SEP - 6 1985

Dear Norman

I enjoyed your "ROOTS" on 1 gene: 1 enzyme: found and lost.

Yes, I was startled to learn from Beets that he had not read Vacuol before about 1945.

However, Tatum certainly had much sooner. (I read about it in 1933 (sic) — or earlier — in Bodansky's text book of physiological chemistry.)

Your account does pass over the thoughts and experiments of JBS Haldane* and Scott-Moncrieff who surely were informed of Vacuol in the 1930's. "Surely" their writings in turn were part of Beets' conceptual framework.

I put "surely" in quotes — really that is a historical question: there might be some evidence to be found in GWB's correspondence and teaching notes.

$\overline{X}$ ..

(X) → Beam

$\overline{0}$ → N.H.H.

(* and as somewhat remoter channels, M. + Sewall Wright who were also thinking about enzymes)

- Moncrieff 9/85