November 23, 1970

Dr. Debi Burma
Banaras Hindu University
Department of Biochemistry & Biophysics
College of Medical Sciences
Varanasi-5 (India)

Dear Debi:

We have set up the RNase III assays in crude E. coli extracts (S 30) essentially as described by Robertson, Webster, and Zinder, J.B.C. 252: 83 (1968), except that we use poly I poly C as substrate. We have the C labeled. We have done this both with some extracts and with alumina ground cells. The assay has 0.1 M NHuCl, 0.01 M (Mg(Ac)₂, 0.02 M Tris pH 7.0, 50 nmoles of polymer P per ml. We use a 0.5 ml assay mix because our poly C is not very hot. Make 5% TCA and add BSA] carrier. They counted filters after filtration on GF/A fiber filters. I don't like looking for disappearance so we follow formation of acid soluble cpm.

A preprint of work on RNase I which is relevant for you is enclosed. Abrell worked some with Heppel before Heppel left; now Abrell is in Marie Lipsett's lab.

With regard to the DNase work in P-22 infected cells. The work of Sadowski and Horwitz is relevant. The references are my list from lectures.

I've had no luck in finding out about plans for this year's Cold Spring Harbor Meeting. I think it best that you write direct to them and enquire as to the topic for this year and the date. The Gordon Conference dates are not announced until March. Usually nucleic acids are 2nd or 3rd week in June. As I recall they have some money available to support foreign visitors. In any case I will send the announcement from Science when it comes out in March. It is likely it will conflict with the Biochemistry meetings which will be separate from the Federation Meetings and will be in San Francisco, June 13 to 18. Cold Spring Harbor is usually earlier in June. Perhaps you should consider traveling through San Francisco either going or coming, so as to get your travel there paid for. Then you could either start or finish your visit in that city.

We are now planning on leaving for Israel at the end of July. Therefore, it would be best for me if your visit here was well before then since the house will be disrupted and both home and lab will be busy preparing for departure. One question to think about is whether I should plan my last visit (1972) during my stay in India. We will return here summer 1972. I tend to think it would be best for me to come in November 1972, near the end of the three year period.

We (Randy Holmessand I) have been struggling with RNase V. At this point we are not sure it exists. In any case we cannot repeat crucial points of Schlessinger's work. The activity we measure does not require ribosomes and supernatant and is not stimulated by ATP, GTP, which, or GSH. In fact its inhibited by all. The low activity we measure seems to be accounted for by the residual RNase II remaining after heating.

At this point we don't know what they measure.

It for now. Do I need to do anything for you at the International Office?

Love to Maharani and the kids, from all of us.

Sincerely,

Maxine Singer

P.3.

No experience with RNase assays on gels. Probably the best thing is to slice gels, mash each slice in a little buffer, sit in cold for a white (4 hr to overnight) centrifuge off gel and do assay. Gels can be nicely sliced into 1-2 mm pieces by hand with a razor or scalpel if they are frozen and kept so with powdered dry ice during slicing.