12. Complex cells

When prokaryotic cells such as bacteria arrived on Earth, life for the next 1.5 billion years did not advance much. Suddenly, about 2 billion years ago life started changing. On Earth, or rather in the water, new and more complex organisms appeared called eukaryotic cells. The eukaryotic cell is very different from bacteria because it has a very intricate structure and includes many new constituents such as a nucleus, mitochondria, chloroplasts and other organelles. Eukaryotic cells also have a bigger and different genome structure than bacteria.

The main feature of the eukaryotic cell is its ability to form higher, multi-cellular organisms. Prokaryotic cells, while living together in colonies, were never able to link together to form a different organism. But the new cell enabled the construction of higher organisms such as plants and animals. It became the building block of all higher forms of life including man. What is amazing is that the human brain, liver, skin, heart, kidneys, etc. are all built from the same type of cell which adapted to perform various tasks. But because all the cells are the same, in the body they can cooperate with each other as one entity. So the arrival of the complex cell was a revolutionary step in the development of life.

The functioning of DNA in eukaryotic cells is very different from bacteria. DNA protein coding sequences in the eukaryotic genes are not continuous as in bacteria genes but they are separated by non-coding sequences called introns. Each gene may even have several introns in the sequence. However a copy of the gene (mRNA) cannot be sent to the ribosome because it would cause an error in the protein chain. Therefore, the non-coding introns must be removed from the mRNA and the coding pieces must be spliced together. This work is done by a huge and intricate molecular machine called the spliceosome. The spliceosome is a complex consisting of more than 700,000 atoms. The whole process of splicing is still full of mystery and it is believed that the spliceosome is the most complicated molecular machine.

The introns play a very important function because they take part in alternative splicing. Alternative splicing is a process that results in a single gene coding for multiple proteins. In this process different coding parts of the gene can be spliced together in a different sequence producing a new protein. As a result of alternative

splicing the human genome generates 4 times the number of proteins than the number of genes.

The arrival of the eukaryotic cell is shrouded in great mystery. Evolutionists have had to admit that it could not have arisen as a result of evolution. Therefore they invented a new, non-evolutionary mechanism called symbioses.

It was proposed by Prof Lynn Margulis that the eukaryotic cell came into existence as a result of symbioses between bacteria. In her opinion mitochondria were bacteria which were swallowed by another type of bacteria but were not digested but welcomed as equal partners and started living inside the parent bacteria. This was a very smart solution to overcome the credibility of the evolutionary origin of eukaryotes. Evolutionists unwillingly accepted this hypothesis because they were unable to see how mutations and natural selection could produce such an incredibly large jump in cell complexity. Unfortunately symbioses does not explain the arising of new properties of the genome such as introns, alternative splicing and the most intricate machinery: the spliceosome. It is even less plausible than evolution itself.