THE UNIVERSITY OF WISCONSIN COLLEGE OF AGRICULTURE

Madison 6

DEPARTMENT OF GENETICS

November 12, 1956

Professor M. Heidelberger Institute of Microbiology Rutgers University New Brunswick, N.J.

Dear Dr. Heidelberger:

While writing a review on recombination genetics, I have been catching up on old reading, and am struck by my inability to find much recent work on the structure of the pamumococcal capsular polysaccharides. Am I wight in thinking that type III is the only one for which a reasonably detailed structure can be written (after Reeves & Goebel)? Or have I overlooked equally pertinent studies on the composition and linkages of other types? I hope so, and that you can refer me to more recent accounts of this field. Now that the experimental basis for genetic studies on the determination of these substances is so well established, it seems to me a pity that the structural and biosynthetic aspects have lost the primacy of interest that they engaged some years ago. As far as I can tell, no one seems to have a clue as to the immediate precursors, though I suppose someone will come up soon with another uridine-diphospho-conjugate!

Your help on this matter would be greatly appreciated.

If I can ask another question, Zamenhof has reported an the structure of some of the Hemophilus polysaccharides as poly-ribophosphates askin to apurinic acids: is there any reason to dispute his chims?

With best regards,

Joshua Lederberg

Professor of Genetics