**EVOLUTION OF LIVING SYSTEMS.**

Most of the questions asked regarding evolution are not really evolution related but are more about religious issues.

Is evolution and the existence of God reconcilable?

Does evolution exclude the necessity of a God to explain life?

Most of the questions and answers ignore a very basic characteristic of life, a characteristic that also has a connection to the Nobel Prize.

Life is controlled and sustained by a code , the genetic code. Evolution is dependent on alterations of the genetic code. Without the genetic code, evolution is impossible.

An important frequently neglected discovery is that the genetic code contain code that protect its major code carrier against the carrier's inherent instability. This is the connection to the Nobel Prize, to the 2015 Chemistry Prize.

An analogy will be having a computer with an unstable hard disk . This hard disk will need code to protect the OS ( operating system) against code corruption.. Without the OS's protective code the
hard disk will be useless because the OS will quickly become corrupted.

An even more comparable analogy will be a computing device with unstable ROM (read only memory) and RAM ( random access memory chips. The manufacturer
of the device will have to design methods to protect the code against corruption.

DNA without code protection will quickly loosens its value as a code carrier. The code protection is in the form of enzymes that do proof reading and error correction.. These enzymes are DNA specific enzymes, only protecting the DNA molecule and not other code carriers. DNA molecules would be useless as code carriers without these enzymes. These enzymes changed it into an excellent self duplicating reliable code carrier.

Another important event that is supportive of the necessity of genetic code's very early presence on the DNA molecule , is the indications that a minimum genome size (minimum amount of genetic code) is necessary to sustain cellular life. ( The J Graig Venter Institute's minimal cell).

It is therefore highly probable that the genetic code predates life. In spite of research and postulations, the scientific method is still failing to contradict this probability.

A analog is again the unstable computer memory on which AI (artificial intelligence) is programmed. . Before the code on the memory banks can expand ( evolve) , a minimum size of binary code is necessary in the computer in which the memory devices reside . Without code protection it will never be able to function. Ai programming on this device would be impossible..

It won’t be able to except, execute and remember new code.
An OS of which the code is protected against corruption is a basic requirement.

The same with a cell , it won’t be able to function properly without a minimum amount of genetic code. The minimum amount of code can be regarded as the OS of life.
Without the OS of life , evolution would probably be impossible.

If the genetic code evolve according to present theories the early code carriers had to have foreknowledge that the final code carrier would be unstable . They then had to have the foresight to know how to evolve enzymes specific for DNA that would be able to protect the code and the code carrier. ( the DNA molecule).

The questions about the evolution of life would be more relevant if it is changed to the following: Was the evolution of life possible without foreknowledge that DNA would need enzymic protection to be an effective code carrier?

It is important to realize that an evolutionary process does not exclude intelligent involvement.. The evolution of aviation, of transport systems , of binary code controlled devices etc. are all examples of evolutionary processes, The evolution of life is just another evolutionary process and the process itself doesn’t confirm or exclude intelligent involvement. ( The creation events described in Genesis refer to , is also a series of events resembling an evolutionary process).

The evolution of aviation since the Wright Brothers and the other processes referred to in the previous paragraph, are examples of intelligent guided evolutions.

There are criticisms from certain corners against The Royal Swedish Academy about the reasons given for rewarding the 2015 Chemistry Prize, especially the referral “ that life would be impossible without the code protection enzymes”.

One of the major critics is Professor Laurence Moron.
The following is quote from his “Sandwalk” blog::

“It's simply not true to say that the rate of spontaneous decay of DNA makes the development of life on Earth impossible. If that were true, then DNA repair enzymes would have had to arise at the same time as DNA and that didn't happen. It may be true to say that once large genomes evolved, DNA repair and accurate DNA replication became selectively advantageous but that's not what the Nobel citation says. “

An important question to ask is :”Is Prof Moran’s comment a scientific fact or mere speculation?”

Apply a simple mental experiment to Prof. L A Moran’s comment on the 2015 Chemistry Nobel Prize.

If DNA evolved according to current hypotheses , the genetic pool (large genomes) Prof, Moran

refers to had to have code carriers , code carriers able to store the amino acid sequences of the enzymes able to induce the synthesis of DNA from the code carrier RNA.

For DNA to emerge, the following enzymes had to evolved and had to be stored on large chunks of ? RNA (or other code carriers) .
For DNA to exists , it needs the following ( according to our present knowledge):

Reverse transcriptase or a similar enzyme to transcribe a RNA to DNA.

Reliable memory on the RNA ( or other code carriers) to keep on remembering without code corruption, the code necessary to produce the enzymes that are necessary to be able to produce the large amount of DNA required by Doran's large genome pool.

For DNA to self replicate and to form a large DNA genome, a myriad of enzyme systems are needed.
(DNA polymerase) All these enzymes are large proteins, requiring large stable code carriers to evolve on and code protection to prevent code corruption. The code necessary for the production of DNA polymerase also reside on the DNA molecule. DNA can't replicate or duplicate without this code.

A reliable manufacturing plant to produce deoxyribose. Code for another enzyme "ribonucleotide reductase " necessary.

Consult a Biochemistry textbook to discover the complexity of DNA metabolism.

Imagine all these large enzymes necessary, evolving on chunks of unreliable code carriers without code protection, until thy all come together in a DNA molecule with all the necessary protection mechanisms intact. Mechanisms that evolved on inferior code carriers without the code protective systems in place.

A miracle, magical series of highly improbable lucky accidents or the presence of an eternal intelligence?

It is also important to realize that the protective code primarily protects the genetic code. DNA polymerases without proof reading and error correction will still produce DNA , but genetic useless DNA. Eventually (rather quickly due to DNA's inherent instability) the DNA polymerase enzyme's code will also become corrupted and DNA production will ceases long before Prof. Daran's large genome had time to evolved.

Evolution clearly is an evolutionary process inducing changes that occurred over time. The "mystery" or "enigma" of evolution is how did it start, how was the first cell assembled? An analog would be the Wright brothers. They brought all the components necessary to keep a heavier than air machine, airborne in a sustainable controlled manner , together. Their first "The Flyer" was the result and it initiated the aviation evolution.

The actual answer that the questions regarding evolution are looking for, is the starting point of evolution. Was it and what followed intelligently engineered or was it a mindless process with some “lucky accidents..

In my view all the recent research are pointing to an ever increasing probability of intelligent involvement . That is the why “sceptic” atheists like Prof, Doran get upset because of their cynic views against the possibility of intelligent involvement. . Are they sceptics or cynics?

A genetic code that preceded life, is an atheist’s worst nightmare .

As Prof Doran puts it, regarding the statement that life might have been impossible without DNA protection: “The Intelligent Design Creationists are making a big splash over statements like that because, if true, it strongly suggests intelligent design,”

It is for the reader to decide : Mindless or intelligently designed?

Who believed our report? To whom was the arm (power) of the creator revealed?

To the cynic sceptic revealed as a mindless quantum energy accident or to the theist as the work of the Eternal creative intelligence.

All life from cells, all cells from cells. All cells need an OS ( operating system) contained in the genetic code.