SMUFD-B-BS-C

6 April 1966

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

Dear Dr. Lederberg:

I would greatly appreciate having a copy of your Interim Report to NASA (Grant NSG-81-60), Technical Report 1040 of your Instrumentation Research Lab., entitled "Systematics of Organic Molecules, Graph Topology & Hamilton Circuits--A General Outline of the DENDRAL System", dated 12 January 1966.

The companion article on DENDRAL 64, "Topology of Cyclic Graphs--A System for Computer Construction, Enumeration and Notation of Organic Molecules as Tree Structures and Cyclic Graphs", dated 15 December 1965, also would be appreciated.

In 1955 I found a novel way to count Heinz & Blair's "free tree" hydrocarbons directly--by partitioning the secondary CH₂ groups around and between the branching (X or Y) points. Have you tried this route? These structure models reveal new types of binomial coefficients and new types of partition-counting terms; at least my tables were novel when checked by the international office of Unpublished Mathematical Tables at Stanford in 1956.

With best regards,

NJN

WILLIAM J. WISWESSER Research Chemist Crops Department

cc: Dr. R. A. Darrow Dr. C. E. Minarik Mr. W. H. Longenecker

ik