

JUL 12 1965

Twyford Laboratories Limited.

309, Elveden Road,  
London, N.W.10.

*Elgar 7213/4/5.*

Ref. TLVU/JFS

7 July 1965

Prof. J. Lederberg  
Dept. of Genetics  
Stanford University School of Medicine  
Palo Alto  
California  
U.S.A.

Dear Professor Lederberg,

I was interested in your recent article in Nature, "Signs of Life". Some time ago I wrote about the significance of net optical activity and its possible mode of origin ("The Optical Asymmetry of Metabolites", in Comparative Biochemistry, ed. by Florkin and Mason, vol. 4, Academic Press 1962).

Incidentally, it is no longer quite correct to say that the direct measurement of optical activity is weak by comparison with other instrumental approaches. This depends on the compound - whether it has a chromophore adjacent to an asymmetric centre, and in which spectral region. It is possible to measure the optical rotatory dispersion of nucleic acid derivatives in the U.V. region, for example, on a hundredth of the material that would be required for an I.R. spectrum.

Yours sincerely,

*T.L.V. Ulbricht*

T.L.V. Ulbricht,  
Head, Nucleic Acid Unit.