

description. Inevitably, in an area like tissue culture, many of the views expressed are very personalised and sometimes appear to lack foundation. For example, concerning the use of enzyme pre-treatments for CVS culture, the phrase 'we suspect that the risk of maternal cell contamination is increased with such methods' is used, with no evidence given, whereas published data support the opposite view.

Chapter 2, by Watt and Stephen, details methods of lymphocyte culture. This section is generally very informative as far as theoretical background is concerned. As well as standard methods, those for synchronisation of cultures, detection of fragile X and establishing a B-lymphoblastic cell line are included. Chromosome staining and banding techniques are dealt with in the third chapter by Benn and Perle. Useful tips on microscopy and photography come into this well written chapter as well as descriptions of almost every conceivable banding method.

For those who, by following earlier chapters, have obtained chromosome preparations, Jonason deals with problems of analysis and interpretation in Chapter 4. This ranges from the most basic classification scheme to considerations of pseudo or true mosaicism in amniotic fluid cells in order to cater for the needs of all comers.

Detailed protocols for obtaining chromosome preparations from leukaemias and solid tumours are described in Chapter 5 by C.J. Harrison. These are all of a standard nature and not innovative in any way, but would be useful to anyone unexpectedly presented with such samples to process. A guide to interpretation is also given.

Chapter 6, on meiotic studies, by Hultén and colleagues, is informative and very well illustrated with photographs of beautiful preparations, showing just how much can be achieved by experts in this field.

The final chapter is tripartite, with contributions from S. Malcolm, J.K. Cowell and B.D. Young, each covering the basic principles and methods involved in three specialist techniques for human gene mapping. These are in situ hybridisation of labelled gene probes to chromosomes, somatic cell hybridisation, and flow cytometry. Although giving useful information on the methods involved, it is doubtful whether a novice would succeed unaided with this book in hand.

In conclusion, this book can be recommended both for newcomers to the field and more experienced cytogeneticists who will find it a useful source of reference.

J.D.A. Delhanty

Neurochemistry: A Practical Approach

Edited by A.J. Turner and H.S. Bachelard

IRL Press; Oxford, Washington, 1987

277 pages. £17.00, \$32.00 (paperback)

Neurochemistry has become a very wide discipline and uses many diverse biochemical skills and practical procedures to explore key aspects of neural function at the chemical level. These range from the manipulation of incubated neural tissue preparations, tissue cultures and histochemistry, to the techniques of immunology and molecular genetics. These practical aspects of neurochemistry are continuously improving and advancing in sophistication as the impact of new laboratory technology is absorbed.

There is therefore a large waiting audience for an up-to-date practical handbook of the kind produced and edited by Turner and Bachelard, giving, as it does, full practical details of procedures and recipes for various techniques. In general the chapters give good reference to the key literature and provide comparisons between various available procedures. The book contains nine contributions which cover many currently popular techniques or topics.

Thus, P.R. Gordon-Weeks describes procedures

for the isolation of neural growth cones and synaptosomes from mammalian brain, and the subsequent resolution of synaptosomes into synaptic plasma membranes and post-synaptic densities. A brief practical guide to the tissue culture of neurones and glial cells is given by R.P. Saneto and J. de Vellis. This includes advice on setting up primary cultures and cell lines and examples of their applications. J.V. Priestly provides a useful basic practical guide to immunocytochemical techniques and their background theory. This includes immunofluorescence, the PAP procedure and double-labelling methods, as well as retrograde HRP transport and EM immunocytochemistry. Bioluminescence techniques for studying acetylcholine, its storage and release from neural tissues is detailed by M. Israel and B. Lesbats. The sensitivity, specificity and drawbacks of the technique are fully aired, and they briefly describe bioluminescence assays for calcium, monoamine oxidase and energy metabolites. G.G. Lunt contributes a useful chapter on the practical aspects of the purification and assay of neuroreceptors. The solubilisation and affinity purification of acetylcholine and GABA receptors is described. The chapter includes a full section on the application of ligand-binding assays to the study of neuroreceptors.

Techniques for following cyclic nucleotides, their changes in level, and the protein phosphorylation processes which they trigger as second messengers, are described by H.C. Palfrey and P. Mobley. Assay procedures for cyclic nucleotides and protein kinases are given in detail, as are extraction procedures and gel electrophoresis separation and immunoprecipitation of phosphoproteins. Techniques for following phosphoinositide turnover and their receptor-mediated responses are marshalled and detailed by C.M.F. Simpson, I.H. Batty and J.N. Hawthorne. The use of [^3H]inositol and [^{32}P]orthophosphate in these studies is described. The extraction of the

various phosphoinositides and their separation by thin-layer chromatography on silica gel plates are detailed and evaluated. The separation of the various inositol phosphates by anion-exchange chromatography and HPLC is described as is the determination of free and lipid-bound inositol. R.J. Thompson contributes a chapter on the isolation and research applications of preparations of neural cell nuclei. Both neuronal and glial nuclei preparations are obtainable and the nuclear envelopes can be subsequently isolated. These nuclei can be used to study chromatin structure, nuclear histones and transcriptional activity as detailed in the chapter.

The use of *Xenopus* oocytes to study the expression of mRNA from brain is detailed by E.A. Barnard and G. Bilbe. The special application of this technique to the expression of cell membrane receptors and ion channels is considered as the principal topic. Again, this is a practical guide, giving procedural details as well as background theory. The examples chosen to illustrate the technique are the expression of nicotinic acetylcholine receptor mRNA, and that for GABA and glycine receptors. Procedures for the extraction and purification of mRNA are given, as well as methods for its microinjection into the *Xenopus* oocytes together with electrophysiological analysis of the effects. Analysis of the proteins produced in the injected oocyte by biochemical procedures, the radioactive labelling of protein products, and fractionation of the crude mRNA preparations which give response in the oocyte in preliminary studies, are each described and discussed.

All chapters give a useful list of relevant literature references as a source for further detail, and each is fully illustrated. Most chapters are written in an explanatory style which is essential for successfully communicating practical procedures of this kind.

H.F. Bradford

The authors edited each other's articles, which imposed both high quality and consistency on the Handbook. In addition, an extensive group of outside experts reviewed the articles. This huge effort showed in both dense information content and readability of the articles. Similarly, the Handbook contained a separate and marvelous "Forecasting Dictionary" toward the end, which allowed quick reference to (and understanding of) separate ideas involved in competent forecasting. In another separate section toward the end of the Handbook, a "Forecasting Standards Checklist" g @inproceedings{Davies1985CentrifugationE, title={Centrifugation (2nd edition): A practical approach: edited by D. Rickwood, IRL Press, 1984. Â£10.00/\\$20.00 (xii + 352 pages) ISBN 0 904147 55 X}, author={P. J. Davies and R.F.A. Ginman}, year={1985} }. P. J. Davies, R.F.A. Ginman. Published 1985. Biology. View via Publisher. Save to Library. Create Alert. Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide in. Oxford New York.Â This further ensures that the book fully justifies its title as A Practical Approach to Criminal Procedure. My thanks are due to my colleague at the Inns of Court School of Law, Miss Lynn Slater, BA, LL.M, who has not only prepared the case and statute indexes, but also read the book as it was in the course of composition and made many invaluable suggestions for its improvement. My thanks also go to my publishers for their kindness and helpfulness, and, above all, to my par-ents for their unstinted support during the time the pages which follow were being written. Neurochemistry book. Read reviews from world's largest community for readers. Neurobiology has undergone a revolution with many advances dependent on new...Â Preview " Neurochemistry by A.J. Turner. Neurochemistry: A Practical Approach. by. A.J. Turner (Editor), Herman Bachelard (Editor), H. S. Bachelard (Editor). 0.00 Â Rating details. Â 0 ratings Â 0 reviews. Neurobiology has undergone a revolution with many advances dependent on new techniques and approaches. This fully updated second edition reflects the recent growth areas in this subject. Practical Criticism. Item Preview. remove-circle. Share or Embed This Item. EMBED.Â texts. Practical Criticism. by. Richards, I.A. Publication date. 1930. Topics. Language. Linguistics. Literature, Literature, Literature. Publisher. Kegan Paul Trench Trubner And Company Limited.Â Pagelayout. FirstPageLeft. Pages. 405. Scanner. 7. Scanningcenter. Osmania University. plus-circle Add Review.