

GEOSCIENCE NEWSLETTER

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GRI WEBSITE

The contents of the latest issue of *Origins* (#59) are listed below, with links to our website:

Editorial: Is Intelligent Design Harmful to Science? L.J. Gibson.

<http://www.grisda.org/origins/59003.pdf>

Article: A Biblical Perspective on the Philosophy of Science. L.R. Brand.

<http://www.grisda.org/origins/59006.pdf>

Annotations from the Literature.

<http://www.grisda.org/origins/59043.pdf>

Book Reviews (3).

<http://www.grisda.org/origins/59049.pdf>

<http://www.grisda.org/origins/59052.pdf>

<http://www.grisda.org/origins/59054.pdf>

For recent news in science relating to origins, see <http://www.grisda.org/links/WHATS-NEW.htm>

GRI TEACHING ACTIVITY

GRI Team Lectures at AU Theological Seminary

Three members of the GRI main office — Jim Gibson, Timothy Standish, and Ben Clausen — presented lectures at Andrews University Theological Seminary during October, 2006. The Seminary offers a class in science and faith for the pastors in training. Lecture subjects included extraterrestrial impacts, intermediate models of origins, design at the molecular level in living things, and God and the new physics.

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GRI BRANCH OFFICE ACTIVITIES



Dr. Antonio Cremades, Director of the GRI Branch Office for Inter-America, speaks to the group.

Creation Seminar Inaugurates GRI Branch Office at Montemorelos University

A new GRI branch office in Mexico is the result of a cooperative effort by Montemorelos University, the Inter-American Division of Seventh-day Adventists, and GRI.

A series of creation seminars was conducted from September to November, 2006 to inaugurate the new Branch Office. In July, a seminar was presented by Dr. Jacques Sauvagnat, Director of the Branch Office for Europe. Dr. Ben Clausen of the main office in Loma Linda, California presented a seminar in

Korean Branch Office Helps Celebrate Centennial of Sahmyook University

As part of the centenary celebration, the Korean Branch Office of GRI organized an international workshop on creationism and science. Dr. Timothy Standish, from the main GRI office, participated in the conference, as well as concurrent NSD Educational Advisory meetings.

October. In November, Drs. Raúl Esperante, Timothy Standish, and Jim Gibson from the main office, together with Dr. Leonard Brand from Loma Linda University, presented a series of lectures on creation and science.



A group of Montemorelos University leaders and Geoscience Research Institute members visiting the location where the new branch office will be housed.

Plans are under way to develop a space suitable for offices and displays for the Branch Office. The relationship of creation, faith and science is of great interest, especially as some of the issues involved are increasingly the topic of conversation and controversy. The new Branch Office will provide assistance to those wishing a greater understanding of these matters.



A group of celebrants of Sahmyook University's centennial, hoping to reunite the world.

SCIENCE NEWS



The urchin, *Strongylocentrotus purpuratus*, whose genome was recently published. Photo taken by Stephen G. Dunbar of urchins at Little Corona del Mar, California.

Sea Urchin Genome Sequencing Consortium. The genome of the sea urchin, *Strongylocentrotus purpuratus*. *Science* 314:941-952.

Summary. Sea urchins are echinoderms, a group thought to be among the closest relatives of vertebrates. The sequencing of the sea urchin genome is thus expected to provide information about the origins of vertebrates, including humans. Sea urchins have also been used for more than 100 years to study embryological development. The sea urchin genome has special significance to understanding embryology and evolutionary arguments stemming from development.

One might expect humans to have more genes than the lowly urchins, but both genomes contain about 23,300 genes. This is surprising because the vertebrate genome supposedly has experienced two complete duplications, while the sea urchin genome is thought not to have been duplicated once.

Another surprise is the fact that sea urchins share many genes once thought to be unique to vertebrates.

Comment. The sea urchin genome provided data consistent with the proposal that the Creator used a similar gene template for living creatures, and created diversity by varying ways in which similar parts are arranged, and by adding novel genes in different groups of organisms. For additional discussion, see the forthcoming issue of *Origins* (#60), both the editorial and the General Science Note.

Valentine JW, Jablonski D, Kidwell S, Roy K. 2006. Assessing the fidelity of the fossil record by using marine bivalves. *Proceedings of the National Academy of Sciences (USA)* 103:6599-6604.

Summary. This study attempted to identify possible biases in the incompleteness of the bivalve mollusk fossil record by determining how many living bivalve genera and subgenera lack a fossil record, and how these missing taxa differ from those with a fossil record. Results indicate the bivalve fossil record is about 76% complete, and that most missing taxa are either small, live in restricted habitats, have narrow geographic ranges, live where few fossil outcrops are found, or were recently described.



The nestling clam, *Kellia suborbicularis*, is generally less than 1 cm in length, near the median length of bivalve taxa.

Comment. Knowledge of the types of taxa likely to be missing can help guide interpretations of the fossil record.

Millien V. 2006. Morphological evolution is accelerated among island mammals. *Public Library of Science (PLOS)*4(10):1863-1868.

Summary. Mammals on islands often differ strikingly in size from their closest mainland relatives. This study compared rates of change among island mammals and mainland mammals. Results indicate island mammals have changed in size more rapidly than mainland mammals. Mainland mammals probably can change rapidly, and may be expected to do so in response to future environmental change.

Comment. This study confirms other studies that have shown that mammals can change quite rapidly in size and other traits, in contrast to previ-



The Beechey ground squirrel, *Spermophilus beecheyi*, is larger on California's Catalina Island than on the nearby mainland.

ous inferences from the fossil record that such changes take long periods of time.

Worthy TH, Tennyson AJD, Archer M, et al. 2006. Miocene mammal reveals a Mesozoic ghost lineage on insular New Zealand, southwest Pacific. *Proceedings, National Academy of Sciences (USA)*103:19419-19423.

Summary. New Zealand presents numerous biogeographical problems, including the total lack of native non-volant terrestrial mammals. Fossil land mammals are known from both Australia and Antarctica, regions thought to have been adjacent to New Zealand until the mid-Cretaceous. Fossil mammal bones were recently discovered on the south island of New Zealand, showing that mammals once lived there, but left no fossil record ("ghost lineage").

Comment. The absence of non-flying mammals in New Zealand may be due to the complete isolation of New Zealand since the Flood, rather than to loss of a lineage extending back to the early Cretaceous.



Divaricate branching in a New Zealand shrub. This pattern is unusually common among New Zealand shrubs, and from many different botanical families. The usual explanation is that this is an adaptation to the effects of browsing by the giant moa birds, in the absence of mammal herbivores.