

July 31, 1962

Lethal Chemosynthesis-- Nice/Interist Program

PS. Since this concept was first formulated (1958) experimental progress has been agonizingly slow, with Interist no less than Bristol. Luca and Giovanni have pushed only moderately hard, as might be expected, and have had serious personnel difficulties. So it is still hanging fire pretty much. We had decided now to emphasize fluorination for analogue generation, and this has given the most serious operational problems.

The idea originally arose out of the thought how to produce DAP analogues, then -> generalized derivatization of metabolites, ~~thems~~ even more broadly from natural products. I only realized this morning the connection with experiments in chemical biopoesis, an incredible failure of correlation, once it is pointed out. Particularly provocative, how much of this has been latent as the very basis of the proposal: its philosophy, contra the studious prospective synthesis of specified endproducts, is very similar.

Talking over the program with Luca yesterday, I had interjected that after all we were mainly interested in achieving a random assembly of atoms for retrospective choice of interesting molecules as antibiotics -- on this basis we would do as well with coal or peat or humic acids as starting materials. And then, he has been asking me to suggesting specific ligands and modifiers to use in the chemical work; perhaps it was my effort to recall the details of Akebori's condensation of aldehydes with glycine that again led to the tie-in with chemical biopoesis. At any rate, there it is, and it should doubtless provoke a more reasoned approach to the antibiopoesis (or therapoesis) project, and give more impetus to careful analysis of the products!

In particular, such reagents as fluor- acetaldehyde, acetone, amides and nitriles and olefins come into the condensation picture.

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Luca arrived on July 22 '62
a visited Nice Jan. 1960 ZOSPAP.

Is that reference.?