

Dr Mike Crumpton, formerly Director of Research at the Imperial Cancer Research Fund (ICRF). The symposium focused on the role of cell surface molecules in presentation of antigenic peptides by antigen presenting cells, specific recognition of these peptides by T lymphocytes, transduction of antigen-specific and accessory signals from the cell surface to the interior of the cell and initiation of immune responses such as cell division and cytokine production.

The first chapter (Bodmer) reviews the evolution of major histocompatibility complex (MHC) molecules from primitive histoglobulins, the functional significance of MHC polymorphisms and the down regulation of MHC expression in placental and neoplastic tissues as a mechanism for immune avoidance. Chapters 2 and 3 (Young *et al.* and Grey *et al.*) summarize the mass of data regarding interactions between antigenic peptides and the peptide-binding groove of Class I MHC molecules. The wealth of detail in these two contributions highlights the relative paucity of information regarding the equivalent reaction between antigenic peptides and the T cell receptor (TcR).

Chapter 4 (McMichael *et al.*) puts the preceding chapters into a functional context, detailing the peptide specific cytotoxic T lymphocyte (CTL) response to polymorphic antigens of the human immunodeficiency virus (HIV). Meuer *et al.* (Chapter 5) discuss the role of accessory signals in regulating the response to TcR triggering. In particular they have examined the mitogenic consequences of the physical interaction between the TcR and CD2 and the differential requirement for accessory signals in the induction of IL-2 receptor and IFN γ synthesis on the one hand and of IL-1, IL-2 and IL-6 synthesis on the other.

In the last three chapters, the intracellular signalling events downstream from the TcR are reviewed. Izquierdo Pastor and colleagues have dissected the molecular pathway from the TcR/antigen complex, via p21^{ras} to expression of the IL-2 gene. Perlmutter describes the role of the SRC protein tyrosine kinase family in controlling thymocyte differentiation and Jackson *et al.* attempt to unravel the sequence of tyrosine phosphorylation events and the formation of signal transducing multimolecular complexes.

This is not a book for beginners: the editors assume a fairly detailed working knowledge of the immune system. However, although not as all-embracing as the title might suggest (B cells and antibodies scarcely get a mention), this book is a concise, comprehensive and extremely readable review of current understanding of the molecular mechanisms of T cell activation.

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The Families of Flowering Plants, Interactive Identification and Information Retrieval. By L. WATSON and M. J. DALLWITZ. CSIRO. 1993. Booklet 40 pages and CDROM. Available from CSIRO Information Services, P.O. Box 89, East Melbourne, Vic 3002 Australia. Price US\$180 for customers outside Australia & New Zealand (+10% for postage + handling). ISBN 0 643 05507 X.

This publication provides detailed descriptions of the characters of all the world's families of flowering plants, together with computer programs for identification and retrieval.

The information available includes the traditional kind of plant taxonomic morphology, such as details of the flowers and fruits, but also a great deal of other data, such as the photosynthetic pathways, germination type, stigma type, anther ontogeny and pollen morphology, wood anatomy, sieve tube plastids and phytochemistry, making about 470 characters in all for 563 families. In addition, the families are assigned to various different classifications and there is an outline of their world geographical distribution. Lastly, there are 690 colour images.

Watson has been working on the project for 20 years or more, and has been at great pains to make his data both comparable and complete. His personal interest in plant anatomy is reflected in the choice of characters. Dallwitz was the creator of the DELTA (Description Language for Taxonomy) format, now an international data standard, upon which this and other major projects are based e.g. the Grass Genera of the World (1988). He is also the author of the INTKEY program for identification and retrieval.

ANGIOFAM is not a database in the relational sense, but rather a data file with accompanying programs. These are intended for the DOS operating system on the IBM PC only. The programs are user friendly and provided with numerous help screens, but users who are accustomed to use only software under Microsoft Windows 3 will need to make a little more effort than they are accustomed to do. The INTKEY program has a wealth of different commands, and a beginner will not need all of these.

Are there any alternatives? You might try the MEKA program by Duncan & Meacham (1986), based on the punched card key published by Hansen & Rahn (1969). That is a good deal simpler, but does not include nearly so much information. It is expected to become available on the Internet at the University of California at Berkeley quite soon.

References

- Duncan, T. & Meacham, C. A. (1986). Multiple-entry keys for the identification of angiosperm families using a microcomputer. *Taxon* 35, 492-494.

Hansen, B. & Rahn, K. (1969). Determination of angiosperm families by means of a punched card system. *Dansk Botanisk Arkiv*, 26.

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Dazzle 'Em with Style: The Art of Oral Scientific Presentation. By ROBERT R. H. ANHOLT. W. H. Freeman and Company. 200 Pages, 26 black and white illustrations. Paperback. Price \$11.95. ISBN 0 7167 2583 5.

Young scientists who embark on a professional career that will take them into the twenty-first century have to contend with an increasingly competitive world, in which scientists are swamped by floods of publications and where the rat race for success occurs under conditions of ever-shrinking research budgets. Under these conditions personal success depends more and more on professional communication skills. Yet, few institutions educate their students in the art of oral scientific presentation. This may change with the arrival of *Dazzle 'Em with Style*, an excellent book that provides a solid explanation of the art of oral scientific presentation. In *Dazzle 'Em with Style*, Robert R. H. Anholt gives a comprehensive outline of both the theory and mechanics of structuring and delivering a memorable scientific presentation. Unlike most books on public speaking, *Dazzle 'Em with Style* is specifically intended for an audience of young scientists and contains numerous well-chosen examples to illustrate the guidelines which the author

describes for the preparation of a successful scientific presentation. These examples, which make the book interesting, and the light-hearted good humor, which prevent the patronizing tone often encountered in this type of book, make *Dazzle 'Em with Style* a pleasure to read. In about two hundred pages, Anholt covers everything from the preparation and structuring of a scientific presentation to the proper use of visual aids and delivery. He provides clear guidelines of how to put a presentation in focus, how to emphasize important issues, how to build sidelines without disrupting the line of thought and how to design slides that are legible and supportive of the story line. Anholt also deals with the importance of body language, eye contact and voice projection. He even covers topics such as what to wear and how to deal with controversial issues and hostile questions. Many readers will find *Dazzle 'Em with Style* an eye opener. Even though it is intended for an audience of graduate students and postdoctoral fellows, it is clear that many faculty members would benefit equally from this outstanding book. Anholt's book is suitable both as a self-help book for personal improvement and as a textbook for courses in oral scientific presentation. Anyone who has to give a thesis defense, a job interview seminar or lectures to students or professionals cannot afford to pass up on the sound advice given by Anholt in this splendid book.

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