

## Junk Moves Up in the World

The DNA in humans which is known to code for protein manufacture makes up only about 3% of the total amount of genetic material.<sup>1</sup> It has previously been argued by evolutionists that the rest is all non-functional; simply useless 'junk' left over from years of evolutionary accumulation (sort of the molecular equivalent of the now seldom-used 'useless organs' argument).

While a Creation/Fall model could account for the accumulation of some random, mutationally defective 'extra copies', evolutionists felt they had a strong point that 97% 'junk' DNA pointed more to evolution than intelligent design.

Creationists have long suspected that this 'junk DNA' will turn out to have a function. In fact, junk DNA research is now a hot topic; not only are more and more functions being detected, but it is suspected that junk DNA is full of yet-to-be-discovered 'intellectual riches'.

For example, there are extremely repetitive sequences — some simple to the point of apparent absurdity (such as two or three nucleotides repeated thousands of times) which were thought to be the 'ultimate in genetic detritus'. Found throughout the genomes of higher organisms, it is now thought that at least some stretches of DNA within these so-called 'minisatellites' must have some function, because a mutation in them may cause cancer.

Similar to these but in longer stretches is 'satellite' DNA, short sequences repeated hundreds or thousands of times and clustered mainly at the centre or tips (telomeres) of chromosomes. It now appears that such 'telomeric DNA' is crucial to prevent chromosomes from deteriorating. It does so 'by binding to proteins that stop the ends from "fraying" and also by helping to repair damaged tips.'

'Introns' are another form of DNA previously dismissed as 'junk'. These are short, non-coding stretches inter-

spersed within the coding sequence of a normal gene. The non-required sequences are later 'snipped out' of the resulting copy. Evidence now suggests that even these may 'provide a previously unsuspected system for regulating gene expression.'

In summary, in accord with creationist expectations,

*'the status of junk DNA . . . is likely*

*to keep on rising . . . what was once thought to be waste is definitely being transmuted into scientific gold.'*

### REFERENCE

1. Nowak, R., 1994. Mining treasures from 'junk DNA'. *Science*, **263**:608-610.

C.W.

## Taking the Pulse of 'Climatic Evolution' Theories

Those challenging creation sometimes point to the existence of well-publicised 'correlations' in the fossil record which they say are hard to explain unless the fossil-bearing sequences really do represent substantial passages of time.

For example, Yale's Elizabeth Vrba has allegedly demonstrated that bursts of evolution coincide with evidence of drastic environmental change in the record.<sup>1</sup> She therefore concludes that climate change drives evolution, and maintains that it was a major climatic event around 2.6 mya which led to the emergence of *Homo* in Africa.

How can such a correlation arise, if it is maintained that the distribution of fossils is largely hydraulic/ecological? (One would expect that the distribution, in a Flood model, of the geological indicators interpreted as evidence of climatic change would be essentially random with respect to the order or appearance of macro-fossils therein.)

Firstly, it needs to be stressed that Vrba's comments on such 'pulses' of evolution really refer to the levels at which certain species enter or leave the record — evolution as such (in the sense of transformism) is not docu-

mented.

Most importantly, the enormous power of the human mind (especially under the influence of powerful ideologies) to impose order upon almost any batch of observations is commonly overlooked.

Fellow evolutionist Jeff McKee of Witwatersrand University has challenged Vrba's 'turnover-pulse' model. By running a computer simulation of a constant rate of evolution, then taking random samples 'to mimic the incomplete fossil record that is observed in reality', McKee found that the results were closer to the observed data than Vrba's model.

The apparent demonstration that a widely-known set of stratigraphic correlations are illusory should thus be considered seriously in all similar cases, we would suggest. McKee says that he agrees with Darwin that evolution will happen whether there is climate change or not, but that '*what did cause evolution I have no idea.*'

### REFERENCE

1. Armstrong, S., 1994. Turning over evolution. *New Scientist*, **143**(1933):35.

C.W.