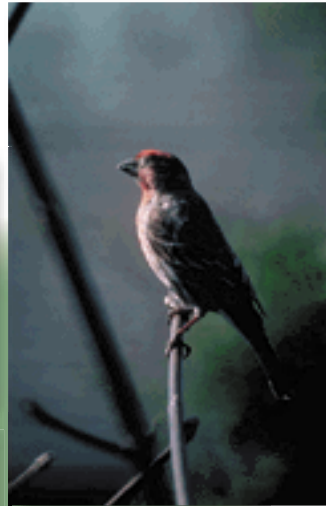
This seems like a good idea since it is so cold that earth worms must be hard to find near the soil surface. So we learn something new about robins, that they make do with other foods when they have to.



The chickadees in our yard seem to be very bright and enterprising and their songs are wonderful. They collect seed from bird feeders when it is too dark for other small birds to see. Indeed chickadees rush in to situations where sparrows fear to tread. The juncos scuff the ground for seed as do the white crowned sparrows. House sparrows are able to feed on the ground too. They also feed at bird feeders but anything that suggests the shadow of a predatory bird (it might just be another bird feeder), will scare them away.



Nature is actually full of interesting things to learn about and to collect. How about looking for abnormal enlargements on plant leaves and stems? These are often insect galls, growths caused by an insect which is developing inside the enlarged tissue. Galls can be found in willow leaves and stems, rose leaves, oak leaves and stems, goldenrod stems and plenty of other plants. Why not collect some galls? You could carefully cut them open to see if the insect is still inside. Think about how the insect is able to affect the growth of the plant in such a way that a nice home with good food inside develops for the insect. It is a wonderfully coordinated system from the insect's point of view.



Speaking of wonderfully designed systems, have you ever found your clothes covered with weed seeds like burrs, which cling in such a determined fashion because of their myriad tiny hooks? From the seed's point of view, this is a wonderful method of spreading its offspring. The fancy term for this process is "seed dispersal." Some seeds like maple keys have tiny wings to enable them to spiral down and outward from the tree.



Many plants have wind dispersed seeds. Dandelions and thistles spring to mind. Use your eyes and your problem solving skills

to identify different methods of seed dispersal. Collect and label the seeds. (Some might have been spread through the intestines of animals like squirrels!) Each mechanism is a design feature whose purpose is to enhance the survival of that plant kind. There are so many design features in nature. It is amazing what you can learn simply by paying attention

The squirrels, skunks, jack rabbits and coyotes or whatever else live near your place, are all wonderfully designed to survive and produce young. Sit still for a few minutes, if you can, to observe these wonderful creatures in action. Why not write a reflective piece about your observations. Next year you can compare your observations with what happened this year. Some naturalists make their living writing books about their experiences and observations in nature. Maybe you can too!



**There's no point
in saving wisdom
for a rainy day!**

Hidden World of Africa
DVD

Overcome your fears of creepy crawlies! Discover the amazing design features of insects. Why could we not get along without them?

Why would we not want to get along without these tiny marvels? Recommended for entire families.

50 minutes



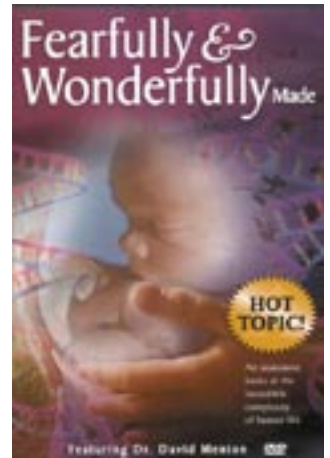
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**Fearfully and
Wonderfully Made**

DVD

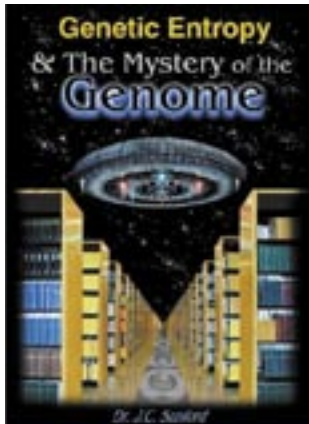
Medical doctor David Menton looks at the amazingly intricate details of development in the womb. Each stage is a series of miracles which cannot be explained by random processes or chance.

63 minutes



\$15.00

**Read and
use
TODAY!**



**Genetic Entropy & the Mystery of
the Genome**

John Sanford

Is man merely the result of natural selection working on random mutations? This geneticist, from a major university, shows that the more scientists discover about the human genome, the less plausible Darwinism becomes. Very interesting.

Paper/202 pages

\$8.00

\$16.50

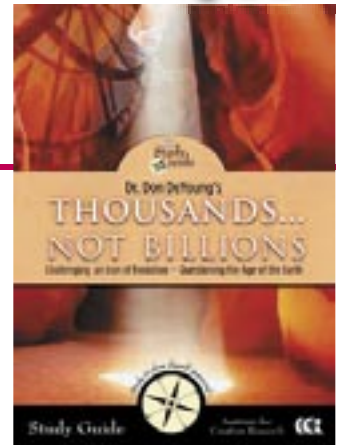
Study Guide for Thousands not Billions

Don DeYoung

Bring yourself up to date on the exciting results of recent research on radiometric dating. The non-technical book is made yet more user friendly when combined with this study guide.

Study guide/64 pages/paper

(also available Book/200 pages/\$14.50)



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