

The Molecular Computer

Scientists are recognizing the similarities between the workings of the DNA code and computer science. DNA is, after all, a complex information storage system. But comparing DNA as an information storage system to our largest and fastest computers is like comparing the Space Shuttle with a bow and arrow.

Harvard biologists have been amazed at what they have learned about the DNA workings of a single-celled protozoan. Its DNA routinely solves mathematical problems that only a very advanced modern computer can handle.

All of us have seen the complex problem of the traveling salesman. He has seven points of departure, and seven destinations. The problem is to work out the most efficient route for him to follow. By comparison, the protozoan under study solves the equivalent problem with up to 50 points of departure and 50 destinations.

This little protozoan has two nuclei, with nucleus arranging the same DNA differently. The smaller nucleus stores only the DNA needed to live in small units and must be reassembled before they do anything. This means it may discard up to 95 percent of the DNA, similar to compressed computer information. When the protozoan needs to reassemble its DNA, each end of each unit needs to find the proper end of the only other unit it attaches to. This is not "simple" life. Even scientists now recognize that this one-celled creature is a complex computer. And this bears witness to God, Who is the author of life, mathematics and all knowledge.

Isaiah 40:12

"Who hath measured the waters in the hollow of his hand, and meted out heaven with the span, and comprehended the dust of the earth in a measure, and weighed the mountains in scales, and the hills in a balance?"

Prayer: I thank You, Father, that You have given knowledge to us. Amen.

Ref: Kathy Sawyer, "Biological Software," Princeton Alumni Weekly.