

22nd December, 1953.

My dear Professor Verschuer,

Thank you for your letter of December 15th proposing a problem of not a little interest and importance.

I do not know of any well established or proved case of mutation at the A locus, but of course I have no doubt that such mutations occur and it may well be that the mutation from O to A_2 , two genes very similar in their serological reactions, is of exceptional frequency. You may like to hear of the following curious case.

O. Friedenreich, who was for many years in charge of the Danish Institute of, I think, Forensic Medicine, told us during a visit to the Galton Laboratory, not as a matter of confidence, that in respect of the difference A, \underline{y} A_2 , he was an exception against his own father. Obviously, in such a case he would have been most particular in ascertaining the serological facts and he certainly has not the least doubt of the genuineness of his paternity. According to my memory, which may well be mistaken at this point, his father was A, while he was A_2 . However, it is likely that a mutation from O to A_2 would also in this case explain the puzzle.

P.T.O.

Wishing you and Mrs v. Verschuer all happiness at this season.

Sincerely yours,