

Dear Fisher

Bernstein- ~~gives~~ some data in his paper. As he was hunting for linkage rather than estimating it, his method is all right. He would doubtless send you a copy if asked.

I think at the next meeting of the human genetics committee there will be a fight about investigating <sup>marriage</sup> consins as such. If  $p^2$  be the probability of getting a recessive genotype in a random mating population, it is raised to  $\frac{p(1+15p)}{16}$ , or  $p^2 + \frac{1}{16}p(1-p)$  in

the offspring of first-cousin marriages. Hence you won't notice much if  $p^2 > \frac{1}{209}$ , when the frequency is doubled. Now, on the offspring of, say 1000 <sup>(cousin)</sup> marriages, will you probably spot anything unless  $p^2 > \frac{1}{4000}$ ,

say. Do you consider it likely that there are many genes - recessive genes with clearcut effects where  $p$  lies between  $\frac{1}{14}$  and  $\frac{1}{60}$ ? If not the research is not worth undertaking.

Our marriage law is rather inconsistent from the eugenic angle. Thus for offspring of step-uncle x step-niece we have  $\frac{1}{16}p(1+15p)$ , for that of double first cousins  $\frac{1}{8}p(1+4p)$ ; but the former is illegal, the latter not.

Yrs sincerely  
JBSH.