

# International Committee on Systematic Bacteriology

## Subcommittee on the taxonomy of staphylococci and streptococci

Minutes of the meetings, 17 September 1996, Institut Pasteur, Paris, France

### Session 1. Closed meeting

**Minute 1. Call to order.** The Chairman, W. E. Kloos, called the closed meeting at the Institut Pasteur (Paris) to order at 10:00 on Tuesday 17 September 1996.

**Minute 2. Record of attendance.** The members present were: W. E. Kloos (Chairman), J. M. Hardie (Secretary), M. D. Collins, T. Ezaki, R. R. Facklam, J. Freney, J. Henrichsen, J. Jelínková, M. Kilian, W. Köhler, J. A. Webster and R. A. Whiley. Apologies were received from A. Coykendall, L. Devriese, V. Hájek, D. Mossel and K. Schleifer.

**Minute 3. Minutes of the meeting held in Prague on 4 July 1994.** It was noted that in Minute 8 the words ‘... selected viridans ...’ should be removed. The minutes were subsequently approved.

**Minute 4. Election of officers of the subcommittee.** The subcommittee accepted with regret the resignations of W. E. Kloos as Chairman and J. M. Hardie as Secretary. J. M. Hardie was elected as the new Chairman and R. A. Whiley was elected as the new Secretary. J. M. Hardie proposed J. Freney for the new post of Vice-Chairman in order that a ‘staphylococcal perspective’ be maintained amongst the officers of the subcommittee. This proposal was accepted.

**Minute 5. Confirmation of membership of the subcommittee and proposals for new members.** The subcommittee noted the resignation of D. Jones, L. Devriese and A. Coykendall, and expressed gratitude for their contributions. Tammy Bannerman (proposed by W. E. Kloos) and Lucia Teixeira (proposed by R. R. Facklam) were elected to serve on the subcommittee. Two further nominations were received, but the secretary was asked to obtain more details about the individuals concerned before a decision on their election could be made.

**Minute 6. Reference strains for production of streptococcal antisera.** M. Kilian reported that the small working group had not yet met but a list of immunizing strains was in preparation and would be circulated to members. It was agreed that this is an important but not urgent issue. R. R. Facklam pointed out that a panel of immunizing strains for  $\beta$ -haemolytic streptococci was held at the CDC in Atlanta but this was not the case for the viridans streptococci. The limited value of serology as a taxonomic tool was recognized but its application to clinical diagnosis and epidemiology was acknowledged to be of continuing significance.

**Minute 7. Minimal standards for the description of species.** It was agreed that there was an outstanding requirement for minimal standards to be published as soon as possible. It was also suggested that such minimal standards should be regarded as guidelines rather than rigid rules as it was recognized that, in practice, they are impossible to enforce. M. D. Collins expressed the view that the inclusion of DNA–DNA base pairing and 16S small-subunit rDNA

sequence data were desirable and pointed out the differences between phenetic and phylogenetic criteria. J. M. Hardie proposed to send previously prepared draft proposals for minimal standards to a member of each of the four subgroups for updating and preparation for publication in the IJSB: *Enterococcus* (R. R. Facklam, L. Devriese, M. D. Collins); *Streptococcus* (M. Kilian, J. Henrichsen, J. M. Hardie, R. A. Whiley); *Staphylococcus* (J. Freney, J. A. Webster, V. Hájek, W. Kloos); *Lactococcus* (K.-H. Schleifer, M. Teuber).

**Minute 8. Remit of the subcommittee.** The scope of the activities and remit of this subcommittee were discussed, bearing in mind the phylogenetic distance between some of the genera involved. It was felt that at some future time it might be appropriate to recommend a separation into two separate committees, one concerned with *Streptococcus* and related genera and another dealing with *Staphylococcus*, as was the case some years ago. Genera to be considered alongside *Streptococcus* should include *Abiotrophia*, *Carnobacterium*, *Enterococcus*, *Globicatella*, *Lactococcus*, *Tetragenococcus* and *Vagococcus* (and possibly *Aerococcus*, *Alloiococcus*, *Dolosigranulum* and *Gemella*). The catalase-positive *Staphylococcus* ‘division’ might usefully include *Deinococcus*, *Planococcus*, *Stomatococcus* and possibly *Kineococcus*, *Luteococcus*, *Marinococcus*, *Pelezaria*, *Salinicoccus* and *Sporosarcina*. Members were of the opinion that the genera *Leuconostoc*, *Oenococcus*, *Pediococcus* and *Weissella* should fall within the remit of the Subcommittee on the taxonomy of *Lactobacillus* and related organisms (lactic acid bacteria) subcommittee, and that *Helcococcus* should be referred to the Subcommittee on the taxonomy of clostridia and *Clostridium*-like organisms. A responsibility for considering subspecies was acknowledged but it was felt that subspecific typing was beyond the remit of the subcommittee.

**Minute 9. Other scientific matters.** M. Kilian proposed that the nomenclature of the species groups within the genus *Streptococcus* should be standardized wherever possible. It was agreed to adopt the names ‘anginosus group’ and ‘mitis group’ for groups sometimes designated ‘milleri group’ and ‘oralis group’, respectively. J. Jelínková and W. Köhler raised the question of the recognition and status of the subspecies of *Streptococcus dysgalactiae* and suggested that *Streptococcus dysgalactiae* subsp. *dysgalactiae* and *Streptococcus dysgalactiae* subsp. *equisimilis* should be regarded as separate species on clinical and epidemiological grounds. Current taxonomic evidence did not appear to support this view, although these streptococci are generally regarded as distinct species by clinical microbiologists. J. Webster and W. Kloos raised the question of the nomenclature of *Staphylococcus pulvereri* sp. nov. [Zakrzewska-Czerwinska et al.; *Int J Syst Bacteriol* **45** (1995), 169–172] and *Staphylococcus vitulus* sp. nov. [Webster et al.; *Int J Syst Bacteriol*

44 (1994), 454–460]. It would appear on the basis of DNA–DNA base pairing, pulsed-field gel electrophoresis, ribotyping and other taxonomic criteria that the two species are identical and that *Staphylococcus pulvereri* is a later synonym of *Staphylococcus vitulus*.

**Minute 10. Any other business.** J. M. Hardie reported that Dr G. M. Garrity had taken over from Dr J. G. Holt as Editor-in-Chief of Bergey's Manual Trust. It was understood that plans for the next edition of *Bergey's Manual of Systematic Bacteriology* were in preparation.

**Minute 11. Current membership.** The current membership of the subcommittee is as follows: J. M. Hardie (Chairman), J. Freney (Vice-Chairman), R. A. Whiley (Secretary), T. Bannerman, M. D. Collins, T. Ezaki, R. R. Facklam, V. Hájek, J. Henrichsen, J. Jelínková, M. Kilian, W. E. Kloos, W. Köhler, D. A. A. Mossel, K. H. Schleifer, L. Teixeira and J. A. Webster.

**Minute 12. Next meeting of the subcommittee.** The next meeting of the subcommittee would be held in 1999 in association with the XIV Lancefield Symposium on Streptococci and Streptococcal Diseases, Auckland, New Zealand (11–15 October 1999).

**Minute 13. Adjournment.** The meeting was adjourned at 12:55 on 17 September 1996.

## Session 2. Open meeting

**Minute 14. Call to order.** The open meeting at Institut Pasteur (Paris), in association with the XIIIth Lancefield International Symposium on Streptococci and Streptococcal

Diseases, was called to order by the Chairman, W. E. Kloos, at 18:15 on 17 September 1996.

**Minute 15. Record of attendance.** In addition to those attending the closed meeting, approximately 80 people were present.

**Minute 16. Scientific presentations.** After a brief welcome and introduction from the Chairman, the following presentations were made: L. M. Teixeira (introduction by R. R. Facklam) 'Overview of new genera of Gram positive cocci.' T. Ezaki 'Application of 16S rRNA sequences for species identification of streptococci and the limitations of the method.' W. E. Kloos '*Staphylococcus sciuri* subspecies, natural reservoirs of methicillin-resistance and the newly described genus *Macrococcus* and its four recognized species, close relatives to staphylococci.' J. A. Webster 'Discrete types and non-overlapping species; a natural classification of bacteria.' C. Riou-Gouloumès 'Atypical strains of *Staphylococcus epidermidis* isolated from human clinical specimens.' C. Vernozy Rozand 'Identification and ribotyping of *Staphylococcus vitulus* isolated from goat milk cheeses.'

**Minute 17. Adjournment.** Following a brief discussion of the scientific presentations, chaired by W. E. Kloos and J. M. Hardie, the meeting was adjourned at 20:30 on 17 September 1996.

W. E. Kloos, *Chairman*  
J. M. Hardie, *Secretary*  
R. A. Whiley, *Secretary-elect*