February 10, 1955

Dear Francis,

I have put off writing because I hoped to be in a position to write a
longish letter. First of all, I have done nothing with the UVs. People.
Reason is preoccupation with many things. However, I seem to be returning to work at a steady pace,
visitors seem to choose this time of year to descend on Pasadena. The following factual
information may interest you.

1) RHA shows no increase in UV adsorption on boiling for one hour [TMV, Yeast, liver]

Beverness shows 20% rise when taken from pH 6 to pH 2. Have been obtaining
fibers from some new yeast RNA at 35°C 10-12. Seems to behave like previous samples
This is a pity. No X-ray pictures yet, but birefringence and stickiness seem similar. This
should be very clear RNA so I wonder whether sample replacement will help us. We
should probably concentrate on obtaining better photographs from present samples.

Hope soon to get X-ray photos and sedimentation pictures from boiled RNA—this to check
whether specific hydrogen bonds exist—would guess they don't. Am going to Berkeley next week
to look again for RNA in E.M.

2) TMV. Cooper (now here at Caltech) doubts whether Rosay's sign assignment for Equations is
right. If he is right in his guesses, we find a high density a 1:200 PO4?+

Probably would pay a talk to her. When we TMV RNA seems to be 240,000. Are there
8:10 clock running down the line as follows:

- He quickly low density
- In the very center to be expected at the borders
- Are on the inside. TMV remains the H₂ of the RHA would, that is unless PUK is pushed. What about leaving Ray measure prepare you some. – Oh is Rosy doing it.

Southern Beta Masai: Casper has low angle one [DUHAMEL EQUIPMENT] in water and high density salt. First picture gave approximations to certain sphere – second gave nothing. Hence RHA is likely to be highly hydrated.

Bacterial Microscope: We are preparing their burn for both low and high angle. Since they are so to RHA, are curious whether we shall see RHA powder patterns. Have new analytical Spino at disposal – necessary in this work.

Ganow was here for 4 days – rather exhausting as I do not live on Whisky. You TELLED tone attack during visit. Am not so pessimistic. Dislike agitators. We must find RHA structure before we give up and return to viscosity and broad matching. I should like more physical-chemical data before I return to model building. This we may have before Summer.

My visit to England: Still plan to come by early summer. However, certain uncertainties about academic future make simple planning impossible. Will write when things clear up – may not be for several months.

My visit East was pleasant. Am returning to New Mexico for several weeks.

regards to Odile – am looking forward to return to Unit

Jim