## Design Hypothesis and Origin of Life

I am a physical scientist who is well trained in the using the reductionist approach based on the belief that scientific explanations should be limited to natural cause and effect of matter and energy. This is sometimes referred to as naturalistic materialism. Lessons from history show that naturalistic materialism has led to our current deep understanding of the natural world from the working of stars and the solar systems to understanding the laws that govern atoms and quarks. These scientific advances were possible because theories were limited to naturalistic materialism. History has also shown that as soon as one introduces non-naturalistic belief systems to explain questions at the frontiers of scientific knowledge that scientific investigation is sidetracked, knowledge and understanding stagnate.

It began to dawn on me that there is a problem naturalistic materialism while watching the Nobel Lecture given by Robert Lefkowitz who with former student Brian Kobilka was co-winner of the 2012 Nobel Prize in Chemistry. The prize was given "for the studies of G-protein-coupled receptors." This family of receptors are responsible for sensing hormones. To quote (Scientific Background on the Nobel Prize in Chemistry: Studies of G-Protein-Coupled Receptors) "Lefkowitz and coworkers made a seminal contribution when they cloned and sequenced the first receptor for epinephrine. Based on this work it became clear that GPCRs form a family of proteins with a close structural relationship. Although the signals picked up by GPCR'ss differ widely- ranging from photons and odourant to neurotransmitters, hormones and peptides – the transmission of the signal into the cell is accomplished in a highly similar manner by a common structural framework of seven transmembrane helicies." Stated simply there was one family of receptor complexes of proteins, but multiple inputs and multiple responses. I was struck by the biochemical complexity of cellular responses in contrast to the relative simplicity of the molecular mechanism for transfer of information from the cell environment. Could evolution rooted in naturalistic materialism explain the development of this beautiful design of interlocking molecular complexity?

Consider the evolution of the universe as explained by the Big Bang Theory. This story line of the history and structure of the universe is converging on design. The theory gained acceptance in the 20<sup>th</sup> century as the only viable explanation of the history and structure of the universe. The opening decades of the 21<sup>st</sup> century have strengthened the theory. It is now possible to trace the origin and evolution of space-time and matter-energy, quarks and electrons into atoms and molecules and evolution of this mater into Earth, Sun, stars and galaxies from the first fractions of a second in the beginning to the present time. The science, while not complete is sufficient and the story line will only become refined. Some surprises emerged but only strengthened the story line. Dark matter, dark energy, and massive black holes at the center of galaxies for example. As the theory is refined the case for design is emerging from the evidence that universe had a beginning and is fine tuned for life beyond any reasonable chance probability. (Infinite multiple universe is a throwback to the abandoned infinite universe argument)

Now it seemed to me that the origin and complexity of life would fit nicely into this naturalistic reductionist materialism picture based on the theory of evolution. After all if the universe is fine-tuned for life it would be reasonable that given the billions of years available then just as we can explain the origin of the elements in the periodic table we would eventually explain the origin of life by chance probability since it is composed of inanimate matter at the most fundamental level. But there was the

## Design Hypothesis and Origin of Life

lingering issue of interlocking complexity and mutual dependency of function at the molecular level in all living organisms.

Then I read *Signature in the Cell* by Stephen Meyer. In a life time of study Meyer investigates the viability of the origin of life theories. He recognizes that the real enigma to be explained is the origin of the information carried in the cell's DNA instructions that makes life possible. Using the same reasoning that scientist use to develop theories of one-time events that occurred in the past, for example in geology, along with probability theory he systematically eliminates old and present theories of the origin of life based on naturalistic conditions over billions of years. What is left is the design hypothesis for the origin of life. Biologists have used metaphoric language that implies design to describe living systems. However, the theory of evolution is invoked to explain the development of complex life from simpler forms. This is known as macroevolution. All living systems appear to be designed. As Meyer points out Neo-Darwinists will admit this appearance of design in biology. However, and thankfully, bioscience has sought natural, material cause and effect relationships which have led to the kind of studies that revealed the workings of cell receptors above. Modern medicine is built on these cause and effect relationships. Based on scientific reasoning Stephen Meyer is saying we must accept the design hypothesis for the origin of life as a foundation for future scientific investigations.

I have a new scientific understanding of intelligent design. Cosmology ultimately leads to the design hypothesis. Does the irreducible complexity of biology also lead to design? Every living organism had its own instruction set. The molecular structure of the double helix explains the replication of the information set for propagation of living organisms. The combination of random mutation of the DNA structure and the pressure of natural selection is observed within species (microevolution) and supports Darwin's theory of evolution. This powerful underlying naturalistic material explanation remains and cannot be dismissed. However, chance random probability cannot explain the origin of life. Is it possible that scientific evidence will eliminate macroevolution as a viable explanation of the molecular complexity of life?

The theory of macroevolution as emerged as the most viable explanation for a wide range of observation. A good site that takes a critical look at the evidence and testable predictions of the theory of macroevolution is found in <a href="The Talk Origins Archive">The Talk Origins Archive</a>. Patterns in organisms from the molecular level to the anatomical level are best explained using naturalistic materialism by the theory of universal common descent. That is to say macroevolution of all living organisms. Numerous examples of these patterns present a picture that is best explained by common descent and offer predictions that can be tested by further investigations.

From Romans 1 we read "<sup>18</sup> For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who by their unrighteousness suppress the truth. <sup>19</sup> For what can be known about God is plain to them, because God has shown it to them. <sup>20</sup> For his invisible attributes, namely, his eternal power and divine nature, have been clearly perceived, ever since the creation of the world, <sup>[2]</sup> in the things that have been made. So they are without excuse." If this is true then I must conclude that the study of God's creation at every level should lead to a revealing of the God's attributes of eternal power and divine nature. Indeed it seems science with its method of hypothesis and testing and

## Design Hypothesis and Origin of Life

underlying search for natural causes does reveal those same attributes of God that we find in the Bible. Now it is fascinating that just as young earth creationist find that they must stretch their alternative explanation of the evidence for the history and structure of the universe revealed by science so it seems that the scientific community may be faced with the same stretch to hold to naturalistic explanations for the origin of the universe and life.

God is revealed in the Bible as the creator and sustainer of life. I could accept theory of macroevolution as within his providence to accomplish his purposes. However just as in cosmology, is biology slowly moving to revealing design? Time will tell, right now creation would appear to be designed for God's purpose. "Listen to advice and accept instruction, that you may gain wisdom in the future. Many are the plans in the mind of man, but it is the purpose of the Lord that will stand." Proverbs 19: 20-21. The scientific evidence over the last 100 years increasingly reveals the evolution of the universe, the earth and the common descent of organisms. Given the mounting evidence and testable nature of these theories, the evolutionary process over deep time is not likely to be undone by further discoveries. However the door is open for God's intervention in the process and it may be that signatures of that intervention will become a necessary conclusion of the scientific evidence.