


# Dr. Ray Bohlin

	<p style="text-align: center;"><b>RAYMOND G. BOHLIN, PH.D.</b> Vice President of Vision Outreach Suite 2000 2001 W. Plano Parkway Plano, TX 75075 Phone: (972) 941-4562 E-mail: <a href="mailto:rbohlin@probe.org">rbohlin@probe.org</a> Probe Web Site: <a href="http://www.probe.org">www.probe.org</a></p>
---	---

Raymond G. Bohlin is Vice President of Vision Outreach with Probe Ministries. Dr. Bohlin was born and raised in Chicago, IL and is a graduate of the University of Illinois (B.S., zoology, 1971-1975), the University of North Texas (M.S., population genetics, 1977-1980), and the University of Texas at Dallas (M.S., Ph.D., molecular and cell biology, 1984-1991). He has been with Probe Ministries since 1975 and has lectured and debated on dozens of college and university campuses. He has addressed issues in the creation/evolution debate as well as other science-related issues such as the environment, genetic engineering, medical ethics, and sexually transmitted diseases. Dr. Bohlin was named a Research Fellow of the Discovery Institute's Center for the Renewal of Science and Culture in 1997, 2000 and 2012. He and his wife [Sue](#), an associate speaker and Webmistress for Probe Ministries as well as a professional calligrapher and Christian speaker, live in Plano, Texas, a suburb of Dallas, and they have two grown sons. He can be reached via e-mail at [rbohlin@probe.org](mailto:rbohlin@probe.org).

## PUBLICATIONS

1. Bohlin, Raymond G. and Beitinger, Thomas L., 1979. Heat exchange in the aquatic salamander, *Amphiuma means*. *J. Thermal Biology* 4:63-67.
2. Bohlin, Raymond G. 1981. "Sociobiology: Cloned from the Gene

Cult." *Christianity Today*, January 23, 25(2):16-19.

3. Bohlin, Raymond G. 1981. "Evolution Society Digs In Against the Creationists." *Christianity Today*, September 18, 25(16):41.
4. Bohlin, Raymond G. and Zimmerman, Earl G. 1982. Genic differentiation of two chromosome races of the *Geomys bursarius* complex. *Journal of Mammalogy* 63:218-228.
5. Anderson, J. Kerby and Bohlin, Raymond G. 1983. Genetic Engineering: the Evolutionary Link. *Creation Research Society Quarterly*, 19: 217-219.
6. Bohlin, Raymond G. and Anderson, J. Kerby. 1983. The Straw God of Stephen Gould. *Journal of the American Scientific Affiliation* 35(1): 42-44.
7. Lester, Lane P. and Bohlin, Raymond G. 1984. *The Natural Limits to Biological Change*. Probe Books, Richardson, TX 75081.
8. Bohlin, Raymond G. 1991. Complementation of a defect in complex I of the electron transport chain by DNA-mediated gene transfer. Ph.D. dissertation, University of Texas at Dallas.
9. Bohlin, Raymond G. 1996. Up a River Without a Paddle: A Review of "River Out of Eden: A Darwinian View of Life" by Richard Dawkins. *Creation Ex Nihilo: Technical Journal*. 10(3): 322-327.
10. Bohlin, Raymond G. 1999. The Possibilities and Ethics of Human Cloning. Chapter 17 in *Genetic Engineering: A Christian Response*, Timothy Demy and Patrick Stewart, editors, Kregel Press, Grand Rapids, MI, pp. 260-277.
11. Bohlin, Ray. 2000. Ed., *Creation, Evolution, and Modern Science: Probing the Headlines that Impact Your Family*, Kregel Publications, Grand Rapids, Mich., 192 pp.
12. Bohlin, Ray, book review of *The Design Inference: Eliminating Chance through Small Probabilities* by William Dembski, Cambridge: Cambridge University Press, 1998 in *Philosophia Christi* Vol. 2 (2), 2000, p. 142-144.
13. Linda K. Bevington, Bohlin Ray G., Stewart, Gary P., Kilner, John F., and Hook, C. Christopher. 2004. *Basic Questions on Genetics, Stem Cell Research, and Cloning: Are these*

*Technologies Ready to Use?* Kregel Publications, Grand Rapids, Mich., 125p.

14. Sebastian, Sharon and Bohlin, Raymond G. 2009. *Darwin's Racists: Yesterday, Today and Tomorrow*. Virtual Bookworm.

## **PROBE RADIO TRANSCRIPTS**

15. Darwin on Trial
16. Christian Environmentalism
17. Sociobiology: Evolution, Genes, and Morality
18. How to Talk to Your Kids about Creation and Evolution (with Sue Bohlin)
19. The Grand Canyon and the Age of the Earth
20. The Epidemic of Sexually Transmitted Diseases
21. The Five Crises of Evolutionary Theory
22. Human Cloning
23. Human Fossils: Just So Stories of Apes and Humans
24. The Natural Limits to Biological Change
25. Why We Believe in Creation
26. The Sanctity of Human Life
27. The Worldview of Jurassic Park
28. Sexual Purity
29. Defending the Faith Philosophically (with Don Closson, Rich Milne, and Jerry Solomon)
30. Men Are from Mars, Women Are from Venus (with Sue Bohlin)
31. Evolution's Big Bang: The Cambrian Explosion
32. The Battle for Life: Physician-Assisted Suicide
33. Up A River without a Paddle: A Darwinian View of Life
34. Life on Mars: Are We Alone in the Universe?
35. Can Humans Be Cloned Like Sheep?
36. Darwin's Black Box
37. Campus Christianity
38. The Star of Bethlehem
39. Contact: A Eulogy to Carl Sagan
40. Christian Views of Science and Earth History (with Rich Milne)

41. Cloning and Genetics: The Brave New World Closes In
42. Why Does the University Fear Philip Johnson?
43. Darwinism Takes a Step Back in Kansas
44. Mere Creation: Science, Faith, and Intelligent Design
45. Genetic Engineering
46. The Coming Revolution in Science
47. Human Genetic Engineering
48. Human Genome Project
49. Icons of Evolution
50. Global Warming
51. The Controversy Over Stem Cell Research
52. PBS Evolution Series
53. Stem Cells and the Controversy over Therapeutic Cloning
54. Where Was God on 9/11?
55. The Galapagos Islands: Sacred Ground of Evolution
56. Are We Alone in the Universe?
57. The Controversy Over Stem Cell Research
58. Is the Tender Warrior Wild at Heart?
59. Genetic Engineering
60. Human Genetic Engineering
61. The Controversy of Evolution in Biology Textbooks
62. Redesigning Humans: Is It Inevitable?
63. The Continuing Controversy Over Stem Cells
64. Total Truth
65. Was Darwin Wrong?
66. The Impotence of Darwinism
67. The Case for a Creator
68. The Privileged Planet
69. Is Intelligent Design Dead?

## **ORIGINS LECTURE TOPICS**

### **Amoeba to Man: You Can't Get There From Here**

An analysis of the various examples of evolutionary change today and the evidence for the concept of the created kind. Video and Power Point on video projector.

## **Creation/Evolution: What Can We Know About the Origins of the Universe and Life?**

A fast-paced presentation outlining the major tensions in the origins debate and what conclusions we can draw. Summarizes the evidence for the origins of the universe and life, the origin of complex adaptations and the evidence for design and intelligence. Requires 1 hour and 15 minutes. Video and Power Point on video projector.

## **Christian Views of Science and Earth History**

A description of the three most prevalent Christian views of Genesis: Literal or Recent Creation, Progressive or Day Age Creation, and Theistic Evolution. Strengths and weaknesses of each one are analyzed and discussed. Power Point on video projector.

## **Early Man and Human Fossils**

This presentation analyzes the fossil evidence for human evolution from a creationist perspective. The scarcity of fossils, the twists of interpretation, and the fossils that are out of place are discussed. Power Point on video projector.

## **Evidence of Intelligence**

Evidence for an intelligent creator from molecules to the universe. Video and Power Point on video projector.

## **The Grand Canyon and the Great Flood**

This presentation takes you on a hike into the Grand Canyon with the Institute for Creation Research. You'll see some of the fabulous sites in the Grand Canyon as well as an explanation as to how ICR believes the Canyon may have been formed in conjunction with the flood of Noah. Slide illustrated.

## **In the Beginning: A Study of Genesis One**

This is a verse by verse discussion of the first chapter of Genesis.

## **The Influence of the Evolutionary Worldview on Society**

More and more evolutionists are calling for a new society based on the principles of evolution. What do they want? Power Point on video projector.

## **Life's Origins**

A critique of the general scheme of chemical evolution and evidence for the hand of God in living cells. Video and Power Point on video projector.

## **Why We Believe in Creation**

A biblical apologetic for a creationist position based primarily on the nature and character of God and the centrality of creation in the Bible.

# **NON-ORIGINS LECTURE TOPICS**

## **A Christian Environmental Ethic**

Christianity provides the only real basis for ecological concern. It should not take a crisis for Christians to be environmentally aware. Video and Power Point on video projector.

## **Abortion: The Destruction of the Innocents**

Abortion is an unjustifiable intrusion on the safety of the womb. What is the logic behind the abortion movement and how should we respond. Power Point on video projector.

## **A Defense of Christianity: Can Christianity Be Trusted?**

This presentation will defend Christian Theism as a worldview and examine historical evidence for the truth of Christianity. Power Point on video projector.

## **Campus Christianity: How Should We Live?**

Four principles (Think Christianly, Cultivate a Teachable Spirit, Pursue Excellence, and Faithfulness) are presented for effective Christian witnessing in the classroom (or any sphere of life) are addressed. Also presented as **Being Christian in a Post-Christian Society** for adult audiences. Video and Power Point on video projector.

## **Human Nature: Who Are We?**

Various views of the nature of man and their consequences are examined and contrasted with the Christian view. Video and Power Point on video projector.

### **Infanticide and Euthanasia: Gateway to the Death Camps of the 21st Century**

The legacy of abortion is an ever decreasing value of human life in our society. The slippery slope is becoming steeper. Video and overhead projector.

### **Genes, Cloning, and Genetic Engineering: A Christian Perspective**

How will these new technologies be used? Is it a Pandora's Box or a miracle cure? Power Point on video projector.

### **The Worldview of Jurassic Park**

Scenes from the movie *Jurassic Park* are viewed with the intent of discovering the some of the obvious and also some of the subtle messages contained within this incredible piece of entertainment. TV/VCR and Overhead Projector

### **Guys are from Mars, Girls are from Venus**

This presentation looks at the astonishing agreement between the newfound discoveries in the secular world concerning the uniqueness of men and women and their agreement with millennia old statements from the Bible. Power Point on video projector.



## **A Christian Response to Homosexuality**

This presentation investigates the problem of homosexuality in our culture today, bringing together relevant Biblical passages and scientific studies from the fields of psychology, neurology, and genetics. The goal is to understand what God says, what science knows, and how we are to respond. How can we “hate the sin, yet love the sinner”? Power Point on video projector.

## **Safe Sex and the Facts**

This presentation documents the unprecedented epidemic of sexually transmitted diseases. Primary to the discussion is the clear medical evidence that abstinence followed by monogamy is the only way to stay reproductively healthy throughout one’s adult life. Slide Projector.

## **Science and Worldview**

This presentation explores the roots of modern science from a Christian world view and why other worldviews failed to produce science as we know it. Power Point on video projector.

## **Worldviews: What Is True?**

The major “isms” (theism, naturalism, and pantheism) in our culture and their influence are discussed. Power Point on video projector.

# **POSITION STATEMENT ON CREATION/EVOLUTION**

1. That God is Creator is clearly taught in Scripture: Genesis 1 and 2, Job 38-41, Psalm 104, Romans 1:18-20, and Col. 1:16,17. The suggestion that life and man are the result of chance is incompatible with the biblical concept of intelligent creative activity. Theistic evolution is not a viable option in my opinion.

2. The data from astrophysics, astronomy, and mathematics do not support the concept of an eternal universe with no beginning. Something, indeed, has always existed, but it is not matter and energy. There is a definite requirement for a transcendent energizing existence which is outside the material universe.

3. The data from geology, chemistry, biochemistry, and molecular biology do not support the theory that life arose from non-life by some process of chemical evolution. There is a definite requirement for intelligence in organizing and ordering living systems.

4. The data from paleontology, genetics, ecology, and molecular biology do not support the theory of descent with modification from single-celled organisms to man. The elements of intelligent design in nature point to a Supreme Designer that possesses a sense of beauty, form, function, and even humor. Though organisms do change over time, there appears to be genetically built-in limits to the amount and type of biological change that is possible.

5. The plain language of Genesis 1 seems to teach a recent literal six-day creation. There is much data from science, however, that indicates the universe and earth are billions of years old. I do not believe that certainty regarding the age of the earth is either necessary or possible at this time. Tension in areas of conflict between science and biblical

interpretation should not necessarily be viewed as either questioning the inerrancy of scripture or a lack of faith. This issue should not be the focus of the creation/evolution debate at this time.

6. The plain language of Genesis 6-8 teaches a violent universal flood which would be expected to leave discernible scars on the earth. However, it is difficult to assimilate all geological formations into a model of a single worldwide flood only 5,000 years ago. There is also a significant amount of geological data that is not easily explained by uniformitarian principles. Research of a water canopy/universal flood model should be vigorously pursued, but belief in such should not be made a litmus test of true Christian belief.

## **PHILOSOPHY OF MINISTRY**

The creation/evolution debate is not only a divisive issue between the conservative Christian community and the scientific establishment, but it also divides Christians as well. The tension between both sets of groups often arises because people are talking with no one listening, and hearing without understanding. Strict adherence to a position is more important than understanding another's point of view. This lack of communication only intensifies the confrontation due to internal biases.

I believe that a reasonable and calm presentation of the evidence can defuse the emotional bullets, especially if questions are answered straightforwardly and with integrity. As a result, the level of learning on both sides is drastically increased. While there are some points in which I believe strongly and will defend them rigorously, there are other issues which still require much study and discussion between all parties before a firm commitment can be taken. Part of my overall purpose is to increase the level and depth of communication between differing camps of the

creation/evolution debate while reducing the level of suspicion, contempt, and confrontation. This approach is aimed first of all at bringing Christians together and secondly towards increasing the level of communication between creationists and evolutionists outside the church.

We must take up the Lord's invitation to the nation of Israel through the prophet Isaiah when He said, "Come now, and let us reason together" (Is. 1:18).

---

### **What is Probe?**

Probe Ministries is a non-profit ministry whose mission is to assist the church in renewing the minds of believers with a Christian worldview and to equip the church to engage the world for Christ. Probe fulfills this mission through our *Mind Games* conferences for youth and adults, our 3-minute daily radio program, and our extensive Web site at [www.probe.org](http://www.probe.org).

Further information about Probe's materials and ministry may be obtained by contacting us at:

#### **Probe Ministries**

2001 W. Plano Parkway, Suite 2000

Plano, TX 75075

(972) 941-4565

[info@probe.org](mailto:info@probe.org)

[www.probe.org](http://www.probe.org)

---

# “How Do You View the Age of the Earth?”

Dear Dr. Bohlin,

As a Christian, how do you view the age of the earth? I was wondering how scientists calculate the age of the stars and the earth.

Please see my article [“Christian Views of Science and Earth History”](#) which will give a fuller explanation of my view. Briefly, I am currently undecided or uncommitted to any particular view of the age of the earth. I continue to find the six 24-hour literal day interpretation of Genesis 1 & 2 to be the most convincing, but I find great evidence for long ages for the universe and the earth. Basically I feel that there is not sufficient evidence either biblically or scientifically to decide the issue. We need more time and more data.

The age of the stars is principally determined by what is known as the red-shift. Light from galaxies that are moving away from us is shifted toward the red end of the light spectrum. The farther away the galaxy is the further toward the red, the light is shifted. If galaxies are moving towards us, their light would be shifted toward the blue end of the spectrum. The vast majority of galaxies are shifted toward the red and those which appear to be the youngest also demonstrate the strongest red-shift. There are Christian as well as a few non-Christian astronomers that are critics of this view of red-shifts but the majority find this explanation to be persuasive and authoritative. You may try visiting an astronomy web site from a planetarium for a fuller explanation.

Respectfully,

Ray Bohlin, Ph.D.

---

## **“Where does the Bible Talk About Unmarried Sex?”**

I am a single Christian and I do believe in abstaining from sex until marriage. But I have a friend who is also a Christian and is having sex outside of marriage with her boyfriend (both are single).

I have always believed that the Bible teaches that you shouldn't have sex outside of marriage, but when I went to look for scriptures that teach this, I couldn't find any. I found plenty about not sleeping with relatives and animals and such, but nothing about unmarried sex.

Can you tell me where the Bible teaches that you shouldn't have sex outside of marriage?

*Kerby Anderson answered:*

I typed in the word “premarital sex” on the Probe web site ([www.probe.org](http://www.probe.org)) and got back 16 matches. I might encourage you to look at my article on “[Teen Sexual Revolution](#)” along with the article by Ray Bohlin on “[Sexual Purity](#)” and the article by Jerry Solomon and Jimmy Williams on “[Why Wait Until Marriage](#).”

Perhaps the reason you are having difficulty finding verses on premarital sex is due to the fact that the Bible uses words or phrases like fornication, sexual immorality, or youthful lusts. If you put these terms in a search engine, you will

find numerous verses in the Bible dealing with premarital sex.

Thanks for writing, and stay pure.

Kerby Anderson  
Probe Ministries

*Dr. Ray Bohlin answered:*

The term fornication, or in more modern translations, sexual immorality, simply refers to all sexual activity outside of marriage. Below is the first paragraph under "fornication" in the *Zondervan Pictorial Encyclopedia of the Bible*, 1975, Vol. 2, p. 601:

"Four different NT meanings are obvious. 1. In 1 Corinthians 7:2 and 1 Thessalonians 4:3, Paul is warning unmarried people about the temptation to fornication. In both cases fornication refers to voluntary sexual intercourse of an unmarried person with anyone of the opposite sex. The meaning is specific and restricted. In four other passages fornication is used in a list of sins which includes "adultery" (Matt. 15:19; Mark 7:21; 1 Cor. 6:9; Gal. 5:19). Since adultery involves a married person, the meaning of fornication in these passages is specific and restricted, involving unchastity of unmarried people."

Later the same entry relates,

"Jesus related fornication to adultery when he said "Everyone who looks at a woman lustfully (i.e. with a thought of sexual intercourse) has already committed adultery with her in his heart" (Matt. 5:28). R. C. H. Lenski interprets the "everyone" to include both men and women and both married and unmarried. Thus Jesus was saying that sexual intercourse of unmarried people (fornication) is as evil as extra-marital sexual intercourse (adultery)."

The entry closes with this statement:

“Those who state that the NT makes no reference to permarital sex relations and gives no advice on the personal and social problems involved are overlooking the NT use and meaning of the word fornication, esp. in such passages as 1 Corinthians 7:2 and 1 Thessalonians 4:3.”

Please also note that Paul closes his discussion of sexual immorality in 1 Cor. 7 with verses 8 and 9. “But I say to the unmarried and to widows that it is good for them if they remain even as I (verse 8). But if they do not have self-control, let them marry; for it is better to marry than to burn (verse 9).” I’d say he felt rather strongly about it.

While the Scripture is very clear concerning the immorality and sin of pre-marital sex, these verses also need to be shared with humility and gentleness with the end of restoring a brother and sister in Christ, not driving them away. The truth of God’s word convicts on its own. A spirit of judgment can often be counterproductive.

Respectfully,

Ray Bohlin  
Probe Ministries

---

**Stem Cell Commentary:  
Spinning the Terms**





Part of the struggle in the stem cell debate is the definition of terms. The media regularly uses the term *embryo* to refer to what is necessarily destroyed to obtain embryonic stem cells. The more specific term is *blastocyst*. The blastocyst (see picture) forms after about 5-7 days following fertilization and ends at about 14 days when further differentiation begins.

Medical thriller author Robin Cook in his latest book, *Seizure*, has one of his characters, a medical researcher Dr. Daniel Lowell, testify before Congress that "Blastocysts have a potential to form a viable embryo, but only if implanted in a uterus. In therapeutic cloning, they are never allowed to form embryos... Embryos are not involved in therapeutic cloning." (p. 32) The clear implication is that blastocysts are not embryos. This sounds extremely disingenuous to me.

Cook further clarifies his personal opinion in the epilogue where he states, "Senator Butler [a predictably hypocritical, pompous pro-life senator—my comment], like other opponents of stem-cell and therapeutic cloning research, suggests that the procedure requires the dismemberment of embryos. As Daniel points out to no avail, this is false. The cloned stem-cells in therapeutic cloning are harvested from the blastocyst stage well before any embryo forms. The fact is that in therapeutic cloning, an embryo is never allowed to form and nothing is ever implanted into a uterus." (p. 428) So if there are no embryos, there are no humans and there is no ethical debate. Cook is playing a semantic game. The character Daniel in the

novel admits as much but says it is important semantics.

So I checked Scott Gilbert's fifth edition of *Developmental Biology* (Sinauer Assoc. Inc.), 1997. On page three Gilbert says, "The study of animal development has traditionally been called embryology, referring to the fact that between fertilization and birth the developing organism is known as an embryo." By this definition, Cook is far off base as I suspected.

But then I checked to see if Gilbert had a newer edition. Sure enough, I found one on Amazon.com. The year is not stated but I suspect it is at least 2002-2003. Not surprisingly, I suppose, the same definition of embryology is stated differently (some pages are available for viewing): "The study of animal development has traditionally been called embryology, from that phase of organisms that exists between fertilization and birth." (p. 4) Note that the word "embryo" is omitted this time, yet the word "embryology" clearly means the study of embryos. So Gilbert tries to backpedal from the word embryo yet inadvertently defines embryo anyway by simply trying to define embryology at all. I wonder if Gilbert and Cook know each other. <smile> Note also that human embryonic stem cells were first harvested successfully from embryos left over in fertility clinics by researchers from the University of Wisconsin in 1998, one year after Gilbert's 5th edition.

Even biologists are now learning how to manipulate the language to define things however it suits them politically.

© 2004 Probe Ministries

---

# “Your Critique of Sociobiology Makes No Sense”

Perhaps I have severely misunderstood your [critique on sociobiology](#), but as I interpreted it, it makes no sense. From the sociobiologist proposition that all human nature and behavior is shaped solely by evolutionary necessity (and what promotes reproduction and survival), it does not follow, as you have asserted, that any significant hope and meaning in life is precluded. I don't know what kind of a faculty member you were talking to, but the question you posed (“What difference does it make if I've reproduced once I'm dead?”) is an easy one to answer. The goal of humanity, as believed by sociobiologists, is to pass on its genetic legacy. No single organism is particularly important, but only the collaborative propagation of a species of its genes. Therefore, the difference of whether or not one has reproduced by the time of death is a crucial one. One who dies and leaves no offspring does not pass on any genetic legacy, and is truly, in an evolutionary sense, dead. Those who do leave offspring and die are able to, in an evolutionary sense, live on vicariously through the genes that they pass on to their young, and the genetic legacy continues.

In response to the philosopher's division of life purpose into 'small letters' (survival/reproduction) and 'capital letters' (ultimate meaning and significance, whatever that means), the sociobiological assertion is that survival and reproduction is the ultimate meaning and significance of life. I think one of your crucial errors is that you assume that knowledge of the cause and origins of human nature actually change the validity of human nature itself, and somehow make our ambitions less “lofty. Well, our nature is what it is and we do what we do. We love our children and spouses with all our hearts, and if we do so only for the sake of evolutionary efficacy, than so

be it, but our feelings do not therefore become false and invalid. We at times act selflessly and help others at the expense of ourselves. But if this behavior is ultimately 'genetically selfish,' ostensibly helping others while really benefiting ourselves, than so be it, but these feelings are nevertheless meaningful. A principal proposition of sociobiology is that we have motives to act of which we are not always consciously aware. That does not mean they do not exist, and if they do exist, then following them does not make our lives inherently worthless.

Perhaps the sociobiological argument is not particularly aesthetically pleasing (which I think is really your main objection), but this is not by any means grounds for a scientific rebuttal.

Sincerely and respectfully,

\_\_\_\_\_, Ph.D.

I believe you are the first to question my critique along these lines. I will attempt to answer your objections in the body of your initial message.

*Perhaps I have severely misunderstood your critique on sociobiology, but as I interpreted it, it makes no sense. From the sociobiologist proposition that all human nature and behavior is shaped solely by evolutionary necessity (and what promotes reproduction and survival), it does not follow, as you have asserted, that any significant hope and meaning in life is precluded. I don't know what kind of a faculty member you were talking to,*

He was the head of the department of ecology and evolution.

*but the question you posed ("what difference does it make if I've reproduced once I'm dead?") is an easy one to answer.*

To be clear, my question was "Once I am dead and in the ground

(implying that in a naturalistic worldview since there is no afterlife, my life is absolutely over), what difference does it make to me NOW?"

*The goal of humanity, as believed by sociobiologists, is to pass on its genetic legacy. No single organism is particularly important,*

Precisely why I made my question very personal.

*but only the collaborative propagation of a species of its genes. Therefore, the difference of whether or not one has reproduced by the time of death is a crucial one.*

Not to the species but to me, but I no longer exist.

*One who dies and leaves no offspring does not pass on any genetic legacy, and is truly, in an evolutionary sense, dead.*

So what? My genes are not me, they are just molecules. If, as E. O. Wilson summarized in *Sociobiology: The New Synthesis*, The organism is just DNA's way of making more DNA, then I don't really matter anyway. And once I am dead and no longer exist (organism), nothing makes any difference to me since I do not exist. That is why the professor said that "ultimately" it doesn't really matter. He got the gist of my question.

*Those who do leave offspring and die are able to, in an evolutionary sense, live on vicariously through the genes that they pass on to their young, and the genetic legacy continues.*

I don't live vicariously in my genes. They are now part of a new unique creature that combines my genes with a woman's genes in a new and totally unique combination. Even a clone would not be exactly "me" since mutations and recombinations would have occurred, erasing my genetic identity.

*In response to the philosopher's division of life purpose into 'small letters' (survival/reproduction) and 'capital letters' (ultimate meaning and significance, whatever that means),*

Some meaning for existence beyond the mere physical.

*the sociobiological assertion is that survival and reproduction is the ultimate meaning and significance of life.*

But as I state in the article, without some meaning for life that arises outside of ourselves, there is no meaning in small letters. If we are just molecules, then that's it! We are just molecules, nothing more can be said about us. How those molecules get arranged or persist or are annihilated is totally irrelevant to the ongoing history of the universe. Nothing cares and nothing therefore matters.

*I think one of your crucial errors is that you assume that knowledge of the cause and origins of human nature actually change the validity of human nature itself, and somehow make our ambitions less "lofty."*

How can this not be so? From Darwin to today, evolution is said to be without direction and without purpose and we are mere accidents of history. This is not a conclusion of evidence, but of philosophy. For many it is a specific attempt to remove any form of God from the equation of who we are and where we came from. Once that is done we are free to make our own rules. When Richard Dawkins writes that Darwin made it possible to be an intellectually fulfilled atheist, he means it, at least partially, for the purpose of the freedom from any kind of imposed morality. Dawkin's watchmaker is not only blind, but totally without sympathy to whatever outcome comes about through natural selection. Specifically as to whether I reproduce or not.

*Well, our nature is what it is and we do what we do. We love our children and spouses with all our hearts, and if we do so only for the sake of evolutionary efficacy, than so be it, but our feelings do not therefore become false and invalid.*

Certainly it becomes false and invalid, because I am only being manipulated by my genes which have been formed by thousands of generations. I am not really choosing, just reacting according the program established by natural selection.

*We at times act selflessly and help others at the expense of ourselves. But if this behavior is ultimately 'genetically selfish,' ostensibly helping others while really benefiting ourselves, than so be it, but these feelings are nevertheless meaningful.*

How can they be "meaningful" if they are ultimately selfish and not altruistic at all? That's why Trivers adds the word "reciprocal" in front of the word because simple altruism no longer exists in a sociobiological world.

*A principal proposition of sociobiology is that we have motives to act of which we are not always consciously aware. That does not mean they do not exist, and if they do exist, then following them does not make our lives inherently worthless.*

Certainly they exist, but their source is crucially important. If I pull the string on a Chatty Cathy doll and she says, "I love you," does she really love me? Of course not. But we are no different according to sociobiology. We are both complex arrangements of molecules uttering responses based on an internal program conditioned to respond to outside stimuli (pulling a string or gazing at our newborn's cute and cuddly face).

*Perhaps the sociobiological argument is not particularly aesthetically pleasing (which I think is really your main objection), but this is not by any means grounds for a scientific rebuttal.*

Indeed, it is not aesthetically pleasing, but sometimes truth is hard to take, agreed. But that is not my problem. There is no purpose beyond survival and reproduction which is merely an illusion perpetrated on us by our brains which has been constructed by natural selection to simply aid survival and reproduction, not to recognize truth. And our entire body doesn't really matter, just our genes which are simply reproducing themselves because that's just what DNA does. But DNA is just a mindless molecule with no purpose or goal or direction. How then can we have any?

Respectfully,

Ray Bohlin, Ph.D.  
Probe Ministries

---

## **“How Do You Develop an Apologetics Ministry Within a Church?”**

First off I want to commend you on your approach to defending and sharing the truth and love of the Gospel, as you show respect for others, without backing off from your discovery and communication of truth. It is very refreshing to see! I have two questions.

First, do you have any suggestions for ways to develop an



apologetics ministry within the church? Second, I am considering pursuing a more focused apologetics/evangelistic ministry path, apart from working inside a church. I am definitely considering pursuing a Masters, or possibly Doctorate, degree. Are there any schools (Christian or secular) or degree programs that you would recommend with my ministry goal in mind? Also, are there any career paths that you would suggest for that type of pursuit, i.e. professor of philosophy at a secular university, speaker, or working at Probe Ministries? Thank you for your time. And again, I appreciate your ministry and your respectful approach to it.

Thank you for your kind letter and we are pleased that you have found our site both encouraging and helpful.

There are several suggestions about starting an apologetics ministry through the church, but it must be a two-pronged approach. Christians must be schooled or trained to some degree in apologetics and there must be regular opportunity to encounter non-Christians in a non-threatening manner. A simple reading group can be arranged for Christians to read helpful apologetics-oriented books like Lee Strobel's *Case for Christ* and *Case for Faith*. You could schedule a Probe Mind Games Conference and offer the Basic Defense Track. (Click on the "Mind Games Conference" button on our home page for information.) For the most part, Christians today not only do not really know *what* they believe, they certainly don't know *why*. To encounter non-Christians, you could host a regular film night or reading group. These groups would watch or read secular movies and books which raise worldview or ethical issues. With a mixed group, Christians can begin to hear what non-Christians really believe and think and begin to interact with them just by stating opinions. This can be enjoyable and non-intimidating. A moderator needs to be skilled in not letting some people dominate the discussion or get preachy.

There are a couple of Christian universities and seminaries that offer programs in apologetics. I believe that Trinity

International University ([www.tiu.edu](http://www.tiu.edu)) in Deerfield, Illinois offers such a program. Biola University ([www.biola.edu](http://www.biola.edu)) in Los Angeles also contains the Talbot School of Theology which offers apologetics and worldview-related programs through Professors John Mark Reynolds and J. P. Moreland. Southern Evangelical Seminary ([www.ses.edu](http://www.ses.edu)) in South Carolina is heavily geared towards apologetics. Famed apologist Norm Geisler is its president. Denver Seminary ([www.denverseminary.edu](http://www.denverseminary.edu)) offers a degree in apologetics. I also know that Bryan College ([www.bryan.edu](http://www.bryan.edu)) in Dayton, Tennessee utilizes worldview heavily in their undergraduate programs but I don't know if they have a graduate program that specializes in apologetics.

Ray Bohlin  
Probe Ministries

---

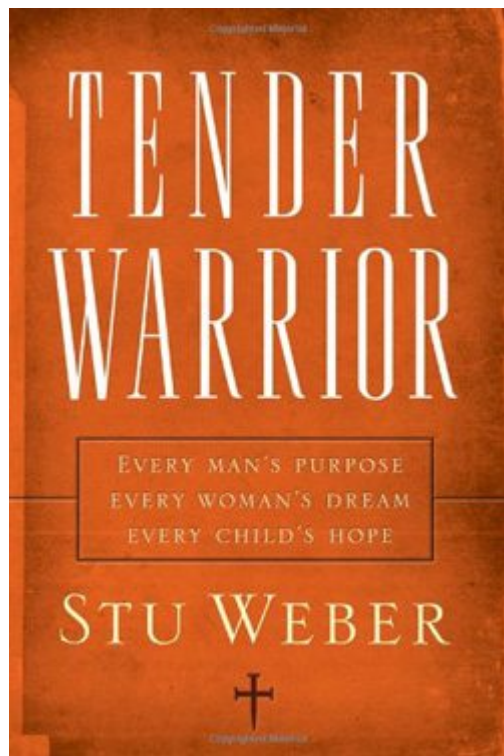
## **Is the Tender Warrior Wild at Heart? – Characteristics of Christian Manhood**

*Dr. Bohlin looks at two attempts to define the characteristics of a godly man according to a Scriptural, biblical worldview perspective. These characteristics give a Christian man a way to evaluate his walk with God and how it communicates Christ to others.*

### **The Four Pillars of a Man's Heart**

Manhood continues to be in crisis. For many men today, their physical strength is rarely necessary. Technology and urban isolation have ripped up the landscape that men inhabit to

such a degree that many men are wandering around wondering who they are and what they're here for. The extreme women's movement proclaims that a woman needs a man like a fish needs a bicycle.



Over the last fifteen years numerous books have been written from both secular and Christian authors to help men find their way. In this article we're going to spend some time with two of them. Stu Weber, a pastor in Oregon wrote the hugely influential *Tender Warrior* in 1993. *Tender Warrior* is full of stories and illustrations that irresistibly pull you along to Stu's appointed end: a vision of manhood mined from God's original intention for a man wrapped up in the New Testament vision of the Ultimate Tender Warrior, Jesus Christ.

At the core of Weber's vision is what he calls the four pillars of a man's heart: the Heart of a King, the Heart of a Warrior, the Heart of a Mentor, and the Heart of a Friend. I first read *Tender Warrior* in the mid 90s, and I was immediately caught up in his four-part description. I knew I didn't exemplify all of these characteristics as Weber describes them, but I knew I wanted to.

The Heart of the King reflects a man's provisional heart. The part of a man that wants to offer order, mercy and justice to the world he inhabits. Think of some of the Old Testament patriarchs, people like Abraham, Moses, and David. All of these men had a sense about them that drew others to them. They were leaders; they looked ahead and prepared those around them for what was coming.

The Heart of a Warrior portrays that part of a man that wants to shield, guard, defend and protect those around him. We intuitively understand this about men, but so many are inhibited from expressing this today. Movies and the entertainment industry often portray this aspect of manhood in its harsher tones. Consequently, this true aspect of manhood is more a target for suppression than for understanding.

The Heart of a Mentor reflects that part of a man that desires to model, train, and explain. Little boys particularly expect their dads to know everything. And a dad puffs up every time he can answer his son's questions. This aspect particularly is missing today in the church as young men from broken and dysfunctional families flounder, looking for an older man to help point the way.

The Heart of a Friend describes the part of a man that is truly compassionate, loving, and committed. The apostle Paul was a tough character as expressed in the list of hardships in 2 Cor. 11:23-28, yet he talked to the Thessalonians with gentle and tender words in 1 Thess. 2:7-8.

"Sourced in Scripture, observed in history, and experienced personally, these four pillars bear the weight of authentic masculinity. They coexist. They overlap. And when they come together in a man, you will know it. You will feel it. You will be touched by it. Like four strands of a steel cable, they will hold you." [\[1\]](#)

## A Man and His Family

These four pillars encapsulate four essential qualities in a man of God: leadership, protectiveness, teaching, and compassion. A man with just three of the four is out of balance. A man who just emphasizes one of the four is a caricature of a real man. Nowhere is this more evident than in the biblical picture of headship and a man's role in his family.

Our culture is horribly confused on this point. Weber sums it up neatly when he says, "Men, as husbands you have been given a trust, a stewardship, a responsibility, a duty, to husband, or manage, or care for the gifts of your wife." [\[2\]](#) Part of my job as a husband is to create an environment in our home that allows my wife to be all God created her to be. She needs to be able to trust my leadership. She needs to know I will stand up for her and provide a secure environment. She needs to be comfortable in seeking my guidance and instruction. Finally, she needs to know that she is loved with a Christ-like self-sacrificing love. Weber adds, "A woman was made to be provided for, protected, and cared for. A man was made to be a provider, protector, and caregiver. Nothing is more pitiful than a man forfeiting his masculinity or a woman her femininity by transgressing the created order." [\[3\]](#)

Weber's discussion of a man and his lady provides numerous helpful insights, exercises, and illustrations on how a man is to love a woman. One commentator suggested that the chapter titled, "Does Anyone Here Speak Woman?" is worth the price of the book alone. Weber encourages men to realize that since men and women are inherently different, a man needs to learn a woman's language, to live with her in an understanding way as Peter commands (1 Pet. 3:7). We need to put our analytical minds to work to understand how she is put together. We won't ever get all the way there, but after all, a little mystery is what keeps marriage exciting, fresh, and interesting anyway.

Weber devotes three chapters to the incredible power of fathering. Our culture today is in dire need of real men willing to father their children. So many dads are absent either physically or emotionally. This alone accounts for so many wayward kids, both male and female alike. A father has a powerful multigenerational impact on his sons and daughters whether intentional or not. It's the nature of God's design.

Like arrows in a quiver, each child needs to be constructed, aimed, and released according to the bent God has given them. Skillful parenting does not come naturally, especially in our culture today that is so confused and off course. It will require biblical and rational thinking in advance.

## **A Man and His Friends**

In his book, *Tender Warrior*, Stu Weber titles the first chapter about a man and his friends, "Real Men Stand Together." In our increasingly mobile and fragmented society, it's harder than ever for men to know each other well enough to be willing to stand together. Upon hearing that Jonathan was dead, the future King David commented that Jonathan's love was wonderful, more wonderful than that of a woman (2 Sam. 1:26).

Men who have weathered tough times together, even fought together, develop a bond that can be stronger than that between a man and a woman. But how many men have such a friendship? There are numerous forces in our culture that leave most men isolated and cut-off. We see the lonely male model in the movies all the time. Characters played by John Wayne, Bruce Willis, Sylvester Stallone, and Arnold Schwarzenegger tend to be the isolated lonely male types: able, or perhaps, forced to handle life's pressures on their own.

Neighborhoods rarely have block parties today. We live in our closed up homes (no open windows in summer or people out on

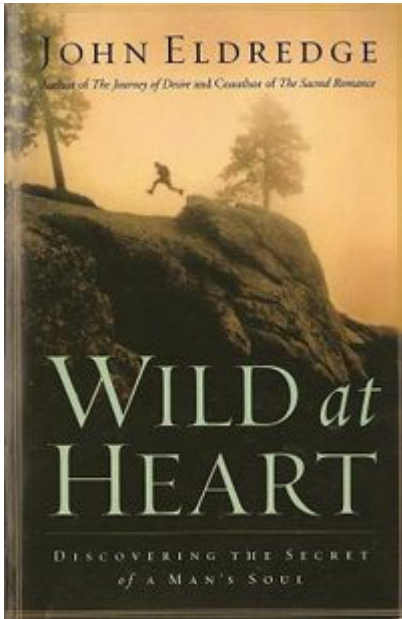
the porch on summer evenings) with tall fences keeping things private. We drive our own cars to work, work long hours, and relax in front of the TV or a book isolated from those around us. A sense of community has been lost in our cities and even small towns. Men, therefore, have no one to connect with outside of office mates or sports teammates. We think we do just fine on our own, thank you.

However, as we grow older, we hunger for someone of the male species to truly share what we are experiencing. But there is no Jonathan or David, someone I fought with in the trenches, someone who really knows me and my successes and struggles.

Men long for someone to lock arms with in a struggle greater than themselves. Looking again at David and Jonathan, we learn in 1 Samuel 14 that Jonathan was a warrior just like David, and when David slew Goliath (1 Samuel 18), Jonathan immediately made a connection. They had shared values. They became one in spirit. Jonathan made a covenant with David that basically said what's mine is yours. They developed an unselfish love for each other. Jonathan exhibited a deep loyalty to David when he intervened on his behalf when his father, King Saul, sought David's life.

In 1 Samuel 20, David and Jonathan expect that they may never see each other again and weep in each other's embrace. They were transparent. They weren't afraid to be emotional in the other's presence. Do you have a friend like that? I encourage you to seek a friend who shares your values, and work to develop an unselfish, loyal, and transparent relationship that the Lord will use to guide you through today's muddy waters.

**Battle to Fight, an Adventure to Live,  
and a Beauty to Rescue**



In the continuing parade of books from Christian authors for men comes a book that has taken the evangelical community by storm. Counselor and writer John Eldredge claims that men are wild at heart and desperately need to recapture this essential part of maleness. In his book, *Wild at Heart*, Eldredge claims that every man needs a battle to fight, an adventure to live, and a beauty to rescue.

Eldredge's triumvirate lines up quite well with Weber's four pillars, the Heart of the King, Warrior, Mentor, and Friend. Both Weber and Eldredge assert that a man needs a cause outside himself to fully live out the image of God in him. They just use different terminology.

However, *Wild at Heart* sometimes leaves you a little too wild. Yes, men need to be free to explore that wild side, but responsibility is not just a duty that shackles a man's God-given wildness. Eldredge can sometimes run roughshod over the state of men in the church and seems to encourage men to be little boys rather than grown men with both needs *and* responsibilities.

For instance, Eldredge uses many illustrations from physically demanding backcountry experiences to highlight his call to be wild at heart. Early in the book he retells how he and his sons faced the flooded, muddy, and debris-filled Snake River



with nothing but a canoe. He says, "I have never floated the Snake in a canoe, nor any other river for that matter, but what the heck. We jumped in and headed off into the unknown, like Livingstone plunging into the interior of dark Africa." [\[4\]](#) Wild? Sure, but reckless and irresponsible, too!

But despite the occasional excess, Eldredge uncovers that same need for a cause outside himself, and identifies it as a battle to fight, an adventure to live, and a beauty to rescue.

Eldredge proclaims that there is something fierce inside every man, whether it is slaying the dragons of business or whacking a little white ball on a golf course. Men naturally compete. If there is no winner, we quickly get bored.

The adventurous spirit is not just about having fun. Adventure requires something of a man. Deep down inside we wonder if we have what it takes, whatever the task that presents itself. Most men watch war movies wondering how they would have responded if presented with the same situation.

But there's more. Men need someone to fight for and with. A companion. A beauty. A helpmate. Adam had a great and wonderful world to explore at his creation. But God recognized that he needed something else, a helpmate suitable for him.

In summary then, at the heart of every man there is something fierce, wild, and passionate. But all this can only be properly harnessed as we seek a relationship with the Ultimate Tender Warrior, Jesus Christ. But in a fallen world, we are all walking wounded. If that is the case, does Eldredge have a recipe for healing?

## **Healing the Wound**

John Eldredge likens many men to a huge male lion in his local zoo. The lion, as powerful and ferocious as he is, is caged in a small cell where he lies around, bored except at feeding time, and is but a shadow of what he was created to be. In a

fallen world, where our enemy prowls around looking for someone to devour, most if not all men have been wounded at the heart of their masculinity. It has sapped their strength and put them on the sidelines.

Most often this wound comes from someone close to us, either a parent (usually the father), sibling, relative or peer. Most of us can remember someone telling us, either by words or actions, that we don't have what it takes to be a man. This can often be due to a series of events over an extensive period of time rather than to a single event. As a result, we go through life wondering if we have what it takes.

In today's culture, this wound can come from a school system that is telling our boys that there is something wrong with them. Boys are far more likely to be medicated than girls, and often it is only for just being boys. And with so many fatherless homes due to either physical absence or an extremely passive father who never gets involved, nobody is showing boys and young men what it means to be a man.

So men will often try to answer their question, to heal their wound, by going to some very unwise places. Some rebel, others try to earn their father's respect by becoming driven overachievers. Others retreat into passivity or are haunted by pornography or even drugs. Some search for their masculinity from women or maybe just one woman. But femininity can never bestow masculinity.

There ends up being a false self we create to distance ourselves from the question we fear, that gives others the impression we have it all figured out, when deep inside everything is mush. The answer lies in going to the One who created us for a very specific purpose and indeed knows who we are (Psalm 139). Jesus never shied away from acknowledging that He was totally dependent on the Father. Many times He said things like, "I and the Father are one." Or "I do nothing apart from the Father."

We have been created to be dependent on God, yet we as men continually try to convince ourselves we can do it on our own. In order to bring us to a point of recognizing our daily need to walk with Him, the Lord will bring us through trials that force us to depend on Him. The false self is stripped away until there is nothing left for us to do. Here and only here can the wound be healed. The Lord will walk us through an intensely personal awakening to reveal whom He created us to be if we will only trust Him.

So when troubles arise, instead of whining or complaining, we should ask, What is it the Lord wants me to see? What is He trying to teach me? What do I need to learn? Then we will be on the road to true masculinity. [\[5\]](#)

## Notes

1. Stu Weber, *Tender Warrior* (Sisters, Ore.: Multnomah Books, 1993), p. 43.
2. Ibid., p. 92.
3. Ibid., p. 92.
4. John Eldredge, *Wild at Heart* (Nashville: Thomas Nelson, 2001), p. 5.
5. This last section summarizes chapters 3-7, which are the heart of Eldredge's book, *Wild at Heart*. When reading *Wild at Heart*, one needs to be aware that Eldredge's language is sometimes imprecise and can leave the wrong impression. I'm convinced that Eldredge sees that the real battle we all must face is with spiritual forces, and that our physical tests of strength are only rehearsals for the real thing. But his book can be misinterpreted as an excuse for men to overindulge in risky behavior and some men to take dangerous risks they are not prepared for. For some, *Wild at Heart* can only serve as an appeal to the flesh.

So, is the tender warrior wild at heart? Yes, but not to the degree some choose to believe.

Eldredge uses a great illustration on page 83. "Yes, a man is a dangerous thing. So is a scalpel. It can wound or it can save your life. You don't make it safe by making it dull; you put it in the hands of someone who knows what he's doing." Only the Ultimate Tender Warrior, Jesus Christ qualifies.

©2003 Probe Ministries

---

# **The Controversy over Evolution in Biology Textbooks**

## **Texas, Textbooks and Evolution**

Public school textbooks are big business in Texas. Texas is the second largest purchaser of textbooks behind California. Texas also employs an extensive review process which involves input from the public. Independent school districts in the state of Texas can purchase whatever textbooks they prefer. But if they want state assistance in the purchase of textbooks, they'd better pick those texts that are recommended by the State Board of Education.

Publishers know that whatever books Texas approves, other states will adopt as well. Therefore the decisions by the Texas State Board of Education regarding textbooks influence what many students across the country will be reading over the

next few years. Publishers pay very close attention to what goes on in Texas.

Evolution has been a contentious issue before the State Board for decades. A few years ago, they passed a resolution that said textbooks were to be free from factual errors and that the information in the texts should allow students to “analyze, review, and critique scientific explanations, including scientific hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information.”

This certainly sounds scientific and fair. I mean, who doesn't want both sides of scientific controversies presented? Any “scientist to be” needs to be able to analyze, review, and critique scientific explanations. Scientists rarely want to just take someone's word for something. Scientists tend to be skeptical in nature. That's a good thing. Students ought to be encouraged and trained to think this way.

That is, they ought to be trained to think this way about everything in science, except evolution. Evolution has become the unassailable myth of modern science. No dissension allowed. No controversies accepted. No challenges tolerated. Evolution is a fact and anybody who doesn't think so is ignorant, dishonest, or religiously motivated.

But for some reason, skepticism about evolution and Darwinian evolution in particular just won't go away. The dissenters are also growing in number and levels of education. So when the Texas State Board of Education announced its two public hearings in the summer of 2003, the battle lines were clearly drawn. Skeptics of Darwinism came loaded with careful examinations of the textbooks up for adoption, pointing out inaccuracies, falsehoods, and skimmed-over controversies. No one came to include creation or intelligent design into the textbooks.

Defenders of evolution came loaded with little else besides crude attempts to discredit their critics and scary words of warning about attempts to get religion into the science textbooks.

## **What's Wrong with the Textbooks As They Are?**

If you have occasion to pick up a high school biology textbook, you quickly realize that the process of writing it must be a daunting task. The amount of detailed information they contain today over a wide range of biological phenomena is truly staggering.

The reality that they contain errors or out of date material can be easily understood. You would think that authors and publishers would welcome those who spot these problem areas and take the time and effort to point them out. For the most part this is indeed the case. Except when the errors concern the presentation of evolutionary theory. Pointing out factual errors, exaggerated claims or poor logic in the presentation of evolution suddenly becomes suspect. One's motives should be questioned. Evolution is a fact, after all, and surely no one thinks that evolution as presented in textbooks should be altered in any way.

I'm being facetious, of course. Evolution should be open to scrutiny as much as any other area of biology, but it isn't. Some mistakes in biology textbooks have persisted for decades, despite efforts to point them out and seek their removal or correction.

A classic example involves the Miller-Urey experiment. In 1953, Harold Urey and Stanley Miller published the results of an experiment that was meant to simulate the production of biochemicals necessary for life from gasses that were thought to be in earth's early atmosphere. Among a host of meaningless organic compounds, Miller and Urey found a few amino acids,

the building blocks of proteins.

The experiment caused quite a sensation and launched the origin of life field with a bang. Over the years, however, numerous problems showed up that invalidated the experiment. Chief among these problems was the determination that the atmosphere they used—ammonia, methane, water vapor, and hydrogen gasses—did not represent the early atmosphere. These hydrogen rich gasses were replaced with carbon dioxide, carbon monoxide, nitrogen, and water vapor. When these gasses are used, the experiment is a dismal failure. Trace amounts of the simplest amino acid, glycine, sometimes appears, but not enough to get excited about.

All this has been known since the late 70s. But over thirty years later, textbooks represent the Miller/Urey experiment as if it still represents a realistic simulation. Why? Because it's the only experiment that works. And there needs to be a naturalistic story of where life could have come from.

Other problems remain in the infamous and fraudulent embryo drawings of Ernst Haeckel, the newly discovered problems with the peppered moth story, the startling evolutionary problem of the Cambrian explosion, and many others. Some of evolutionists' most cherished examples of evolutionary principles have fallen on hard times.

## **A Public Hearing in Texas in July 2003**

The Texas State Board of Education is a powerful group of people. Every six years they evaluate textbooks for use in the Texas public schools, and many private schools and public schools from other states follow their lead. Part of the reason for this is the extensive review process the board employs.

Not only do the fifteen elected Board members review the texts, but a committee of educators from the Texas Education

Agency also reviews them, and the public is invited to state its opinions as well. The Board reviews textbooks every year but they cycle through several categories every six years. The year 2003 was the year for biology textbooks.

I attended the first public hearing on July 9th in Austin, Texas. Citizens of Texas who wish to testify need to sign up about two weeks prior to the hearing. Each testifier is allotted three minutes, which is closely timed, and then a few board members may ask a few questions.

Three minutes isn't very long. It's about the length of one of our daily radio programs. So whatever you need to say, you'd better say it concisely and quickly. I briefly presented my scientific credentials and addressed problems with the Miller-Urey experiment, the Cambrian explosion, and the mutation/natural selection mechanism of evolution.

I kept my remarks strictly along factual lines and discussed the evidence, with no mention of a Creator or Intelligent Design. But before the meeting even started I knew I was in for a long afternoon. At noon, one hour before the meeting, a group from The National Center for Science Education (NCSE) gave a press conference warning the media to expect another attempt from pseudo-scientists to try to include creationism into the textbooks.

Actually of the forty or so people signed-up to testify, only three of us were there to criticize evolution and no one was there to argue for creation. In the minutes before the meeting there was suddenly a horde of media looking for me and asking for interviews. Thanks to the NCSE I was provided with opportunities for nearly a dozen interviews, mostly TV. I was able to explain our side of the story and correct the NCSE's distorted paranoia.

The defenders of evolution came to say that evolution ought to be left alone: don't cave in to the pressure! But who was



exerting the pressure? There were only three of us and over thirty of them. We came with scientific criticisms. They offered little else besides blatant misrepresentations and character assassinations.<sup>{1}</sup> These testimonies primarily set the stage for the September hearing.

## **A Second Public Hearing in September 2003**

A major player in the entire hearing process was the Discovery Institute ([www.discovery.org](http://www.discovery.org)), a public policy institute out of Seattle, Washington. Discovery sponsors a Center for Science and Culture that provides limited funding for skeptics of Darwinism and proponents of Intelligent Design. I have received two limited fellowships from Discovery to help write a new edition of my book with Lane Lester, *The Natural Limits to Biological Change*. It was Discovery that contacted me about possibly testifying at the July 9th hearing.

Because of the intense media coverage of that hearing, the folks at Discovery spent a great deal of time addressing the media, correcting their errors and explaining the real story. As the September 10th hearing approached, Discovery sent out press releases and sent a team to Texas to hold press conferences and potentially testify before the State Board of Education.

Because of all the media attention, that ranks of testifiers swelled to unmanageable portions. Over 150 people signed up to testify and they all expected their three minutes. You do the math! This was going to be a long meeting. Most of those associated with the Discovery Institute and a Texas-based organization, Texans for Better Science Education ([www.strengthsandweaknesses.org](http://www.strengthsandweaknesses.org)), gained the early testimony slots when the board members were most alert. The meeting dragged on until 1 a.m., a full twelve hours.

Once again, those of us criticizing the textbooks came prepared with specific criticisms of the textbooks and the

other side simply wanted to say that we had no place at the table of discussion and should be ignored because we are pseudo-scientists and religious fundamentalists.

Most distressing of all was a pastor from a large Southern Baptist Church in Austin who came to tell the Board that evolution was of science and creation was of Genesis and faith and that the two had nothing to do with each other. He went on to add that he and everyone else knew that the dissenters from evolution were only there to protect their religious beliefs. He received a thunderous round of applause from the theistic evolutionists, agnostics and a theists in the crowd.

How sad that this brother in Christ was so deceived and even pretended to know why I was really there, having never spoken to me, nor had we even ever met. This broke my heart, as did other pastors who came to help but only showed their lack of knowledge about evolution and ended up hurting more than they helped.

While many evolutionists embarrassed themselves by exhibiting a childish paranoia, so did many Christians who just really didn't understand the issues. I'd love to do a Probe Ministries [Mind Games Conference](#) in all these churches—they need it.

## **Was Anything Accomplished?**

There was heavy media interest from July through early November when the Texas State Board of Education made their final decision. Special interests from both evolutionists and those dissenting from evolution were involved.

Those who wanted to strictly follow Texas guidelines to teach evolution, but remove factual errors and include both strengths and weaknesses of evolution hoped to vote on each textbook individually. But the more liberal majority decided to vote on adopting the Texas Education Agency's

recommendation to approve all eleven textbooks. This motion passed by a vote of 11-4. Only two textbooks had made sufficient changes to be judged “conforming.”[{2}](#) The other nine would have been judged “non-conforming,” which would have still made them eligible to be purchased with state funds. Only a book judged “rejected” would not be purchased by the state.

This was a small setback. But some significant changes were made. The fraudulent Haeckel drawings of vertebrate embryos, suggesting far more evidence for evolution than actually exists, have been virtually removed entirely. The fraud has been known for over 100 years. Two textbooks (Holt and Glencoe) have now inserted acknowledgments that the Miller-Urey origin of life experiment was based on ideas about the earth’s early atmosphere no longer accepted by scientists. Another textbook has qualified an earlier claim made about evolutionary intermediates. The original textbook claimed that “since Darwin’s time, many of these intermediates have been found.” The revised text now reads: “Since Darwin’s time, some of these intermediates have been found, while others have not.”[{3}](#)

The journal *Science* matter-of-factly reported, “In response, some textbook publishers made minor changes, including replacing embryo drawings with photos and dropping the term ‘gill slits.’ One also eliminated the assertion that Darwin’s theory is the ‘essence of biology.’”[{4}](#)

While many of these changes are small, the public perception of the debate seems to be changing as evidenced by this statement from a *Dallas Morning News* editorial from November 5th:

*“This ought to be easy; science is supposed to deal solely in facts. But the teaching of evolution is so entangled with politics that warring factions can’t even agree on the facts. (What did the flawed Miller-Urey “origin of life” experiment*

*prove, if anything, for example?) This is an injustice to the people of the state, who have a right to expect their children's biology textbooks to be a straightforward presentation of the most up-to-date scientific information, facts not privileged from a religious or anti-religious perspective."*

Other errors and problems still remain.[\[5\]](#) But this has been a good start.

#### Notes

### 1. Sample testifier statements:

- *Steven Schafersman, President of Texas Citizens for Science: "I am aware that the Discovery Institute, a creationist organization out of Seattle, Washington, has become involved in the Texas education process just as they did recently in Kansas and Ohio. They have prepared written testimony about the books submitted here and apparently deputized a member of a Texas creationist organization, Probe Ministries, to speak on their behalf." (Hey, that's me!)*
- *Ms. Amanda Walker: "So what we are really doing here is talking about using the political process to override the science process to suit creationists whose theories can't stand up in the global scientific community"*
- *Dr. David Hillis, Professor of Biology, UT Austin: "The objections to evolution in textbooks that you have heard are not about science or facts. They are about pushing a religious and political agenda."*
- *Ms. Kelly Wagner: "If you consider at all adding intelligent design to any of these textbooks, I would like you, again, this is a very, very personal*

*question. I would like you to think, am I furthering medical research? Or am I contributing to Kelly Wagner's early death?" Ms. Wagner felt that "weakening" evolution in the high school biology textbooks would compromise medical research and therefore that research on her heart condition could be compromised.*

2. Most likely these would have been the Holt Biology book and the Glencoe Biology book, both of which made numerous constructive changes.

3. Holt Biology, p. 283

4. Constance Holden, "Texas resolves war over biology texts," *Science* Vol. 302(Nov.14, 2003):1130.

5. Use this website from Discovery for full report on the Texas debate. <http://www.discovery.org/csc/texas/>.

©2003 Probe Ministries

---

## **"Is Cloning Inherently Evil?"**

**I have several questions about cloning.**

**1) I understand the dangers of cloning, which in themselves are enough to warrant banning the practice. But I'm trying to understand if there is there anything inherently evil or anti-biblical about cloning (for reproductive purposes). Is it simply a technology, comparable to in vitro fertilization, that could be used for good or evil, or is there something inherent in it that is against God's will? (Perhaps removing the nucleus of the original egg cell?...I just don't know)**

2) I'm wondering about the biblical laws against sexual relations with a close relative (brothers and sisters, nieces and nephews, etc. from Leviticus 18). Is it true that children born to parents who are close relatives are more likely to be deformed? And if so, is there a known reason this occurs genetically? And to relate that to cloning, is this possibly why clones are often deformed? I wonder if the deformations are a result of problems with the "process" or if there's a "built-in" reason that cloning will always, on the whole, fall short of sperm-and-egg conception?

3) How long would the cloned human embryo in November 2001 have lived in order to divide to six cells? Is that a matter of seconds, minutes, hours, days? I imagine it's very short but wondered how short.

You ask some good questions. Here are my brief responses.

*Is there anything inherently evil or anti-biblical about cloning?*

1. The only inherent evil in cloning that I see is the resulting devaluing of the individual, since you have brought this particular person into existence for a reason that is beyond simple reproduction in marriage. This places unrealistic expectations on the clone and tells them their value lies in those expectations and not on their intrinsic value as a human being. Some hold that the process itself is evil since it clearly deviates from the God-ordained union of sperm and egg. But that is also the case with identical twins. The second twin was the result of a budding process delayed from the initial union of sperm and egg, similar to cloning.

*Is it true that children born to parents who are close relatives are more likely to be deformed? And if so, is there a known reason this occurs genetically?*

2. Children resulting from incestuous relations do have a higher incidence of genetic deformities which is the reason for state laws forbidding them. All of us harbor harmful recessive genes in single copies that are not expressed because they are masked by normal dominant gene copies. Siblings and first cousins will share many of these same recessive genes because the genes came from the same parent or grandparent. But when close relatives have sexual relations and a child results, these shared family recessive genes can be paired in a homozygous condition which allows the recessive harmful gene to be expressed. Such children are not always born with these defects but the chances are much higher than normal.

But this probably has little to do with the problems faced by cloned embryos. Nobody really knows what is going wrong with the cloned embryos but my suspicion is that the process of removing the original nucleus in the egg and the subsequent placement of the new nucleus in the egg cell disrupts the complex and intricate arrangement of important signal proteins in the egg cytoplasm and membrane. Rearrangement of this critical spatial orientation could put important proteins in the wrong places, meaning early development signals are missed or misplaced. This would have devastating consequences for the embryo. If this is the case, then at least current cloning techniques may never be able to escape the low success rates currently experienced.

*How long would the cloned human embryo in November 2001 have lived in order to divide to six cells?*

3. The cloned embryo which reached the six cell stage was probably no more than 3-4 days old when it stopped dividing.

Hope this helps.

Ray Bohlin  
Probe Ministries

---

# The Galapagos Islands: The Bohlins' Visit



The Galapagos Islands, off the coast of Ecuador, are where Charles Darwin received the inspiration for the theory of evolution. In observing the islands' ecosystem and how its bird and reptile inhabitants compared to similar South American cousins, Darwin assembled what has become the driving philosophy of science.

In May 2003, Dr. Ray and Sue Bohlin visited the Galapagos Islands with a different perspective, focusing on intelligent design and the natural limits to biological change. Here is their report.

[1 – Why Visit the Galapagos Islands?](#)

[2 – Thursday PM: Bartolome](#)

[3 – Friday AM: Punta Espinosa](#)

[4 – Friday PM: Tagus Cove](#)

[5 – Saturday AM: Punta Moreno](#)

[6 – Saturday PM: Urbina Bay](#)

[7 – Sunday AM: Darwin Research Station](#)

[8 – Sunday PM: Santa Cruz Highlands](#)

[9 – Monday AM: Beach Visit](#)

[10 – Galapagos Wrap Up: ICR Lecture, What It All Means](#)