HNSTITUTO DE QUIMICA

FISIOLOGICA Y PATOLOGICA

ESCUELA DE MEDICINA UNIVERSIDAD DE CHILE Borgoño 1470 - Santiago

November 8, 1956

Dear Josh:

I received your letter of October 26 with a check enclosed. Thank you for both, I have taken care of the deposit of the check directly.

I am enclosing here a check for \$ 17 corresponding to \$ 5.- for shipping and postage charges on account of QCAL and \$ 12.- for 20 % commissions on the sale of ONPG to B. Davis and Dexter. I have received a check for \$ 20.- to the order of QCAL from State of New York, Division of the Treasury in Albany, N. Y. Do you know anything about this? It is not any sale I know of.

I have received a letter from Mann saying that he confirmed you by phone about your 20 % arrangement. He is intrigued by the fact that you use QChL stationary. For your information the QChL society does not exist anymore. In view that I did not need the name because of my association with Mann and because one of the partners here in Chile (owner of the name QChL) was acting only as an intermediary, we decided, in complete agreement, to dissolve the society. Therefore I have only one partner here in Chile, he is the one who synthesises the cpds. and I handle the administrative portion. You can use the stationary of QMChL to write to me or for scratch paper if you want to.

With regard to the quotation on 10 gms. of methyl or butyl- β ,D-galactoside I would estimate it in \$30 to 40 per gram whether the yield is as good as the ONPG or not. The preparation of either one is as hard, or harder than the one for CNPG.

These settles the business part, I believe.

In your letter you mention a "enclosed note" for J. Bact. I did not find any, so I guess that you forgot to put it in the envelope. It was very interesting to know about the evidence for the lack of cell wall in protoplast and penicillin action. Everything ties quite well.

The DNA penetration problem is on its way and has shown some difficulties to start with. The main one is to eliminate any nucleotide or TCA-soluble material with P32 because the cells pick them up even in the absence of growth. The other problem is to avoid hydrolysis of the DNA outside the cell. I would like to try for transformation routinely, because It doesn't take much work and I thought that it would be easy to follow Streptomycin resistance as a marker because it would eliminate the need for control plates of the extract recipient in view of the small incidence of mutants. What do you think of it? Could you send meastreptomycin resistant strain?, I don't have any here with the proper markers. I would like to have, if possible, one with the constitutive-lactase gene. I tried to get one by selection but I did not have any luck and I decided it would be easier (for me) to get by crossing.

Do you want still a copy of the ms on the sonicated cells? I have found it. The paper will appear in the Nov. issue.

With regard to a reprint of my paper on the Chemostat you can ask the Secretary of the Enzyme Institute. I will send you a list of the reprints of your papers I have.inxprocessing You told me that you could send me missing ones which are available. I will thank you very much for this favor.

These clears the cientific part.

The private part is rather sad. Raquel hasn't felt much better in spite of being in bed for about five months and the doctor has advised an operation. We plan to have the operation done in New York by a famous authoriy in the field, Dr. Leo Mayer. It is probable that we will leave around the middle of December. The operation and the post-operatory treatment will take about six months.

I would like to ask you to try to get me a job in N. Y. for that period of time. I know that it will not be easy, but I will need the job badly because, in spite of Dr. Mayer's kind offer of not charging for his professional services we will have at least two months of hospital at \$25 a day plus the trip and so on.

Luckily Raquel's spitit has been high and the operation has very good chances of eliminating all her troubles.

Thanking you in advance for the multiple favors I have asked you in this letter, received you and Esther my best regards,

Pours,

P. S. I forgot to mention Monod's ms. I will quote Monod himself and I will say that the most interesting part of his work is what he doesn't say. It is imposible to decide from his paper the point whether the permease is responsible or not for the β -galactosidase activity of the intact cell. He didn't do the crucial experiments, such as testing if the lactase activity was inhibited with the same inhibitors as the permease or if the rate of hydrolysis was the same as the rate of entrance. He says that he has measured the rate of entrance of ONPG by inhibition of the TMG entrance, but he does give the data. As a matter of fact the reference to the table was crossed out with ink in the ms. My conclusion is that either K-12 has a different system or Monod's permease doesn't have any relation with penetration of ONPG for hydrolysis. You must think about my ms on activation, I do too. But, believe me, I really can not sit down and finish it, I hope to do it soon.