

The Biological Cell as a Witness to Divine Creation by Darrel Kautz (September-October, 2005)

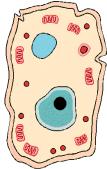
[editorial note: This is a reprint of a much older article. Darrel Kautz went home to the Lord in 1993.]

With the invention of the electron microscope with its immense power of magnification, our knowledge of the biological cell has expanded radically. Through the relatively new science of molecular biology, biological systems are analyzed in terms of the physics and chemistry of their molecular constituents. This new knowledge about the enormously complex structure of the biological cell is compelling evolutionists to rethink their theories of how life could have come into existence apart from some supernatural intelligence. Current knowledge about the cell supports the view that life is the product of a superintelligent Being.

The Complexity of a Cell

Every biological cell is the site of a complex series of chemical reactions. Simple substances are synthesized into the complex materials of living tissue (anabolism), and complex molecules are changed into simple ones (catabolism). These reactions constitute what is known as metabolism — the complex of physical and chemical processes involved in the maintenance of life. "Many thousands of separate chemical reactions are involved, each controlled by a different enzyme. Overall balance and control is ultimately maintained by the genetic material of the cell, which governs the production of enzymes." 1

The bulk of living matter is made up of about a dozen chemical elements. Life's "diversity is largely the result of the combining properties of just one element: carbon. Carbon atoms can form chemical bonds with each other to produce an extensive range of basic structures. These can be modified by the addition of the atoms of other common elements of life — hydrogen, oxygen, nitrogen, phosphorus, and sulfur — to produce the living world's enormous diversity of chemical substances." **2**



"The living cell is a marvelous, complex piece of machinery. It is by definition the smallest unit of life that is self-sustaining. It contains energy conversion dynamos (mitochondria), factories to produce new products (golgi and rough endoplasmic reticulum), and even the ability to repair or duplicate itself. The centre, or library, which contains most of the information necessary for carrying on the cell's activities, is the nucleus. Within the nucleus is the actual. Information storage system — DNA (deoxyribonucleic acid). DNA contains the 'genes which determine most of the physical characteristics present in each human being." 3

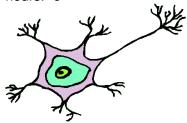
Molecular biologist Michael Denton states that if a single cell were magnified a thousand million times, we would see millions of openings on its surface allowing a continual stream of materials to flow in and out. Within the cell we would find a world of supreme technology and bewildering complexity. There would be a central memory bank in the nucleus, and elsewhere assembly plants and processing units. In

the nucleus of this highly magnified cell would be the miles of coiled chains of DNA molecules.

In addition, we would see "all sorts of robot-like machines. We would notice that the simplest of the functional components of the cell, the protein molecules, were astonishingly complex pieces of molecular machinery, each one consisting of about three thousand atoms arranged in highly organized 3-D spatial conformation. We would wonder even more as we watched the strangely purposeful activities of these weird molecular machines, particularly when we realized that, despite all our accumulated knowledge of physics and chemistry, the task of designing one such molecular machine — that is one single functional protein molecule — would be completely beyond our capacity at present and will probably not be achieved until at least the beginning of the next century. Yet the life of the cell depends on the integrated activities of thousands, certainly tens, and probably hundreds of thousands of different protein molecules." 4

Within the cell, says M. Denton, are structures analogous to sophisticated devices of late twentieth-century technology: "artificial languages and their decoding systems, memory banks for information storage and retrieval, elegant control systems regulating the automated assembly of parts and components, error fail-safe and proof-reading devices utilized for quality control, assembly processes involving the principle of prefabrication and modular construction." 5

Not only is the cell an automated factory, it also is one which has "one capacity not equaled in any of our own most advanced machines, for it would be capable of replicating its entire structure within a matter of a few hours." **6**



The immense complexity of the biological cell and its operational efficiency remove the origin of the cell from the realm of chance. Reason alone is sufficient to lead a rational person to understand that there had to be an intelligence behind the cell. Thus the biological cell itself testifies to the Creator Who not only is supremely intelligent, but Who also is a superb architect, engineer, and artist. How well all of this correlates with the Genesis account of origins! *LSI*

References

- 1. The Random House Encyclopedia (1983), p. 1573.
- 2. lbid., p. 1570.
- 3. Creation Ex Nihilo (May, 19844), p. 38.
- 4. Denton, Michael, Evolution: A Theory in Crisis (Adler & Adler, 1985), p. 329.
- 5. lbid., p. 329.
- 6. lbid., p. 329.