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Department of Microbiology

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Professor Joshua Lederberg
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Dear Josh:

I find myself somewhat embarrassed by your recent request for information concerning Ed Tatum. This is because I was a very green first year graduate student at the time of my contact with him, without the background that would normally lead one to inquire into his previous work or his motivations in selecting certain areas of investigation.

When I arrived at Wisconsin, Ed was a postdoctoral fellow working for Professor W. H. Peterson in the Biochemistry Department. Harland Wood also was a postdoctoral fellow that same year, and the two of them were collaborating on investigations into the nutrition of propionic acid bacteria. Professor Peterson assigned me to the same laboratory and Ed was my first official advisor in studies of the nutrition of lactic acid bacteria. I found him a very friendly and approachable individual, ready with suggestions, and rarely, if ever, moody or critical of others in an unpleasant way. A particular nutrient I was fractionating was found in comparatively high concentrations in the juice of expressed potatoes, and I remember particularly Ed encouraging me to fractionate the material on a large scale, and seeing that I did so by sitting down with me to cut a bushel of potatoes into sufficiently small chips so they could conveniently be fed into the only grinder we had in the laboratory. In retrospect, many of the suggestions he made to me in connection with this problem were naive, but at that time knowledge of bacterial nutrition was extremely fragmentary, and I found these suggestions very helpful.

Both Peterson and Tatum were extremely impressed with Kögl's studies on biotin and particularly with the micromethods that were used in its characterization (a characterization Du Vigneaud later proved to be faulty), and Ed chose that laboratory for a postdoctoral fellowship primarily to become acquainted with these techniques. I don't remember what he worked on while there, or how he later came to Dr. Beadle's attention. I suspect it was through W. H. Peterson, who had a wide acquaintance and a wide correspondence due to the fact that he was chairman of the committee for selecting and awarding Wisconsin Alumni Research Foundation fellowships.

So far as I can remember, the 1936 paper on the thiamine requirements of propioni bacteria had relatively little impact at the time. Thiamine had previously been shown to be a growth requirement for

yeasts by Williams and by Frey. It was only later when microorganisms proved to be useful for the assay of vitamins required in the animal diet and to be appropriate tools for the discovery and study of new vitamins that the significance of these and subsequent nutritional studies became evident.

In summary, my recollections are fragmentary, but I know that having Ed Tatum and Harland Wood in the same laboratory during my first year of graduate study was a most helpful influence on me and presumably on the other graduate students in the laboratory at that time.

Sincerely yours,

Esmond

Esmond E. Snell

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