

of either a single chain or a homodimer capable of transducing a signal after binding to IL-4.⁵ However, it has been revealed recently^{6,7} that the γ subunit of IL-2R, γ_c , constitutes a functional component of IL-4R (K_D 79 pM) although IL-4 binding to the IL-4R can be detected in the absence of γ_c (K_D 266 pM). The variability we have observed in the K_D of IL-4R species in B-CLL may be the result of variable expression of γ_c and may explain the heterogeneity of B-CLL proliferative responses to IL-4. In addition, the inhibitory effects of IL-4 and IL-2 induced proliferation of B-CLL cells described by Mainou-Fowler *et al* may be the consequence of competition between IL-4 and IL-2 for their common receptor subunit, γ_c . In this context it would be helpful to display the range of the proliferative response following incubation of B-CLL cells with IL-4 and IL-2 and to correlate this with the expression of the γ_c receptor.

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Book reviews

Tissue Culture Techniques. An Introduction. Martin BM. (Pp 250; £34.) Public Relations Birkhauser Verlag A.G. 1994. ISBN 3-7643-3643-9.

One noticeable trend in scientific publishing over the past few years has been the advent of the plastic comb-bound laboratory manual, full of detailed step by step recipes which can be followed at the bench. No doubt the popularity of these books is partly explained by the explosion in the number and complexity of techniques which have been de-

veloped in biomedical science, and because of the reluctance of some authors, despite the pleas of journal editors, to provide adequate details of techniques in refereed publications. There have been a large number of extremely useful publications which have found a permanent position in many laboratories, but I fear that this book is unlikely to join them on the shelves above the laboratory bench.

This book arose from a basic tissue culture course given by the author at the Boston University School of Medicine. It does contain some recipes, but the book is mainly an exposition of the basic principles of cell culture. It covers the usual aspects of basic technique, including aseptic technique and sterility, routine manipulation of cell cultures, preparation of primary cultures, and cell preservation as well as some more advanced aspects, including cloning, transformation and transfection. There are brief appendices about the cell cycle, formulation of media and salt solutions and a list of vendors aimed at the North American market. In a number of places in the text there are sets of problems and exercises and a set of model answers. These problems are generally of a conceptual, but of a rather self evident nature—for example, "What do you do if you drop a tray of culture dishes and some of the lids fall off?"; answer: "After reacting to this disaster in your own personal manner, calm down..." and then "... throw them out!". There are some factual questions along the lines of "how many 500 ml bottles will it take to contain 10 litres of medium?"

There are a number of technical matters described in the book with which I do not agree—for example, pouring from one bottle into another and I would not use a gas flame for routine cell culture purposes in a class II biological safety cabinet. I also have little faith in ultraviolet lamps in culture hoods as effective surface sterilisers. It is impossible to know the ultraviolet (as opposed to visible blue light) output of a lamp and how quickly the output is deteriorating. A single grain of dust can cast a shadow which can shade many millions of bacteria from the ultraviolet light. There are also a number of important topics which a student learning cell culture for the first time should beware of and which are not covered. A major omission is any discussion of cell culture cross-contamination. This is certainly more common than most people realise and the practical measures needed to prevent this and to detect that it has occurred should form part of any introductory book on cell culture.

There is no doubt that there is a need for laboratory manuals which describe particular techniques in detail, together with a realistic description of what can go wrong and how to troubleshoot, primarily aimed at the relatively experienced bench scientist who has mastered a number of techniques and can appreciate when he or she is going wrong, but who wishes to try something new. There is also a need for introductory books for the novice but this area is already well catered for with a number of better produced books available, with more and considerably better illustrations. I wonder to whom this particular book is likely to appeal? It is very doubtful that someone who has never done cell culture could pick up this book and start and for those who already know the basics there is very little in this book which would be useful.

J L DARLING

Notices

FNA Cytology using the Cytospin method

October 9 1996

Venue: Royal Preston Hospital, UK

This course, costing £60.00 to include coffee, lunch and tea, is aimed at Consultants and trainees, and MLSOs involved in Cytopathology.

For further information, please contact: Dr A J Howat, Department of Histopathology, Royal Preston Hospital, Preston PR2 4HG, UK. Tel: 01772 710141; fax: 01772 710181.

United States FDA Medical Device Update: Design Controls, GMP Requirements and Marketing Clearance

20-23 May 1996

Venue: Charles de Gaulle Hilton, Paris, France

An international meeting on FDA GMP and marketing regulations including the proposed new GMP requirements and how to comply with them. All three days will be presented by FDA's CDRH with a presentation by the European Commission. Sponsored by the French Government.

For further information, please contact: Sharon Goff, Advanstar Communications, Advanstar House, Sealand Road, Chester CH1 4RN (Tel: 01244 378 888; fax: 01244 370 011.)

Australian Institute of Medical Scientists

National Science Meeting

October 6-11 1996

On behalf of the Organising Committee, I extend a warm invitation to all Medical Scientists, Technical Officers and interested parties, to attend the above conference to be held in the Convention Centre in Adelaide, South Australia.

The Conference theme is Aboriginal Health and will cover this and many other related topics and scientific endeavours.

Persons interested in taking part in the scientific program by presenting a paper or poster should contact: Mr John Stirling, c/o Histopathology Dept, Finders Medical Centre, Bedford Park, SA 5042.

For further information, please contact: SAPMEA Conventions, 80 Broughams Place, North Adelaide, SA 5006. (Tel: +618 239 1515; fax: +61 8 239 1566.) Brian Matthews, Chairperson Organising Committee.