International Committee on Nomenclature of Bacteria

Subcommittee on Gram-Negative Anaerobic Rods

Minutes of Meeting, 9 August 1970

Mexico City, Mexico

Minute 1. Record of attendance. Members present were H. Beerens (Chairman), Ella M. Barnes, S. M. Finegold, A. C. Sonnenwirth, and W. E. C. Moore (Secretary).

Minute 2. Past activities of Subcommittee. Subcommittee examination of cultures. Lille meeting and London meetings. Assignment of described species to 3 groups: well-known; those requiring further study; species to be rejected. Reports of the first meetings are published in the *International Journal of Systematic Bacteriology* (20:297-300 [1970]).

Minute 3. Future meetings. It was proposed that the Subcommittee meet every 2 years. The next meeting was tentatively set for June or July 1972 in Los Angeles, California, USA.

Minute 4. Present work by Subcommittee members. H. Beerens discussed the results of studies on 132 strains of the "*Bacteroides fragilis* group" using gel diffusion and agglutination by antisera produced with whole, fresh cells from cultures of NCTC 10582 (*Bacteroides thetaiotaomicron*), ATCC 8483 (*B. ovatus*), ATCC 8482 (*B. vulgatus*), ATCC 8503 (*B. distasonis*), NCTC 9343 (*B. fragilis*) and Beerens E323 (*B. fragilis*). There are at least five distinct major antigen groups with cross-reactions caused by minor antigens. This work stimulated much interesting discussion and is to be continued in Beerens' laboratory. It was proposed that the antisera be tested against representatives of other species of *Bacteroides*.

Minute 5. Distribution of reprints. It was requested that members distribute reprints of their work to the other Subcommittee members.

Minute 6. Discussion of additional problems. Relationship of *Fusobacterium necrophorum*, *F. funduliformis*, and *F. pseudonecrophorum*. Beerens cited earlier data showing antigens A, B, and C for *F. necrophorus*, antigens A, B, C, and D from *F. funduliformis*, and antigens a, b, c, and d from *F. pseudonecrophorus*.

Minute 7. Problem cultures. Finegold introduced problems of microaerophilic rods, for example Finegold culture B536.

Minute 8. Production of black pigment.

Barnes suggested that a report of black pigment from many species of *Bacteroides* resulted only from H₂S production by these organisms. The color in the presence of iron is probably not related to the black pigment associated with strains of *B. melaninogenicus*.

Minute 9. Taxonomy of *Bacteroides melaninogenicus*. The problem of the taxonomy of *Bacteroides melaninogenicus* was discussed at length, especially in relation to the work of Sawyer, MacDonald, and Gibbons (Arch. Oral Biol. 7:685-691).

It appears that there are at least four groups of organisms that produce dark to black colonies on blood agar. A fermentative group of cultures reported by these authors to produce butyric acid is apparently not available to the Subcommittee. The cultures were reported to produce very black colonies. The relationship of those that produce brown colonies is in question since these produce only small amounts of butyric acid. An attempt will be made to obtain additional strains of these groups for examination by any Subcommittee members who are interested. These will be sent out by the Secretary as they are obtained. The Subcommittee would like to unravel this problem as one of its next objectives. Other problems of interest may also be examined according to the wishes of the Subcommittee members. The Secretary also will send other strains to Beerens for the serological studies.

Minute 10. Membership of the Subcommittee. The possibility of adding new members to the subcommittee was discussed as was the continuing interest of the present membership.

Minute 11. Election of Chairman. H. Beerens announced that he wishes to retire as Chairman of the Subcommittee following the planned 1972 meeting. It was decided that the members should send to Beerens nominations for Chairman by August 1971. Beerens will then conduct the election prior to the 1972 meeting in Los Angeles.

Minute 12. Open meeting. On Thursday, 13 August, an open meeting was held by Barnes, Beerens, Finegold, and Sonnenwirth to discuss taxonomic problems with any interested microbiologists.

Others present and their individual interests were as follows: F. L. Jackson (*Bacteroides corrodens*), Dept. of Medical Bacteriology, University of Alberta, Edmonton, Canada; T. Hofstad (Nature of antigens in *B. melaninogenicus* and related organisms), Lab Oral Microbiology, Dept. of Microbiology, The Gade Institute, University of Bergen, 5000-Bergen, Norway; M. J. Allison (Biochemistry of the rumen *Bacteroides*), National Animal Disease Lab., P.O. Box 70, Ames, Iowa 50010, USA; T. Mitsuoka (Identity and properties of the flora from man, chickens and other animals), Institute of Physical and Chemical Research, Yamato-machi, Saitama, Japan; L. J. Mata, Maria L. Mejicanos, and F. Jimenez, (Effect of nutrition on the human intestinal flora and related problems), Institute of Nutrition of Central America and Panama, P.O. Box 11-88, Guatemala, Guatemala C.A.

Barnes reported on the work of the Subcommittee and the problems to be considered next.

There was considerable discussion of the properties of *B. melaninogenicus*. Hofstad refer-

red to a publication (J. Bacteriol. 1969) describing sugar fermentation patterns comparable to those of *B. fragilis*. Jackson discussed the problem of *B. corrodens*, and he may propose (in J. Med. Microbiol.) a new genus for the facultative strains that were originally included in this species.

Minute 13. Present membership. Present members of the Subcommittee are: H. Beerens (Chairman), Lille, France; W. E. C. Moore (Secretary), Blacksburg, Virginia, USA; Ella M. Barnes, Norwich, England; Jean Bittner, Bucharest, Rumania; M. P. Bryant, Urbana, Illinois, USA; L. Fievez, Brussels-Cureghem, Belgium; S. M. Finegold, Los Angeles, California, USA; H. S. Goldberg, Columbia, Missouri, USA; H. S. Heineman, Philadelphia, Pennsylvania, USA; L. Rheinhold, Halle (Saale), Germany; A. C. Sonnenwirth, St. Louis, Missouri, USA; S. Suzuki, Gifu-Shi, Gifu-Ken, Japan; and H. Werner, Bonn, Germany.

W. E. C. Moore
Secretary