

July 31, 1950.

Mrs. Mildred P. Holbrook,  
Administrative Secretary,  
Board of Scientific Advisers,  
Jane Coffin Childs Fund,  
New Haven 11, Connecticut.

Dear Mrs. Holbrook:

In response to your letter of June 26, I am pleased to write the following information concerning my activities since last summer.

**Research:** continuing as before in the area of bacterial genetics. Three graduate students have been working with me on problems relating to gene-enzyme relationships, genetic control of mutability, latent bacterial viruses (lysogenicity) and cytogenetic mechanisms of recombination and segregation in *E. coli*. One student is occupied with looking for genetic recombination in other bacteria (*Salmonella*). New work includes a study of the mechanism of bactericide by radiations and by mutagenic and non-mutagenic chemicals. The results suggest that bacteria are not killed by such simple processes as lethal mutations, but that much more complex genetic phenomena are involved in the bactericidal action of mutagenic agents. This research is supported by continuing grants from the Wisconsin Alumni Research Foundation, the Rockefeller Foundation, the Public Health Service, and the Chemical Corps.

**Academic Position:** Promoted July 1 to rank of Associate Professor of Genetics at the University of Wisconsin. On leave, summer session, to occupy visiting professorship, teaching at letter-head address.

**Publications:** (1949-1950 - may overlap previous report)

- 1949 Aberrant heterozygotes in *Escherichia coli*. *Proc. Nat. Acad. Sci.*, 35: 178-184.
- 1949 with K. Doudoroff, et. al, The utilization of maltose by *Escherichia coli*. *J. Biol. Chem.* 179: 921-934.
- 1949 Bacterial Variation. *Annual Review of Microbiology*, 3: 1-22.

1950 The selection of genetic recombinations with bacterial growth inhibitors. Jour. Bacteriology, 59:211-215.

Papers in press are not cited.

Other Activities:

Louis A. Slotin Memorial Lectures in Radiobiology.  
University of Chicago, November 1949.

Please let me know if I can provide any further information or other assistance.

Yours sincerely,

Joshua Lederberg