Experimental Biology and
Medicine Institute

February 21, 1949

Dr. Alan Mehler
The Rheumatic Fever Research Institute
Northwestern University
3026 S. California Avenue
Chicago 8, Illinois

Dear Alan:

Severo had told me some time ago that you were considering taking a job with Knox and I wanted to write you many times to find out just what had happened. Your letter which arrived this morning answers most of our questions and, on the whole, sounds rather encouraging.

I hope you will have a profitable time at Northwestern. The problem about which I have heard little from Knox sounds good and probably worth the annoyances that go with it. If you have had trouble, don't feel that we have had easy sailing. I have spent the past two months working on minutia concerning the DPN-pyro enzyme and the potato pyrophosphatase. I had no idea so many petty details which I thought worth while to get could be so elusive. For instance, the crystallization of either cadmium or manganese salt of pyrophosphate is confounded by almost every constituent in the incubation mixture, and it did seem worth while to separate such a salt for proper analysis. I have begun now to compromise and hope to finish writing up this work in a week or so and return to TPN synthesis by yeast. Several months ago I was able to get conditions for synthesis of DPN from DPN plus ATP, and it looks like a promising way to get some good TPN. In addition, it seems desirable to establish the synthesis of TPN by direct phosphorylation of DPN. I would also like to return to some work on FAD synthesis by yeast which requires the presence of riboflavin phosphate and ATP. This system is both weak and unstable and the assay methods more laborious than we are accustomed to. So the chances are that when we meet in Detroit you will have to do most of the telling.

Bernie and Leon are in the throes of isolation from liver of the TPN and DPN cytochrome reductases, respectively. It was a tough problem to get them into solution and now they seem to be rather

unstable, but on the whole the prospects look pretty good.

We have a new man at the Institute by the name of Otto Warburg who has come to work with Burk on photo synthesis for a few months. Bernie went over to see the old boy Saturday for some Kinetic advice and found him extremely civil, aware of what we were doing in our section and anxious to come over to visit with us. It's like having God around!

There isn't much new at home. We have a maid, so Sylvy is free to spend full time on her editorial work and will probably line up a job before long. Roger and Tommy are swell little boys, but probably no match for Louise. Please give our fond regards to Anne, and keep us posted on how things are going.

Sincerely,

Arthur Kornberg.

AK:T