Bldg. 10, Room 9N-119

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Dr. Marianne Grunberg-Manago
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Dear Marianne:

I should have reported to you a long time ago as we gave the L. Arabinosus another look last summer. We checked for phosphorolysis of poly A with Mg^{++}, under our standard conditions. The amounts of protein used covered a wide range and were as high as 0.4 mg in a 0.1 ml reaction mixture. We never detected anything more than 1 or 2 cpm above background and that was not reproducible. The fractions tested included a whole sonicate, the 30,000 x g supernatant, and ammonium sulfate cuts on the latter (0-30, 30-55, and >55). This would seem to make it negative. On the other hand, given the recent Q13 data, perhaps I should give it another go--first of all with Mn^{++}, and secondly, looking for polymerization.

There is an RNA- specific exonuclease that is similar to E. coli RNase II.

The pictures sound interesting. Will you be publishing them soon? We have been busy with the trypsin enzyme and its modification by -SH. Reduction with sulfhydryl makes it primer independent again. This is reversed by PCMS and by N-ethylmaleimide. The former is, as expected, reversible itself while the latter is not. All of this has little or no effect on overall ability to polymerize or phosphorolyze.

We have been looking at the temperature-sensitive RNase II in 113B and by way of controls have done some checks on the phosphorylase--which should be identical with that of Q13. We have confirmed Buchanan's Mn^{++} finding, and have two peaks on G-200 which may well correspond to the 200,000 and 100,000 enzyme that you mention.

Any chance of your coming to the Gordon Conference this June? Hopefully the plans for Greece will work out this time--although all situations seem so in flux at this time that it is difficult to see that far ahead.

Love to you, Armand and the children.

Yours,

Maxine Singer