

August 7, 1940

Dear Janet Vaughan,

We have completed the counts on your last three boxes, 5111 forms, and they will be returned to Slough this week or next.

In view of what you said about the technique, it was particularly interesting to see whether the deviations from previous ratios from Slough tallied with what are regarded as common errors of technique. Two comparisons are worth noting here:

(a) the frequency of AB donors is in this sample fully up to expectation, ^{based on O, A + B frequencies} although the previous 25,000 from Slough shows a fairly general deficiency, very like that in Oliver's material from Sutton.

(b) The percentage of gene A estimated for the last batch is lower than for the previous lots, being 24.05 against 27.01% for women, and 21.67 against 27.39% for men. These could be matched, for example, by Scottish men and Northumbrian women, and I suppose there is no reason to suspect these 5000 of having much more Scotch, Welsh or Irish immigrants than the previous lots. I should be glad of a confirmation of this opinion, if you think it just; for, if so, one is led to think that with the slide technique A_2 reactions may be missed both in A and in AB donors.

This view is a little unsatisfactory, since of the 27% A genes

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commonly found in the South of England, not more than about 7% are A_2 , the remaining 20 being A_1 , and a depression of the order observed suggests that about half the A_2 would have to be missed in both groups. I do not know how far you will think this impossible, but I thought you might be interested in the comparison which arises from the contrast in the technique used.

I ought to add that the 23,000 sent in from Oliver and ~~Boyd~~ at Sutton, which included the previous groupings from two Sectors, does not as a whole show a deficiency of gene A, giving 26.4% for both sexes together.

I hope your grouping work is still going strong.

Yours sincerely,