Creation Matters

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Creation, Evolution and the Molecular Revolution

by Kevin L. Anderson, Ph.D.

The last ten years have witnessed an explosion of scientific understanding in the areas of genetics and molecular biology. On an ever-increasing level, popular newspapers and magazines have feature articles on topics such as the most recent discovery about the human genome or the molecular basis of various diseases. The "molecular revolution" is in full stride, and the scientific information being obtained weekly makes even next year's textbooks hopelessly outdated literally before the ink even dries.

Dr. Kevin L. Anderson has been named the new director of the CRS' Van Andel Creation Research Center. Photo courtesy of the Chino Valley Review.

Linking themselves closely to such discoveries, evolutionists are continually insisting that these new genetic discoveries are providing the final and ultimate proof of the evolutionary "theory" (some even insist such discoveries would not have been possible without the guidance and insight of evolutionary thinking). A letter in *Current Biology* (1996. 6:220) states, "most evolutionary geneticists would agree that the major problems of the field have been solved." Another letter, in the August 2002 newsletter of the American Society for Microbiology, argues that molecular biology has confirmed the claims of evolution. Any lingering questions about the validity of evolution as a historical event the authors dismiss by citing some recent genetic discoveries and declaring, "case closed!"

This becomes the challenge of creationists — making our voices

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Selective Value of Genetic Variation in Humans

by Jerry Bergman, Ph.D.

The existence of genetic variations that produce a clear survival advantage that can be acted upon by natural selection is critically important if evolution is to occur. Those traits that exist are believed by most neoDarwinists to be due to the results of the natural selection of beneficial mutations (Mayr, 2001. p. 97-98). It is now estimated that about 0.1% of the human genome (3,000,000 base pair differences) are non-deleterious genetic variations called polymorphisms. The selection value of these enormous differences between humans will be explored in this paper.

The study of the natural world has revealed many examples of genetically-caused animal and plant traits and variations that appear to have no known selective value. Furthermore,

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Essentially Emmett

Next year the Creation Research Society will lose the invaluable services of Dr. Emmett L. Williams, who has decided to retire from the Society's Board of Directors. Emmett, a member of the Board for 35 years, has served CRS in many capacities, including:

- Vice President of the Board and Chairman of the Research Committee, 1973 - 1983
- CRSQ Editor, 1984 - 1989 and 1999 - 2003
- President of the Board, 1996 - 1999

Academically he holds B.S. and M.S. degrees from Virginia Polytechnical Institute in metallurgical engineering, and a Ph.D. in materials engineering from Clemson University. Dr. Williams retired from his scientist position at Lockheed-Georgia Co. in 1990, following 11 years of service. Prior to that, he had a distinguished teaching career at Bob Jones University (BJU) where he taught for 13 years in the physics department.

While at BJU he started the physics major and authored or co-authored several BJU textbooks for Christian schools. He edited the first CRS monograph, *Thermodynamics and the Development of Order*, which remains a classic among creationist publications. His articles and book reviews in the *CRSQ* are too numerous to mention.

Emmett is famous for his southern style humor, which has enlivened many Board meetings, and is proud of his southern heritage. Board members will greatly miss his words of wisdom and the guidance which has contributed so importantly to the success of the CRS.

Molecular Revolution

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heard above this over-hyped clatter. The simple fact is the case is not closed — far from it. In fact, the scientific case for creation has never been stronger, and the claims by evolutionists have never been weaker. This is because of, not in spite of, these recent genetic discoveries.

Bacterial genes in humans

For example, while evolutionists gleefully point to the presence of bacterial genes in the human genome as clear evidence of our shared evolutionary descent with bacteria, this actually presents evolutionists with a serious dilemma. No one claims humans descended from bacteria. Rather, bacteria and humans are presumed to have shared an early, biologically "simple" ancestor. Did humans and some bacteria retain genes from these earliest cells, while plants, yeast, and even other bacteria lost them? Or, did several bacteria somehow introduce genes into the early human evolutionary lineage that were retained by humans yet lost by other mammals?

Evolutionists do not yet have a plausible explanation. In fact, as genomic sequencing continues, I predict that many different bacterial genes will be found in a variety of species. Are all these genes also a result of common evolutionary ancestry from the earliest life form? Evolutionists will probably soon find that the number of bacterial genes in various animal species is greater than the plausible genome size of any proposed ancestral cell. Hence, this ancient ancestor could not have been the source of all these "shared" bacterial genes. The evolutionary source of these bacterial genes is ambiguous at best, and provides no clear evidence for common evolutionary ancestry.

"Junk" DNA

The existence of so-called "junk" DNA in many species has also been heralded as evidence of evolutionary descent. This DNA is claimed by many evolutionists to be pieces of DNA left over from various evolutionary ancestors, but no longer functional or needed by contemporary organisms. Such DNA is often pointed to as a form of "vestigial organ" at the genomic level. But, as with vestigial organs, "junk" DNA is not necessarily "leftover" junk. As research continues on the genome, more is becoming understood about how chromosomes regulate and control the genetic events in the cell. Already some portions of DNA, once thought to be "junk," appear to have key roles in the cell's genetic activity.

What is more, even if some DNA is ultimately determined to be truly nonfunctional, this is not contrary to a creation model. As mutations occur and accumulate over numerous generations, certain genes may be lost (although portions of their DNA remain). This has been demonstrated to readily occur in bacteria, and almost certainly occurs in all living systems. This accumulation of lost genetic function and activity neither violates nor conflicts with a creation model. However, it does pose a problem for evolutionists when they appeal to the same mutational process to create, rather than eliminate those same genetic functions.

Universal genetic code

In addition, evolutionists have pointed to the universality of the genetic code as an example of shared evolutionary history. The genetic code, as the reasoning goes, was first formed in the earliest of cellular systems, and has remained unchanged in all the contemporary evolutionary descendants — bacteria, archea, yeast, plants, and animals. However, this is hardly contrary to a creation model.

Moreover, even while evolutionists are claiming this is evidence for common evolutionary descent, exceptions to the universality of the genetic code are constantly being discovered. Yeast (such as *Candida*), other types of microorganisms, and the mitochondria of mammalian cells have been found to possess a genetic code that differs from the "universal" code. Such differences are not readily explained by evolutionary descent, and do even contradict some of the claims made by various evolutionists.

"Beneficial" mutations

A final point. Historically, evolutionists have pointed to the occurrence of "beneficial" random mutations as a mechanism for evolutionary change and common descent. However, molecular analysis of these "beneficial" mutations now reveals a much different genetic event than is typically discussed in college evolution textbooks. The simple fact that a particular random mutation may, for example, enable an organism to grow faster or tolerate cold better (hence beneficial) does not mean that particular mutation provides the genetic mechanism required for evolutionary common descent. Unfortunately, this has become a major area of confusion among both evolutionists and creationists.

Since evolution claims to account for the origin and diversity of all life on this planet, then any proposed genetic mechanism for evolutionary descent must provide a genetic explanation for the origin of cellular functions and activity. However, all "beneficial" mutations (that I am aware of) actually involve mutations that are the antithesis of that required for evolutionary common descent. Such mutations cause the reduction or loss of regulatory proteins, transport proteins, protein binding affinity, enzyme specificity, etc. In certain instances, these mutations may enable the cell to replicate faster, utilize a wider variety of substrates, or become resistant to a particular type of antibiotic. Hence, they may impart a "beneficial" change to the cell.

But, regardless of any "beneficial" attribute, mutations that reduce or eliminate any pre-existing system in the cell cannot be offered as the type of mutation that provides a mechanism for how that system initially formed. This would be analogous to removing an interior wall from a house. If a larger room is desired, then the removal of the wall could be seen as "beneficial." However, the process by which the wall was removed could not be claimed to demonstrate how that wall was originally built. Yet, this is exactly the claim evolutionists continue to make. Perhaps this is because they have nothing else to offer.

Dr. Anderson has a Ph.D. in microbiology and was an NIH Postdoctoral Fellow. His prior experience includes that of assistant professor at Mississippi State University and USDA/ARS-NSRIC research microbiologist. He brings with him extensive knowledge and expertise in microbiology, biochemistry, and molecular genetics.

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How to Write a Letter to Your Newspaper

by John R. Meyer, Ph.D.

The front page of your newspaper carries headlines and stories that the editor judges to be the most newsworthy for your community. Editorial columns sample the thoughts and feelings of the editors. The letters-to-the-editor section, however, provides a window on the "hot buttons" of the community as judged by the readers themselves. If you really want to know what is important to people in a community, these letters often provide the key.

Because of this, the editorial section is one of the most widely-read parts of any newspaper. This immediately leads us to suspect that a short, well-written letter to the editor of any newspaper is likely to have far more influence than its mere word count or column inches might indicate.

Such a letter is, in reality, a significant means of molding the public opinion of readers and, ultimately, of our entire culture. Because of this, creationists in particular should consider this a means of taking a stand for Biblical principles within the community.

Few people have considered writing a letter to the editor; and of this number, fewer still have actually put pen to paper (or fingers to the keyboard) to produce a well-written work for public consumption. I make no claim that such writing is easy and swift. However, I do believe that when done correctly, it is well worth your effort and can carry a significant message to many people — far beyond your normal circle of influence.

As you consider the possibility of engaging in such an effort, the following guidelines may be helpful in crafting a publishable letter.

Just do it!

Do not be dismayed because you are not a professional writer, and do not be discouraged if you are not a polished public speaker. If you have strong feelings about an issue and have given it a bit of serious thought and study, you can nearly always put it in writing. Just do it!

Several years ago I mentioned the importance of writing letters to the editor at a family camp in Montana. Immediately following the evening service a fifteen-year-old student went home and wrote a letter to the editor regarding a recently-published story on the supposed evolution of animals. The young man had no

experience in writing for publication, but he took the challenge seriously, and his letter was published within three days!

Savvy and short

Take the time to study an issue. Do not shoot from the hip by dashing off a quick letter containing items and comments you might later wish you had avoided. For a particular technical issue relating to origins, many members of the Creation Research Society have found that a quick post to CRSnet (see below) asking for information can provide many ideas in a day or so.

The problem with a letter to the editor is that nearly every paper will have strict limitations on the word count. This is often 300 words, but sometimes it is even less. Check out the guidelines your target paper has for such communications. Stay strictly within the proscribed length. Anticipate that the editor may even reduce this length to fit your letter into the editorial page. In concise writing, every sentence, phrase, and word should be put on trial for its life!

Writing a long rambling communication is often much easier than writing one that is short and concise. Learn to delete words and phrases that do not take the readers directly where you want to lead them. Once you think you have mastered the art of short, concise letters, try writing a 30-second spot announcement for a radio station! You will see how difficult concise writing can be!

Relevant and timely

Evolutionary philosophy and evolutionary implications permeate our culture. Therefore, finding an article in your paper or an event in your community that is worthy of a challenge is usually not difficult. For example, the first discovery of a supposed Martian Rock on earth (complete with postulated signs of primitive life) hit our Prescott paper at least three times in one week. Hardly a week goes by that allusion to evolutionary theory or morality does not appear in almost every paper of any size. When this happens, seize the moment!

If you wait more than two days or so to submit your letter to a daily paper, you may lose the edge and the interest of readers and the editor. Some controversies are long lived. However, an evolutionary-oriented report from NASA, for example, may hit the news once and then disappear. If you wait a week or more, the interest will be lost on such time-sensitive issues.

Polite but pithy

As Christians, we are called to be salt and light in an alien land. Honey attracts more flies than vinegar. Our old nature is very much in tune with downloads and data dumps of frustrations, anger, and discontent. The victim mentality stalks our culture. Do not get caught up in this sort of whining and grumbling. A short, pithy, and positive note can have an immense

impact.

While we may be tempted to describe some issues, people or positions in our culture as "stupid," "perverted," "idiotic," etc., these are not words designed to win friends and influence people! Adjectives such as "ill-advised," "confused," "nearsighted," "appalling," or "disappointing" are much more acceptable! Even these should be used with care. Nevertheless, the reader should have the impression that you care deeply about the subject at hand.

For example, stating that "I was disappointed to learn that a local high school teacher was requiring students to . . ." is much more appropriate than suggesting that the teacher is intellectually deficient! Personal attacks should be avoided — deal with events, issues, and positions, not personalities.

Use Scripture appropriately

Do not be afraid to quote an appropriate Scripture verse, especially if you are saying something that supports Biblical principles. Not every subject lends itself to Scripture, and the old canard of "Bible thumping" should be avoided. On the other hand, do remember that God's Word will not return void (Isa. 55:11). There is great convicting power in Scripture (Heb. 4:12). The Bible has an immense amount to say about mod-

Sample Letters

Creationism Takes Many Out of Their Comfort Zones

Editor:

The recent letter by Amos (*Review*, Feb. 5) reveals the contradictory mind set of an ardent evolutionist. He criticizes a letter by Hank Giesecke and claims "creationists offer no empirical evidence, nothing of substance to support their views." One wonders how much real creationist literature he has read!

In the 40-year existence of the Creation Research Society, the more than 600 scientist members have produced 160 issues of the *Creation Research Society Quarterly* (and with not a penny of tax support). Many major university research libraries subscribe to this publication, including such modest institutions as Princeton Univ., Cornell Univ., and even the Univ. of Arizona.

Amos asserts, "No science has claimed that one species evolves into another. That's your idea." Odd! More than 140 evolutionary books grace the shelves at the Van Andel Creation Research Center just north of Chino Valley. Nearly every one of them deals with the issue of "speciation" in considerable detail because of its importance to evolutionary theory. I seem to remember a book written by a fellow by the name of Darwin in 1859. It was called *On the Origin of Species*. It certainly appears that knowledgeable "evolutionists" still think speciation is important.

Amos also asserts "The fact that there are no 'transitional' fossils is neither pertinent nor relevant." At least he acknowledges the absence of transitional forms! If he is correct on the missing links, one is led to suspect that the evolutionary tree, as presented in most textbooks, is in reality a fraud. If no transitional forms hold the limbs on the evolutionary tree, then what we have is a creationist brush pile rather than a well-developed, robust theory of genetic continuity and evolutionary relationships.

Readers, including Mr. Amos, who are willing to consider alternatives to naturalistic, purposeless, evolutionary processes are invited to visit the Van Andel Creation Research Center, read the hundreds of creationist books and journals on the subject, and observe the scientific research that is in progress. This may take some adults out of their comfort zones, but it is nothing compared to the pressure to which creationist-oriented young people are often exposed in many government schools.

— John R. Meyer

Hundreds of Scientists Hold Creation Viewpoint

Editor:

In a recent letter to the editor entitled, "Creationists are trying to kill study of Science," Thomas Odell demonstrates his faithful allegiance to Carl Sagan, one of the great high priests of evolutionary, humanistic religion. After enumerating Sagan's accomplishments, Odell asserts that these ". . . and all other scientific achievements are under attack from Mr. Duane Gish of the Van Andel Creation Research Center."

These, of course, are absurd accusations. Dr. Gish is an outstanding scientist who holds a Ph.D. in Biochemistry from U.C. Berkeley. He was a co-worker with two Nobel prize winners and made significant contributions to health sciences while working at two major pharmaceutical companies.

As Director of the Van Andel Creation Research Center, I hold a Ph.D. in Biology and have been a researcher, teacher, or student in the sciences at twenty colleges and universities. The Center is operated by the Creation Research Society, comprised of nearly 650 member scientists world-wide. These, along with the hundreds of visitors to the Center and most of the 1,500 attending our recent creation conference, can easily testify to our support of legitimate science.

The misleading accusations by Odell are typical of the militant anti-creationists who would destroy the right of our young people to be exposed to the scientific evidence against evolutionary origins. The creationist movement is advancing and the evolutionists obviously are not happy campers!

— John R. Meyer

ern culture. While the outward form may change, the inner problems are precisely the same as they were 3,000 years ago.

It will come as a surprise to some readers of a newspaper that many serious social, moral, and ethical problems are dealt with explicitly in Scripture. The decision to use Scripture in a letter to the editor is not easy and may depend in part on the issue at hand, on the target audience, and even on the editor's attitude.

Write legibly

Always type your letter. Double space the material and use generous margins. At the bottom, be sure to include your full name, address, daytime phone number, evening phone number, and email address. Your signature beside your typed name should also be included. Many papers will call to make sure you are, in fact, the writer to avoid possible legal or ethical issues. Some papers may prefer submissions on computer disk. Others may want submissions by email. Be sure to check your paper's guidelines on this.

Other considerations

1. A letter to the editor does not always need to be negative. For example, if you have experienced a great deal of help from volunteers on a specific project, a letter to the editor publicly thanking those involved is often appropriate. This is especially true in smaller communities.

2. Giving a brief quotation and publication date when responding to a previous editorial or letter to the editor is often helpful. Referring to a "recent letter to the editor by …" is also acceptable.

3. Final proofreading and critiquing are often better done by a friend than by the writer himself! My wife, my pastor, and my colleagues have been of immense help in pointing out words and phrases that were a bit too harsh.

4. Check for accuracy of facts, quotations, etc. Be careful not to quote a person out of context.

5. Many papers have limits on the frequency of letter submissions by a given individual. Be respectful of the editor's time by not violating these limitations.

6. While many papers may carry a response to a previously-written letter to the editor, there are often strict limitations on how often a "ping-pong" type of discussion can be carried on in the paper. Do not think that you must always have the last word in an ongoing discussion.

7. Get to know the editor of your target paper. This is much easier to do with a small "hometown" publication, but it may be possible to get past the "gate keeper" in a larger paper as well. One way to do this is to hand deliver the letter in person to the editor. Because editors often work against very tight deadlines, check with the receptionist to see when is the best time to try to meet the editor. Some papers may have an occasional "coffee with the editor" forum that can provide direct contact as well.

8. Do not automatically assume that a letter to the editor has no chance of publication just because the editorial position of the targeted paper is decidedly humanistic. Controversy sells papers. And there is hardly anything more controversial in our society than the viewpoints of a Bible-believing, young-earth creationist! Note, however, that some papers, especially those of very small communities, will not publish controversial letters.

9. Many other printed media sources also accept letters to the editor. These might include specialty magazines, trade magazines, denominational publications, etc. All are potential targets for a well-written letter.

Resources for Writers

1. A good web site to navigate is www.amyfound.org. This group is dedicated to developing Christian writers and to penetrating our culture with Bible-based articles in the secular media. Take a close look at the content of the articles for which they have given significant monetary prizes. While these are mostly editorials, many great ideas for specific situations may be gleaned from some quality time visiting this helpful resource (even though they promote a Hugh Ross book).

2. CRSnet, the email discussion group operated by the Creation Research Society, is often a great source for information and suggestions on how to handle a specific creation-oriented issue. Although CRSnet is limited to Society members, any young-earth creationist can join. Each member receives an outstanding technical journal (C*reation Research Society Quarterly*) and a popular-level newsletter called *Creation Matters*. To participate in CRSnet, contact glen@creationresearch.org for more information.

3. Not all web sites are created equal. Highly informative and trustworthy sites include:

www.creationresearch.org
www.answersingenesis.org
www.christiananswers.net
www.icr.org
www.creationsafaris.com/crevnews.htm

4. If you find this "Dear Editor . . ." article helpful and you are successful in having your creation-oriented letter to the editor published, please share it with me. We will keep it on file as an example to encourage others!

5. Read over the sample letters included with this article. Though they are far from perfect models, they have been published, and they do make a point.

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Human Genetic Variations

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many of these variations appear not to have conferred a survival advantage at any time in the past. Actually, scientists have been unable to show that *most* variations existing in humans have a selective advantage. Often, many variations found in the animal world seem to exist solely to produce variety, and are not for the purpose of conferring a survival advantage.

One example is the well-known blood types, such as A, B, AB, and O, plus the Rh factor. Leith notes that "in the most widely-studied species of all — man — there is little evidence for any selective advantage or disadvantage for most of the human blood-group types" (Leith, 1982, p. 44). Leith adds that the same is true for the hundreds of other kinds of variation. More will be said about blood types later.

Some of the other many examples of genetic variation in humans that have been most thoroughly researched (and for which no evidence exists that they affect survival) are listed below.

1. **Attached earlobes**: The allele for free earlobes is dominant to the recessive allele for attached earlobes.

2. **Tongue rolling**: The "R" allele enables a person to bend his/her tongue into a right-side-up, U-shape (looking at the front). This trait is dominant to the "r" allele (those persons lacking this ability).

3. **Hitchhiker's thumb**: People who are homozygous for the recessive allele "h" can bend the last joint of their thumbs back to an angle of 60 degrees or more, and those who cannot do this have the dominant allele, "H."

4. **Bent little finger**: People with the dominant allele "B" can lay their hands flat on a table and, while relaxed, are able to bend the last joint of the little finger toward the fourth finger. Those who are homozygous for the recessive allele "b" cannot do this.

5. **Interlacing fingers:** People with the dominant "C" allele have a tendency to cross their left thumbs over their right thumbs when they interlace their fingers. If you are a "right-thumbed" person, placing your left thumb on top will feel unnatural. The recessive "c" allele results in people normally crossing their right thumbs over their left thumbs.

6. **PTC tasting**: Those with the dominant allele "T" for this trait can detect the bitter taste of phenylthiocarbamide (PTC). Those persons who are homozygous for the recessive allele "t" cannot taste this chemical. Many other examples exist of similar taste-related genetic differences, including variations in sensitivity for bitter, sweet, sour, and salt. A group of so-called "super-tasters" find chilies, coffee, certain cheeses (such as Swiss), and other foods very unpleasant. So far, no one has found any relation between these many taste variations and survival — if anything, taste should select for a healthy diet (but it obviously doesn't, and often quite the opposite is true).

Often, many variations found in the animal world seem to exist solely to produce variety, and are not for the purpose of conferring a survival advantage.

7. **Widow's peak**: The "W" allele (for widow's peak, which is a pointed hairline) is dominant to the allele which produces a straight hairline (Lewis, 2001).

8. **Front Hairline Shape**: Some persons have an "m" shaped instead of a rounded shaped front hairline, often called a "recessive hairline," while others may have a straight hairline.

9. **Cleft vs. round chin**: Cleft chin (a small dimple in the chin) is dominant over a round chin (no cleft dimple).

10. **Freckles vs. clear skin**: Freckles are dominant over clear, non-freckled skin.

11. **Dimples vs. clear, non-dimple cheeks**: Dimples are dominant; the lack of dimples is recessive.

12. **White forelocks** (the presence of a small tuft of white hair on the front of the hairline) is recessive.

13. **Red hair** (caused by iron pigment in the hair) is a recessive trait.

14. **Hair color** (blond, brown, black and all the shades in between). Brown is dominant; all other colors are recessive.

15. **Hair shaft shape** (round shaft, which produces straight hair; partly oval, which produces curly hair; and largely oval, which produces kinky hair). This trait is determined by several genes.

16. **Mid-digital Hair**: The presence of hair on the middle segment of the fingers is believed to be a dominant trait, while the lack of hair is a homozygous recessive trait.

Other examples include musical talent, the ability to do complex physical and mental games, fly jet planes at speeds several times that of sound, and display mathematical abilities, all of which are not things that, "on the face of it, assist your genetic survival" at least in the past (Richard Dawkins, quoted in Witham, 2002, p. 248). Dawkins is confident that an answer will be found to explain why and how all of these abilities evolved within a Darwinian world view, but others are less sure.

Music and math

Musical ability seems to be a very complex ability that defies a Darwinian explanation (Allman, 1990; Bartz, 1995; Glausiusz, 2001; Gray, 2001; Marks, 2000; Schirrmacher, 1995; Wallin, 2000). Steven Pinker of MIT concluded that music is not needed for survival (Glausiusz, 2001, p.72).

Mathematics is probably one of the best examples, because without numbers modern civilization could not exist. While we do not even know where numbers "exist" in the mind, we do know that humans have a "number module" built into our brains, from birth, that allows us to work with numbers (Butterworth, 1999, p. 8). Numbers do not reside inside our minds the way words do; they are a separate intelligence with their own brain module located in the left parietal lobe. Research into the behavior and genetics of mathematical ability has led Butterworth to conclude that we all are born with an innate ability to use numbers, which he calls "numerosity."

This ability has been present in humans long before the need for anything but

simple math existed. High-level math (such as algebra, geometry, and calculus) has been important in society only in the last century. Before that it was, at best, a pursuit indulged in mostly by the wealthy or the clergy. As Butterworth argues, the reason a person has problems with math is usually not due to genetics, but because the "mathematically challenged" have not fully developed the math sense with which we are all born. He has argued that this inherent ability is even more basic to human nature than language.

Butterworth considers math a basic part of our innate biology and that, with practice, he feels most people could become mathematical geniuses. He cites patients who have brain damage and who, as a result, lose the ability to work with numbers, although they are otherwise normal. Other patients may lose the ability to use language, but are still good at arithmetic (Butterworth, 1999, p.65).

The most common explanation for mathematical ability is that the brain became larger ...

> ... by natural selection for a small set of reasons having to do with what is good about brains on the African savannas. But by virtue of that computational power, the brain can do thousands of things that have nothing to do with why natural selection made it big in the first place ... Natural selection didn't build our brains to write or to read, that's for sure, because we didn't do those things for so long (Gould, 1995).

This argument, though, is pure speculation. A larger brain alone is not related to the ability to achieve complex tasks, such as playing a musical instrument.

No doubt the list of variations above will shorten as we find more traits that have some basic biological survival purpose, but the list will also no doubt grow as we discover more genetically-based traits that do not have survival advantage. It is premature to conclude that a certain genetic variation has no advantage, because this trait may in the future prove to have some advantage in certain situations. Like the vestigial organ argument fallacy, it is not possible to prove an organ has either *no* function or *no* survival function.

Nonetheless, some, if not many, structures do seem to exist, not for survival, but for variety (e.g., attached earlobes would not seem to have produced any survival advantage whatsoever), for human enjoyment (such as music), or for other non-survival reasons. Variety such as ear, chin, and hair type does allow us to identify friends and acquaintances rapidly and accurately.

Blood types

Some evidence now exists that certain blood types may result in disease protection in certain situations. For example, one study found that a person with type A or AB blood had a 7 times greater chance of contracting smallpox than did a person with type O or B blood (Kottak, 2003, p. 99). Conversely, type O persons were found to be especially susceptible to some of the most deadly diseases in history, including bubonic plague and cholera, as well as other diseases, such as ulcers.

The reason for such protection (or, conversely, susceptibility) is that certain antigens of some pathogens (antigens are the portions of molecules and cells which provoke immune responses) mimic certain parts of the A, B, or O glycoproteins (which are also antigens). For example, an antigen on the smallpox virus mimics the type A glycoprotein antigen, allowing the virus to escape detection more often (Kottak, 2004). Since the healthy immune system will not attack self proteins, a pathogen with an antigen similar to a self protein may escape detection.

Given the above, it would seem that blood types AB, A, and B would, as a whole, confer a clear survival advantage in many situations, yet the *most common* blood type is the mutant form, type O, present in from 61 to 98 percent of the population (Cavalli-Sforza, 2000, p. 15). Type O is caused by a mutation that prevents the type A glycoprotein from binding to the blood cell.

Conclusions

Some traits may have unintended benefits in certain situations (such as blonde hair in a society that values blonds). Nonetheless, much evidence exists that many genetic variations do not normally provide a selective advantage. At the least, many genetic variations (including most of those discussed here) do not provide a significant survival advantage to their owners.

Darwinism argues that physical traits are selected (and thus exist today) because they confer a survival advantage to their possessor. Many genetic traits are now known, such as musical ability, white forelocks, and red hair, that do not confer any known *survival* advantage, and cannot therefore be accounted for by Darwinism. Other explanations are thus necessary. Creationists believe these traits have an important reason for their existence: they were created by God solely for human variety and enjoyment.

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Dr. Emmett Williams is shown here during one of his many field research trips. Here he is pointing out geological features at the western end of Grand Canyon. The view here is of Wheeler Ridge from Grape Vine Mesa. Photo by G. Wolfrom.

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Creation Matters

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Creation Calendar

Note: Items in "Creation Calendar" are for information only; the listing of an event does not necessarily imply endorsement by the Creation Research Society.

October 25
The Flood Evidence from the Great Basin by Mark Wannamaker
7:00 pm, Evangelical Formosan Church, Torrence, CA
Sponsored by South Bay Creation Science Association
Contact: Garth Guessman 310-952-0424

Oct. 31 - Nov. 1
Cosmology Conference
The Fawcett Center, The Ohio State Univ., Columbus, OH
Sponsored by Creation Research Science Education Foundation,
P.O. Box 292, Columbus, OH 43216
Contact: 614-837-3097, www.WorldByDesign.org

November 22
Touring the Solar System: Clues to Its Age, Part B by David Coppedge
7:00 pm, Evangelical Formosan Church, Torrence, CA
Sponsored by South Bay Creation Science Association
Contact: Garth Guessman 310-952-0424

2004

June 3-5
Annual Meeting, Creation Research Society Board of Directors
Phoenix, AZ

June 9-11
Discovering the Creator (early registration deadline May 1, 2004)
Baraminology Study Group Conference
Bryan College, Dayton, TN 37321
www.bryancore.org/bsg/discovering04
Contact: conference@bryancore.org,