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UNIVERSITY of PENNSYLVANIA

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The School of Medicine

DEPARTMENT OF BIOCHEMISTRY 327 Anatomy Chemistry Bldg.

December 5, 1962

Dr. Joshua Lederberg Department of Genetics Stanford University School of Medicine Palo Alto, California

Dear Josh:

I am taking the liberty of sending you a copy of a paper presented at a Symposium of the Society of General Physiologists in August, 1962. The paper will be published at some time in the future, but I thought that there are some notions in the paper on which you might wish to comment. Indeed, I would very much appreciate hearing from you about it if you found both time to read the paper in the first instance, and time to comment.

With best wishes, I remain

Sincerely yours,

Seymour S. Cohen

SSC:db Encl: MSS

Dear Seymour -- Thanks very much. I don't find much to disagree with, except what we each marvel at. Of course there has been innovation in evolution, but if you accept the monophyletic peemise, we are on common ground. Perhaps we are each reacting to a different set of irritations, and I can well understand yours at finding such unreasonable resistance to the monophosphate shunt. When you do find a genetic mucleic acid with, say, a polyhexosephosphate backbone, I will shift my own marvels closer to yours. Meanwhile, I think you may be doing harm by underemphasizing the basic evolutionary pathway, along which the innovations are strung -- or do I completely misunderstand you? I would not be so forceful in deploring the "unity of biochemistry"; I would certainly agree that it should not be a dogma to shut out appreciation of the variations. So, which is more important, the forest or the trees?

Joshue.