

# Chairman's Report to the WHO-IUIS Nomenclature Committee, Kyoto, 25 August 1983

Underlying all communications is the terminology which must form the basis for the communications. It is clear that terminology must be unambiguous, as simple as possible, as coherent as possible with biological mechanisms, and convenient for printing. Almost any such linguistic convention must be regularly revised, since Immunology is in a continuing ferment which yields new facts and new insights. To fulfill these functions IUIS formed a Nomenclature Committee and appropriate subcommittees. There are problems which have been repeatedly encountered by our subcommittees. "Is it too soon to set up a nomenclature? Perhaps we shall know more tomorrow and be compelled to scrap our nomenclature." At times, it became clear that a definitive nomenclature for some particular system was not in our grasp, but a nomenclature was nevertheless desirable to allow communication with nonspecialists and to minimize the obstacles to learning, which are put in the way of students by conflicting designations. We often have a nomenclature which has historic rather than mechanistic justification. This becomes a stumbling block for new investigators who enter the field and even more so for students, particularly medical students. A disproportionate part of the learning effort may be consumed by a cumbersome terminology. For instance, it appears to be reasonable that components, which are ultima-

tely recognized to be part of a chain of reactions, should be designated by numbers in the sequence of interactions and not in the sequence of discovery. Quite naturally, those who have been involved in the process of discovery have sentimental and "facilitation" commitments to the historical designation. Those entering the field do not have this kind of commitment, but in the nature of things, are not heard until they have been established as investigators and have become "aculturated" to the prevailing language and have thus entered the establishment. Nevertheless, there are good reasons for conservatism! It would be counterproductive to revise nomenclature every year, and totally confusing if every discovery of a new component involved a complete revision of the designation of each component. How does one determine a point in time when the new discovery of additional components has become so slow that it seems justified to rename all the components? I have deliberately chosen a particularly difficult area in which the right moment for action is the central concern of a subcommittee of experts. Another area, in which revision is needed, presents fewer objective problems. It concerns fields in which the same component has been discovered by several individuals, where precedence is not easily assigned, and where relative merit of different nomenclatures is not easily agreed upon. A prior

commitment to find a solution, acceptable to all, is needed in such situations.

Ultimately, a system of nomenclature, even if it were perfect, would be completely useless if it were not accepted by the leaders in the field and by those who teach the subject in the universities. Thus, a broad and continuing series of dialog is required and the International Union of Immunological Societies provides the organizational basis for this dialog and for the gradual evolution of a coherent system of designations. The second Congress of Immunology will afford an opportunity for considerable progress in this area.

Since 1980 one report has been published and a number of new activities have been initiated.

The nomenclature subcommittee on *Alternate Pathway of Complement* has reached agreement and published a report. Since then critical views have been expressed by the Editor of the *British Biomedical Journal*. These will be taken into account in discussion of the entire complement system's nomenclature which Dr. F. Austen (Harvard Medical School, The Seeley G. Mudd Building, 250 Longwood Avenue, Boston, Mass. 02115) will initiate. When the committee was polled in 1983, it was the uniform view that it was not appropriate to proceed, at this time, with a definitive document.

The subcommittee dealing with *Nomenclature of Fc Receptors* met

in Winnipeg on 1-3 June 1981. Further discussions and exchange of views will be required before a document for publication can be evolved (Chairman: Dr. K. Ishizaka, Immunology Division, Johns Hopkins University School of Medicine, The Good Samaritan Hospital, 5601 Loch Raven Boulevard, Baltimore, MD. 21239). The problems remain in the nomenclature for Fc receptors in terms of specificity particularly for IgG subclasses; it is the opinion of Dr. Ishizaka that this matter must be held over for at least another year before sufficient information is available for further discussion of nomenclature in this area.

The subcommittee on *Lymphokines* have discussed a framework of lymphokine classification, but have not felt that the time was ripe to proceed with further development of this topic. It was, therefore, decided to discontinue the committee, but subcommittees, dealing with more narrowly defined topics will be initiated.

A subcommittee on *Antigen Specific Soluble Factors* is being planned by Drs. M. Feldmann (Department of Zoology, University College, London, Tumour Immunology Unit, Gower Street, London WC1E 6BT, London, England) and T. Tada (Department of Immunology, Faculty of Medicine, University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113, Japan).

A nomenclature subcommittee on *Terminology of Immunodiagnostic Methods* has been convened by Dr. D.H. de Savigny (Ministry of Health, Laboratory Services Branch, Box 9000, Terminal A, Toronto, Ontario M5W 1R5, Canada).

The desirability and feasibility of a subcommittee for *Nomenclature of Synthetic Peptides Representative of Immunoglobulin Chain Sequences* is being investigated by Dr. D.R. Stanworth (The University of Birmingham, Rheumatology and Allergy Research Unit, Department of Immunology, The Medical School, Vincent Drive, Birmingham

B15 2TJ, England).

A subcommittee on *Hybridoma Nomenclature* has been initiated by Dr. A. Bussard (Directeur Scientifique au C.N.R.S., Chef du Laboratoire d'Immunologie Cellulaire, Institut Pasteur, 75015 Paris, France) during February 1982, in Geneva. The Committee has met again in Kyoto and will report.

A nomenclature subcommittee on *Thymic Hormones* is being formed by Dr. J. -F. Bach (unite de Recherches Nephrologiques de l'Inserm U 25, Hopital Necker, 161 Rue de Sevres, 75730, Paris, France) and Dr. A.L. Goldstein (The George Washington University Medical Centre, Washington, D.C., U.S.A.). We hope to hear from Dr. J. -F. Bach and/or Dr. A.L. Goldstein about the development in this area.

A subcommittee on *MHC Nomenclature for Domestic Animals* will attempt to evolve a standard nomenclature for designating both the genes and gene products of the major histocompatibility complex of domestic species. It will consider the existing nomenclature and attempt to agree on a unified system based on established genetic and immunologic principles and practices. The major objective was to develop uniform guidelines which will serve the workers in this field and in the future. The subcommittee met in Ottawa on Thursday, July 22, 1982, and began to discuss nomenclature for Bovine Lymphocyte Antigen (BoLA) and Equine Lymphocyte Antigen (ELA) and decided to designate antigens with the prefix "w" for workshop, plus an integer for that particular antigen. The non MHC lymphocyte antigens received some attention. It was agreed to hold the next meeting of the subcommittee in Göttingen, West Germany, at the occasion of the next ISABR conference in July, 1984. (Chairman: Dr. R.L. Spooner, A.R.C. Animal Breeding Research Organization, West Mains Road, Edinburgh EH9 3JQ, Scotland).

Some committees are being jointly organized between IUIS and other international organizations. Among these are the subcommittees on *Macrophages*, on *Lymphocytes* and on *Limfocytes* (Dendritic cells, Langerhan's cells, M cells, NK cells), which are creations of the Reticuloendothelial Society, and are now forming part of the network of WHO-IUIS subcommittees. The views of the group have been summarized in the Journal of Reticuloendothelial Society 31:371-380, 1980.

Human *Leukocyte Markers* have been discussed by an independently initiated leukocyte subcommittee which has met in Vienna in February 1981. Members of this subcommittee agreed to function also as a subcommittee of the WHO-IUIS Nomenclature Committee (Dr. W. Knapp, Institut für Immunologie der Universität Wien, A-1090 Wien, Borschkegasse 8A, Austria, Chairman). Human Leukocyte Markers detected by monoclonal antibodies were discussed in a Workshop in 1982 and published by Springer-Verlag, Berlin, Heidelberg, New York. Minutes, correspondence and summaries of a Workshop in Paris are being appended. There are still some differences which need to be settled as to the best nomenclature to be selected, and we hope to hear from Dr. Alain Bernard and Dr. Roy Ritts about developments in this area.

*Allergen* nomenclature has been discussed between Drs. H. Lowenstein, David Marsh and Tom Platts-Mills (Paris 1980, Konstanz 1980, and London 1982). They considered a nomenclature based on the first three letters of the first Latin name followed by the first letter of the second Latin name of the allergen source and followed by a number in the order of acceptance. Thus, in the case of Ragweed: Antigen E = Amb. e.1; antigen K = Amb. e.2; Ra 3 = Amb. e. 3, and so on. They still need to define criteria by which an antigen to be adequately defined for designation by this

system. It was not possible for the subcommittee to meet in Kyoto.

Dr. J. Herbert proposes to investigate the possibility of a committee on *Adjuvants and Immunostimulants* to explore the utility of such a committee. Dr. Bob White had expressed a great interest in developing a subcommittee on *Adjuvant and Immunostimulant* nomenclature. His tragic death on 17 September 1982 has been a great loss

to the scientific community, in many respects. Dr. John Herbert has shared Dr. White's interest in the adjuvant and immunostimulant nomenclature and will endeavour to investigate this matter further.

Dr. Peter Demant (Antoni van Leeuwenhoekhuis, Het Nederlands Kankerinstitut, Plesmanlaan 121, 1066 CX Amsterdam) has suggested the need for an examination of the status of the *Murine Ly Termino-*

*logy* and has undertaken to examine the feasibility of a nomenclature committee that would discuss this matter.

The absence of funds for travel are a major obstacle for more rapid progress in this area, though one might argue for delays in the formulation of nomenclatures, so as to avoid premature designations, which will not survive even a period of 4-5 years.

**B. Cinader**

*Institute of Immunology,  
University of Toronto,  
Toronto, Canada M5S 1A8*