September 30, 1957

Dear Jim:

I just thought I should let you know that Esther and I very likely will be returning home via India and Europe rather than California. This is not quite settled, and I will send you a definite itinerary in a couple of weeks; however if anything has come up that you might be holding for our possible stopover in Berkeley, it would be better to deal with it by mail.

We will remain in Melbourne, where we are comfortably settled, till the end of October, and, if we return westward, will get home about Thanksgiving.

If we go to India, it will be in response to a formal invitation from the Government (Atomic Energy Commission in Bombay) and this sounds like an unusual opportunity.

oOo

My work here has been working out better than I could have reasonably expected, largely because Burnet has assigned one of his personal assistants to work with me during my visit. This has made it possible for me to get my hands deep into influenza virus genetics, and I have been learning a great deal, first hand. At the moment, I am trying to work out some improved, selective techniques for recombination analysis, principally with the use of mucoprotein inhibitors. There is also a rather interesting problem on dominance and autonomous action of virus alleles in phenotypic mixing: in the yield from a mixedly infected cell, the phenotype of the particles is determined by the whole cell, not the individual particles. Thus, as was already known, most of the particles can be neutralized by ~~either~~ antiserum for either component; on the other hand, the phenotype qua reaction to inhibitory mucoids seems to show dominance of resistance. Thus, for two mucoids, m and s, the ~~phenotypes of the~~ two types of experimental yields:

$m^r s^r / m^s s^s$ as well as $m^r s^s / m^s s^r$

are both phenotypically $m^r s^r$. The work with this bug does go fast enough that there is some hope of finishing up a segment before my leaving. Unfortunately Burnet himself, after 20 years of nothing else is getting rather weary of flu, and is moving over to problems of the mechanism of antibody determination & the number of labs doing sound genetic work on animal viruses is very small.

With best regards,

Joshua Lederberg