

19.5.1965

Helsinki

Dear Josh,

How good of you it is to provide your former students with charming ideas like those in your letter. To me it seems quite possible that the first opportunity to find a blood group synthesizing enzyme might be in the acquisition of the Levis factor. I had not thought of going back to blood group work but if necessary sera could be obtained, I would be very tempted to do what you suggested. Helen is thrilled, too, and would like to join the work.

Your statistical work interests me and still more my boss, Renkonen. I once helped him to process some data, and they suggested a sex-dependent family planning. Out of 26389 Finnish families starting with either two boys or two girls 67.5 % had at least one further child while only 65.0 % out of 25479 families starting with a boy and a girl or vice versa had a third child. Most but not necessarily all of the families had stopped reproduction at the time the data were collected. Birth intervals were not known.

I would much like to recommend a fellow for your demography study, mainly for his or her sake; but right now I do not know a suitable person.

Helen has probably told you about her present work more than I have about mine. I have gone on with antibody formation by single cells. My tests with cross reactive bacteriophages in microdrops demonstrated a clear cellular heterogeneity in the production of neutralizing anti-T2 (or anti-T4 or anti-T6). Recently I have studied single anti-hapten cells. The method includes coupling of a T even bacteriophage with a hapten and testing phage-inactivation by anti-hapten. When the coupling goes all right, phage inactivation follows first order reaction kinetics with k values of a few hundreds. Right now I am coupling T2 with hapten A and T4 with structurally related A', and shall test single anti-A cells with both phages to see whether relative inactivating powers vary, whether there is cellular heterogeneity in the production of anti-A.

You may be interested in the general post-fellowship activities of your former fellows. Helen is holding a government investigator's job and working in this laboratory. Since April I am an associate professor of serology and bacteriology. Before that I was docent in medical genetics, and still give part of the medical genetics course. We are having a USPHS grant as you may know (we suspect that you were perhaps consulted before the application was accepted), and both spend most of the time for research.

You and Esther are probably having standing invitations by most terrestrial universities. I would like to add Helsinki to the list. It would be so nice to see you again; and if you happen to be not too far from here and willing to give a talk, those \$200 which the University pays for distinguished talks would at least cover the extra cost.

Love from Helen. Too
Alli

D. MARZLA