Program 1946-1947. 10/26

Salmonella.

nutrition
mutants
recombinations.

use sugar utilization as a selecting component??

E. coli.

conditions: chloral, salt, serum, time factor.

3 x a^-b^- expts. B T L, B, T L, B, B T, can be done three ways.

Basis of non-random recombination.....

determination of linkage relations of T_1

complementary classes using other phages

phage stocks

$4(C_2^2)$ sets B, B_1, T, L... + resistants to T_3.

Develop stocks for B, linkage.

Biochemical linkages.

selection modifications of ratios.

reciprocal stocks. (use B, B T L).

develop other characters which can be put into any stock: phage res., penicillin (Tuffus), salt resistance, sugar fermentation; citrate; other C-sources.

Tests for plasmagene hypotheses for discrepancies analysis.

sugar reactions (vide Bonner).

examine "prototrophes" more critically for further segregations, etc. (use phage also). Excess substr.

look for partial prototrophes: e.g. threonineless

other coli stocks — try L-15.

Aerobacter

Yeast mutants.

(Proteus). (B. subtilis - Burkholder)

Genetic analysis of reverse mutations.