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United States Army
BIOLOGICAL LABORATORIES
Fort Detrick, Frederick, Maryland 21701

SMUFD-BR-C

12 March 1965

Dr. Joshua Lederberg
Department of Genetics
Stanford University School of Medicine
Palo Alto, California 94304

Dear Dr. Lederberg:

Thank you again for your keen observations on polycyclic cage-coding problems. Long ago I reminded our notation team members (Addelston, Bonnett, Gelberg, Granito, Smith, and--later--Bowman, Landee, Schultz, and Sorter) that ring conventions are "defective" in finishing with an open rather than closed box. Our Least Effort justification is that the importance of any structural groups must be divided by two or three million--and that's a big denominator!

That old "Rule 30" requires a much more careful elaboration than I gave in my "frontier phraseology" of 1954. In practice, the correct notation traces a path of least measures; like your DENDRAL, it is easier to do than explain, and it positively does not depend on any diagrammatic orientation! My trial analyses are shown on an attached sheet.

Dr. Elbert G. Smith has taken Sabbatical leave from Mills College to devote his full time to a necessary elaboration and clarification of our notation for computer users. Since he is in San Francisco (1931 Golden Gate), I believe that it would be mutually profitable for you two to get acquainted; you can make far more intensive exchanges of ideas than we in the east can offer with letters.

Meanwhile, I will enjoy postal exchanges as ~~sw~~swiftly as you care to continue.

Sincerely,



WILLIAM J. WISWESSER
Research Chemist
Crops Division

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