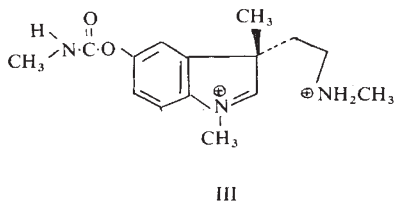


biosystem in which the molecules are in solution is still a matter of conjecture. In their interatomic distance comparisons between neostigmine and physostigmine, Petcher and Pauling record¹ for physostigmine the distances between the C and O atoms of the carbonyl group and the N₍₈₎ atom, whereas a more valid measurement would have been that between these C and O atoms and the N₍₁₎ atom, since it is well established^{9,10} that it is the N₍₁₎ atom in physostigmine which reacts with a proton, and presumably in its quaternary state interacts with the anionic centre of the cholinesterase receptor. The measurements of Petcher and Pauling involving the N₍₈₎ atom in physostigmine become significant in connection with this interaction if the active form of physostigmine at the cholinesterase receptor site is the ring C opened species III as proposed earlier¹¹ but not referred to by Petcher and Pauling¹.



Petcher and Pauling state¹ that "AChE appears to be relatively insensitive to molecular shape as far as reversible inhibition is concerned". This statement is invalidated by the results of work¹² which showed that the enantiomers of the alkaloids physostigmine and physovenine are approximately twenty times less active (as calculated from their relative K_i values) in competitively inhibiting erythrocyte acetylcholinesterase than are the parent alkaloids.

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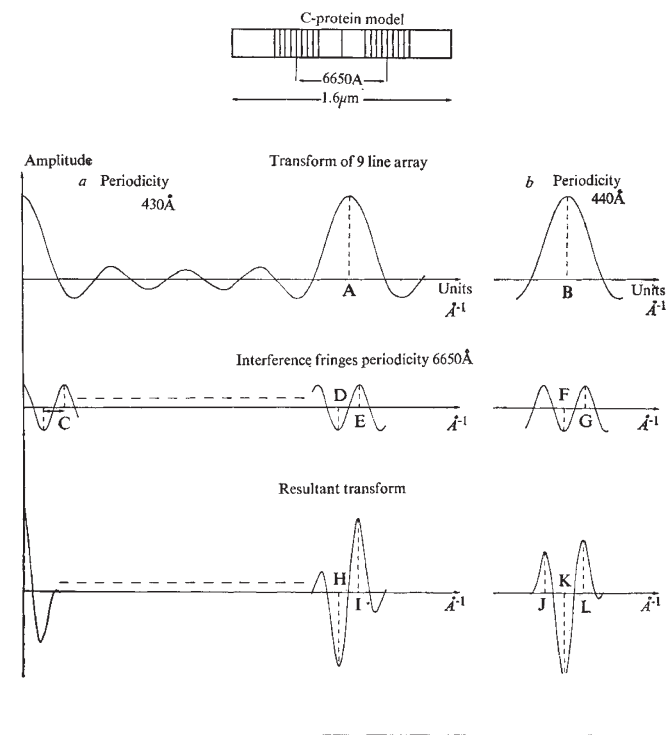
Received September 26, 1973.

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Errata

IN the article "Structural Organisation of the Transcription of Ribosomal DNA in Oocytes of the House Cricket" by Michael F. Trendelenburg, Ulrich Scheer and Werner W. Franke (*Nature new Biol.*, **245**, 167; 1973) there was an omission in Table 1: the values for denaturation mappings of refs 12 and 13 (*Xenopus laevis* and *Xenopus muelleri*) come from chromosomal and extrachromosomal nucleoli.

IN the article "X-ray Diffraction of Muscle labelled with Antibody to C-Protein" by Elizabeth Rome, Gerald Offer and Frank A. Pepe (*Nature new Biol.*, **244**, 152; 1973) paragraph 4, line 5, should read "... inextensible rigor condition", not "... extensible", and paragraph 7, line 24, should read "... the goat before immunisation", not "... the goat pre-immunisation". Also Dr Pepe's address should be "Department of Anatomy, University of Pennsylvania, Philadelphia, Pennsylvania". Figure 2 was incorrectly labelled and the correct figure is reproduced below. A, 1/430; B, 1/440; C, 1/6650; D, 15/6650; E, 16/6650; F, 15/6650; G, 16/6650; H, 1/442; I, 1/417; J, 1/474; K, 1/442; L, 1/417.



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