A meeting of the Subcommittee was held at McGill University, Montreal at 7:30 p.m. on Friday, August 17, 1962.

Those present were: Dr. P. R. Edwards, Dr. S. Hofmann representing Prof. Kauffmann and Prof. Rauss, Dr. L. Le Minor, Prof. C. Peluffo representing Dr. Hormaeche, Prof. H. P. R. Seeliger (ex officio member), Dr. Joan Taylor, Chairman, and Dr. K. Patricia Carpenter, Secretary. Dr. S. T. Cowan, by invitation, attended as Chairman of the Subcommittee's ad hoc Commission on the Selection of Neo-type Cultures, to take part in the discussion on this item in the agenda.

Apologies for absence were received from: Dr. D. W. Bruner, Dr. W. H. Ewing, Dr. W. W. Ferguson, Prof. A. Giovanardi, Dr. E. Hormaeche, Prof. Kauffmann and Prof. Rauss.

Opening remarks by the Chairman, Dr. Joan Taylor:

The Chairman formally opened the meeting and welcomed the members present and the representatives of absent members.

Order of Business:

1. Minutes of the last meeting. (Stockholm, August 1958.)

As the Minutes had been approved by the Subcommittee and subsequently published immediately after the VII Congress, 1958, the Minutes were taken as read.

2. Matters arising from the Minutes.

In Appendix 2 of the Minutes of the 1958 Subcommittee Meeting a recommendation was made to the International Committee on Bacteriological Nomenclature that the designation given to a serotype should not be regarded as a specific epithet and that serotype designations should be considered as infrasubspecific designations. Since then the Subcommittee had considered and voted on proposals made by Prof. Kauffmann regarding the classification and nomenclature of Enterobacteriaceae. The voting results had already been circulated to all members. The Chairman explained the difficulties in making a simple summary of the
opinions expressed by various members on their voting papers, nevertheless the majority wrote that the terms "group" and "serotype" should continue to be used at present. Prof. Kauffmann's proposal (Int. Bull. Bact. Nomen. Tax. 1959, 2:1) that the biochemically defined groups are regarded as species was thoroughly discussed; as a result a formal proposal was made by Dr. Edwards, seconded by Dr. Hofmann, that "the biochemically defined groups of the Enterobacteriaceae can be regarded as genera." This was accepted by the members present but it was agreed that there should be a postal vote to include all Subcommittee members. This would be done after the Congress.

The definition of species was discussed but it was unanimously agreed that no recommendation should be made.

3. 1962 Report of the Enterobacteriaceae Subcommittee to the Nomenclature Committee on the occasion of the VIII Congress of Microbiology.

The Secretary reported that this had been circulated to all members and approved by a majority of 8 out of 11 members with voting powers. In addition one member approved the Report except for the Proteus-Providence section and two members who disapproved the Report submitted minority opinions. It was approved that the 1962 Report be presented to the Nomenclature Committee and after acceptance by the Nomenclature Committee subsequently to be published.

The approved Report was given to Dr. W.A. Clark, Secretary of the Nomenclature Committee, on August 23, 1962.


After a discussion concerning aberrant biochemical reactions given by certain strains of enterobacteria e.g. lactose fermentation by Proteus rettgeri, salicin fermentation by Shigella sonnei etc., it was unanimously agreed that it was unnecessary to alter the current definitive biochemical reactions to include such aberrant reactions given by a very small proportion of strains isolated. That such anomalous strains exist in all genera should be recognised, and that they are of value in epidemiological studies.

It was recommended unanimously that at present Arizona should be retained separately and not included in the Salmonella genus. Though there are good taxonomic reasons for including Arizona within the Salmonella genus, it was con-
sidered that for practical reasons it was desirable to keep Arizona and Salmonella as two separate genera.

5. Enterobacter:
Prof. Seeliger, ex officio member, reported that the Judicial Commission had accepted the proposal of Hormaeche and Edwards to substitute the term Enterobacter for the generic designation for the genus previously known as the Aerobacter (Cloaca) genus. The Subcommittee welcomed this decision and unanimously supported the action of the Judicial Commission in accepting this proposal.

6. Shigella:
Sh. flexneri designations: It was reported that recommendations regarding these were being prepared by the two International Shigella Centres.

The request from Dr. B. Sereny, Budapest, Hungary, that as salicin positive Sh. sonnei strains existed, the definition of the Shigella genus should be altered to include such strains was considered. The members reaffirmed the opinion expressed earlier. (See Item 4 of these Minutes.)

The several requests for the Subcommittee's opinion made by Dr. D.G. Manolov, Sofia, Bulgaria, were considered, in particular those concerning the inclusion within the genus Shigella of the organisms named by him "Sh. sofia" (Sh. manolovii - Stenzel) and "Sh. lom" (Sh. metadysenteriae - Stenzel). Other requests by Dr. Manolov concerned the classification of biochemical variants and subserotypes of existing members of the Shigella genus. The views of the International Shigella Centres, who had studied these organisms, were reported. The opinion of Dr. Manolov and Dr. Stenzel that pathogenicity tests should be the main criteria for the inclusion of organisms within the Shigella genus was discussed. The Subcommittee unanimously agreed that pathogenicity tests, e.g. the keratoconjunctivitis test, should not be considered in deciding if an organism should be classified in any particular genus.

In view of the existence of several problems concerning the Shigella, a subsection of the Enterobacteriaceae Subcommittee was set up to study these. The subsection would consist of the following Subcommittee members, Dr. Ewing, Prof. Rauss and Dr. Carpenter as Chairman, with Dr. K. Lachowicz, Warsaw, Poland, and Dr. S. Szturm-Rubinsten, Paris, France, as co-opted members.
7. Ad hoc Commission for the selection of neotype cultures.
   Dr. Cowan reported that the neotype cultures recom-
mended by the Commission in Appendix 3 of the Minutes of
the 1958 Meeting had been accepted by the Judicial Com-
mission.
   The Subcommittee unanimously approved the strain Salmonella typhi NCTC 8385 recommended by the ad hoc com-
mission as the neotype culture. Neotype cultures for other
genera will be selected.

   A discussion was held on the procedures for electing new
members. It was agreed that a decision on these matters
should be postponed until after the Congress.

   The Chairman stated that the meeting of the Subcommittee
on August 21, 1962, would be open to any interested bacter-
ologists and an opportunity would be given for discussion on
various aspects of the Enterobacteriaceae.

10. The Meeting closed at 10:30 p.m.

K. Patricia Carpenter,
Secretary
1. Prof. Kauffmann, who was not present at the meeting, wishes the following statement to be added to the Minutes:

"I cannot approve these Minutes since my species-definition in Int. Bull. Bact. Nomen. Tax., 1961. 11:5, is not mentioned at all. In this paper is the following definition: 'A species is a group of related sero-fermentative-phage types.' I have not defined the species as a serotype in this paper.

"Rule 8 and the Note to Rule 8 in the Bacteriological Code are valid only for sub-divisions of species, but not for the species itself.

"My definition is a species-definition and not a definition of sub-divisions of the species. Therefore it is necessary to cite my species-definition in the Int. Bull. Bact. Nomen. Tax. 1961, 11:5.

2. Prof. Rauss, who was not present at the meeting, states:

"I approve the Minutes of the Subcommittee Meeting except the decision regarding the definition of species. Kauffmann's definition reads correctly: 'A species is a group of related sero-fermentative-phage types.' - Int. Bull. Bact. Nomen. Tax. 1961. 11:5. The decision was passed on an earlier, but not on this modified definition."

Dr. K. Patricia Carpenter,
Secretary,
Enterobacteriaceae Subcommittee