

June 16, 1952

REPORT ON RESEARCH PROJECTS
for the
FISCAL YEAR 1951-52

I. Name LEDERBERG, J. Dept. GENETICS Proj. No. % 51:430
Title Bacterial Immunogenetics

II. Personnel: Palmer D. Skaar

III. Statement of other financial support, if any:

The Research Committee grant was awarded on the understanding that it would be terminated when other support was found. This project has been supported by the Rockefeller Foundation for the interval January 1, 1952 to August 31, 1953 (\$3000).

IV. Brief statement of specific progress made during the year:

A large number (over 50) of *Escherichia coli* strains have been found which are mutually fertile, and are serologically diversified.

Our work to date has consisted primarily of preparing serological reagents that will distinguish the antigenic factors in these strains, and we are now proceeding to cross them to discover how they are inherited.

In preliminary experiments, segregation of antigens has been observed. This would place bacterial immunogenetics on the same basis as the mammalian blood groups, and implies that the somatic and flagellar antigens are controlled by the same sort of chromosomal genes that regulate the rest of the bacterial phenotype.

Different somatic antigens may be non-allelic. Hybrids have been produced which display a somatic antigen from one parent; a flagellar antigen from the other.

V. Publications that have appeared in print during the present fiscal year:

None

VI. Manuscripts accepted for publication but not yet printed:

None

The pink copy should be returned to the Graduate School Office on or before August 1, 1952. The blue copy is for your file.