

# God and SCIENCE By Jerry Thomas and Dianna Wineinger



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**W**e are Christians who work as scientists. Some people question how we can be both Christians and scientists. How can we believe in something we cannot see?

Science, in fact, was born out of the desire to know God. Its founding leaders, Copernicus, Kepler, Newton, Boyle, Pascal, and others who birthed modern-day science were Christians. They embraced the notion that the heavens genuinely declare the glory of God (Psalm 19:1-6), and that the exploration of the world would reveal the character of God and lead them to a greater understanding of God (Romans 1:20, Job 12:7-11). Many scholars contend that other religions stymied the development of science and that the Christian belief in a rational, purposeful, and divinely-ordered world provided fertile soil for the growth of science.<sup>1-5</sup>

In the past 50 years an explosion of technology led us to trust science; but what is science? Science provides a way of exploring and organizing the world through the scientific method. First a hypothesis is proposed. The hypothesis is tested by observation and experimentation. For example, if one hypothesizes that an egg dropped from the top of a building will break, one can perform an experiment by dropping an egg from the top of a building to see if the egg breaks. Others can independently perform and verify this experiment. As new data comes to light the hypothesis and conclusions can be revised. Suppose the aforementioned egg landed onto a mattress of foam and did not break, but did break when landing on pavement. The original hypothesis and conclusion can be refined to include both observations, (i.e.) an egg landing on foam will not break, and an egg landing on the pavement will break.

The scientific method, however, is a prisoner of the present. The method can provide inference only of the past and predict only what might happen based on what is known in the present. The scientific method does not lend itself well to questions that cannot be explored by observation and experimentation, nor is it suited for questions that involve single events such as miracles.

Nonetheless, data uncovered through the scientific investigation of atoms, chemicals, cells, life, cosmos, and even human consciousness, point to the existence of an intelligent designer and creator. When investigating the inner workings of the cell, we observe a highly complex and efficiently ordered machine. A library of information is contained within the four letter language of DNA, or the storehouse of genetic information. This language has more capacity and power than

any computer. It has been universally concluded that information cannot be assembled by random acts, but must be directed by forces. Proteins made of amino acid building blocks utilize that information. Similarly even if one had all of the components for life stored in a bag one cannot assemble them into working systems. A garage full of car parts is still a garage full of parts – not a working car.

Life is simultaneously fragile and robust. For example, a single amino acid mutation or building block error in protein assembly leads to cystic fibrosis, a terminal genetic disease. Yet a host of repair mechanisms are constantly active in maintaining the integrity of the genetic library, the DNA. Likewise, a multitude of healing mechanisms in the body are also constantly on alert. We are both equipped and vulnerable at the same time. Accident or design?

The evidence from physics, astrometry, and a study of the cosmos (origin of the universe), indicates that we are a privileged planet in a privileged galaxy. The galaxy, solar system, sun, and earth all conspire to provide a rare environment finely tuned for life. The earth's location, size, composition, structure, temperature, internal dynamics, and intricate environmental cycles all testify to the exquisitely and precariously balanced set of circumstances and forces that cumulate to sustain life. A change in the earth's distance from the sun by five percent would be disastrous. Animal life would be impossible. If the sun were too close, water would evaporate. The increased heat would produce a runaway greenhouse effect. If the sun were further away, the decreased temperature would cause increased carbon dioxide and decrease the amount of oxygen.

The circular orbit of the earth around the sun is critical in maintaining a balance of temperature and climate. Elliptical orbits result in large extremes of temperature and climate; but the circular orbits appear to be uncommon. The moon, tides, and earth's tilt are crucial in maintaining the convection of air and

water currents, which are critical in temperature and nutrient redistribution. Carbon, nitrogen, and oxygen cycles are finely balanced. The intricate and life sustaining cycles of the ecosystem are interlinked.

The earth occupies a sheltered position within the solar system. Jupiter, with 300 times the mass and gravitational pull of the earth, deflects incoming comets and objects from the earth's path. The sun is rare. The sun, a yellow G dwarf star with optimal proportion of blue and red light to sustain photosynthesis, is a rarity that exhibits a high level of consistent and stable intensity. In contrast, the more common red dwarfs exhibit large intensity changes due to flares, resulting in dramatic temperature and radiation swings. If the earth's sun was a red dwarf, life would not exist. The number of finely tuned and balanced events and activities science has uncovered is staggering. Even the location of our solar system within the galaxy provides a safe haven from intense radiation and energy bursts.

Our solar system occupies an optimal position between the danger zones of star formation and the cold outer fringes. The circular orbit of our sun keeps the earth within this safe zone. In elliptical galaxies one observes irregular orbits that offer no safe harbor.

From the world of physics we learn that all of the seemingly arbitrary and unrelated constants in physics have one strange thing in common: They are precisely the values needed for a universe capable of producing life. Nobel Laureate Arno Penzias has summed the data in this way: "Astronomy leads us to a unique event, a universe which was created out of nothing, one with very delicate balance needed to provide exactly the conditions required to permit life and one which has an underlying (one might say supernatural) plan."<sup>6</sup> In considering the "big bang theory" American astronomer Robert Jastrow (at the time an agnostic) was forced to concede that

although details may differ, "the essential elemental in the astronomical and Biblical accounts of Genesis is the same: The chain of events leading to man commenced suddenly and sharply, at a definite moment in time, in a flash of light and energy."<sup>7</sup> One is led to conclude the earth is a rare place and the mind-boggling convergence score of extraordinary coincidences that make intelligent life possible on earth cannot possibly be an accident.

From the building blocks of the cell to the galaxies of the universe, the scientific exploration of the world around us continues to paint a picture consistent with the existence of intelligent design and a designer. In the end, science does not prove the existence of God. If science could prove the existence of God, where would faith be? I would conjecture the gap is by design because God requires faith (Hebrews 11:6).

Science not only points us towards God but reveals aspects of God's heart and nature. I am in awe of the complexity, the pallet of color, the intricacy and details of shape, the variety and diversity of the world in which I walk. Consider the color and shape of a flower's petals. Marvel at the delicate arrangement and construction. Reflect on the beauty and design. Yet we are more precious to God than the flower (Luke 12:27).

## Psalm 8:3-5

**When I consider your heavens,  
the work of your fingers,  
The moon and the stars, which  
you have set in place,  
What is man that you are  
mindful of him,  
The son of man that you care  
for him?  
You made him a little lower  
than the heavenly beings  
And crowned him with glory  
and honor.**



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<sup>3</sup>K. L. Woodward, "How the Heavens Go," *Newsweek*, July 20, 1998.  
<sup>4</sup>D. Ratzsch, *The Philosophy of Science* (Downers Grove, Ill.: InterVarsity Press, 1982) & *The Battle of Beginnings* (Downers Grove, Ill.: InterVarsity Press, 1982).  
<sup>5</sup>O. Helweg, "Scientific Facts: Compatible with Christian Faith?" vol 125 *USA Today Magazine*, 1997.  
<sup>6</sup>H. Marhenau & R.A. Varghese, ed. "Cosmos, Bios, and Theos" (LaSalle: Open Court, 1992).  
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