



have told us much more about the occurrence of enzymes and their behavior in isolated systems than their integrated functioning ~~with~~ with intact cells, and this system may have unusual advantages for consideration of the latter problem.

4. Dr. Aleck Bernstein is proceeding with a comparison of the physico-chemical properties of the two antigenic types of flagella found in Salmonella, ~~(the "group" phase)~~ "specific" and "group" phase. Cells carrying these flagella differ in their agglutinability by acriflavine dyes, <sup>and</sup> ~~but~~ the chemical basis of this difference, not yet elucidated, may help the understanding of the genetic differentiation between them.

5. Dr. L. L. Weed (at ~~Rockefeller~~ the ~~AMS~~ AMS Graduate School, Washington) had discovered and privately reported to us that copper had a remarkable effect of "inducing" small colony variants in E. coli. As he is primarily interested in the biochemical alterations, we agreed to collaborate on the genetic aspects. Miss Helen Byers in this laboratory has reproduced the <sup>primary</sup> ~~major~~ findings, but it is not yet established ~~with~~ whether the copper is actively inducing the genetic defect, or whether spontaneous copper-resistant mutants happen also to have the small-colony metabolic defect. As mentioned elsewhere, most cases of specific induced mutations in bacteria (as distinct from transductions) have evaporated on careful analysis, but this case has not yet been sufficiently studied.