

REQUEST TO RESEARCH COMMITTEE FOR RESEARCH SUPPORT, 1956 - 1957

Submitted by Professor Joshua Lederberg, Department of Genetics, January 5, 1956

TITLE AND REASONS FOR STUDY

RESULTS OBTAINED TO DATE

Genetics of Bacteria: a continuing program on life cycles and genetic mechanisms of bacteria and other microbes. See attached sheets for detailed report

PROCEDURE AND PERSONNEL

All laboratory work will be conducted in the Genetics Department, and will be an extension of current studies. The partial problems will be handled as follows:

Transduction in *Escherichia coli*; relationship of provirus to bacterial genes.
Dr. E. M. Lederberg; Dr. J. Lederberg; Dr. M. L. Morse (to June 1956)

Sexual conjugation in *E. coli*. Dr. N. Morton; Dr. J. Lederberg

Cytoplasmic transmission in yeast dikaryons. Mr. R. E. Wright*

Transduction in *Salmonella*; genetic control of flagellar antigens. Mr. T. Iino*

Biophysics and genetics of sexual compatibility in *E. coli*. Mr. Alan Richter*

*These assistants, now supported by WARF funds, have proved to be excellent graduate students and researchers. I have never before had such a consistently good group. Mr. Wright's work last year was set back by a serious auto accident but he has now resumed at his former stride. Mr. Richter is a WARF fellow; the budget below is based on the assumption his appointment will be renewed, which I am happy to recommend. Miss Ruth Zloten was intended as a fourth assistant last year but she has joined a related project with Professor D. T. Berman. The budget request provides for the renewal of these appointments, with the possible addition of a student to be selected from current applications.

FINANCIAL SUPPORT

During the past two years, the Committee has awarded funds for four assistants. Last year, two appointments were vacant, but the funds were used to meet urgent and unforeseen needs; they were rearranged to pay the salary of one full-time nonstudent assistant. This is now to be supported from other funds, and the assistantships now requested are intended for their usual application to graduate assistants.

Budget	3 Twelve-month assistantships, at \$1560 (Wright; Iino; ---)	4 680
	Hourly Help (dishwashing)	500
	Equipment (small air-turbine centrifuge for concentrating phage)	200
	(Contingent request; assistantship for Richter	1 560)**
	Total	\$ 5 380

**Requested for the contingency that his WARF fellowship will be terminated.