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Title: Genetic control of biochemical reactions in Neurospa.
Author: G. W. Beadle and E. L. Tatum
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The publication of this article in November, 1941, coincided with my first term as an undergraduate student in the Department of Zoology at Columbia University. Gordon Whaley discussed it in his course on plant morphogenesis in the spring of 1942. However, it was Francis Ryan's return in September 1942, from a year's postdoc with Tatum at Stanford, that brought the full meaning of that article home to the Columbia scientists and students, including myself.

Until then, genetics had no part in my vision of the analysis of cell physiology which was my scientific ambition. Mendelian ratios were a kind of numerology that seemed very remote from the structure and function of enzymes and cell membranes. But now, Beadle and Tatum had shown an experimental pathway to the correlation of hereditary information packaged in the chromosomes to the control of all the metabolic and morphogenetic networks in the cell -- the paradigm of mutational dissection of pathways that informs so much of biological research to this day.

I at once beseeched Ryan to teach me the lore of Neurospora and allow me to assist in his laboratory. That mentorship led me into the genetics of microorganisms more broadly, and by 1945 into the design of experiments to seek evidence of genetic recombination in E. coli. {Cf. Lederberg, J. Genetic Recombination in Bacteria: A Discovery Account. Ann. Rev. Genet. 21:23-46 (1987)}

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