

“Evolution, from Malaria to Manuscripts” (Molecular evolution, and dating ancient documents)

Dr Chris Howe

Department of Biochemistry, University of Cambridge

Monday, 23rd May, 2005; 7.30 - 9.00 p.m.

The Wolfson Lecture Theatre, Churchill College, Cambridge

Chair: to be announced
Vote of Thanks: to be announced

About the lecture:

Dr Howe writes.....

The development of mitochondria for respiration and chloroplasts for photosynthesis completely transformed life on earth. The talk will discuss how we can use the evolution of DNA sequences to understand something of how these subcellular structures developed over a billion years ago. These studies have led to some surprising conclusions, such as the realisation that the malaria parasite *Plasmodium* had a photo-synthetic past.

There are many other things that evolve in similar ways to DNA, and we will look at how methods from evolutionary biology can be used to study languages and written traditions.

About the speaker:

Dr Howe is a Reader in Biochemistry at the University of Cambridge, with research interests in molecular evolutionary biology and in the biochemistry of photosynthesis.

He obtained a First in Natural Science from Cambridge, where he stayed on to complete his PhD in 1984. He has been a Reader in Biochemistry at Cambridge since the year 2000

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Dr Howe is a Fellow of the Linnean Society, a Fellow of the Woodard Corporation (national Anglican educational charity), a Member of Society for Experimental Biology, the Biochemical Society, the Genetical Society, and of course the Cambridge Philosophical Society, amongst others.

The CSAAR Organising Secretary adds.....

At first sight, this lecture seems surprisingly similar to our previous talk on Mothers and Fathers (e.g., mitochondrial DNA). However, Chris has used this technology for entirely different purposes.

One cannot do better than quote from his website:

“I went to University convinced I wanted to be a chemist, or possibly a geologist, but rapidly discovered that biology was even more exciting. I did a degree in Genetics, followed by a PhD in Plant Sciences (both at Cambridge) looking at the DNA in chloroplasts, the photosynthetic compartments of plant cells. My hankering to be a geologist perhaps explains one of my research interests - to use the information in today's DNA to understand events of a billion or so years ago, when non-photosynthetic cells swallowed up photosynthetic bacteria to form the chloroplasts we see today. You can find more about what we do, with related material, on the following web sites.”

There you go; a fortnight ago, all about Eve; tonight, all about plants; and things....

Coffee and biscuits available, as usual, in the foyer outside the lecture theatre from ~7.00 p.m. Once again, we shall be charging non-members a nominal sum for entry.

The CSAAR Summer Visit:

Folks: Elizabeth needs to know if you are interested in the visit; unfortunately, due to pressure of work (I am off to Mongolia tomorrow) we have not been able to disseminate the usual standard of background information on our summer visit.

Basically, it's to St Peter's Hall and Brewery, and to Sutton Hoo. In a comfortable coach, with knowledgeable guides at each location

DO please let Elizabeth know (01223 525681) immediately if you wish to go along; cost £25 (£21 to National Trust members). May seem a bit expensive, but you do get a lot for your money.

Best

Richard Freeman
CSAAR Organising Secretary