

Correspondence

Cytochrome P450 CYP 1B1 mRNA in normal human brain

We read with great interest the paper by Rieder *et al.*¹ where they demonstrated the presence of CYP 1B1 mRNA by northern hybridisation in several areas of normal human brain. However, using a sensitive reverse transcription polymerase chain reaction we have shown recently that individual cytochrome P450 forms have a regional distribution in normal adult human brain.² We detected CYP 1B1 mRNA only in the medulla and could not detect it in other regions of the brain including the pons, cerebellum, midbrain, basal ganglia, frontal cortex, and temporal cortex.

These differences may be attributable to the different samples used. In our investigations we had comprehensive clinicopathological data available for all the brains studied, whereas in Rieder and colleagues' investigation they used commercially available northern blots for which no clinicopathological information was presented (and more importantly may not be available) regarding the source of the brain samples. In particular, no data were given regarding potential exposure to chemicals capable of inducing the expression of CYP 1B1, or whether the blots were prepared from RNA obtained from single individuals or from samples pooled from several individuals.

It is also important to note that whereas CYP 1B1 mRNA can be detected in brain, the CYP 1B1 protein is not detectable even in the medulla. Rieder *et al.* speculate that the presence of CYP 1B1 in individual regions of the brain might indicate a role for this protein in the metabolism of compounds involved in the development of neurodegenerative and other diseases. However, they provide no evidence for the presence of the CYP 1B1 protein. By contrast, we have demonstrated the absence of the CYP 1B1 protein in normal human brain by immunohistochemistry with an antibody specific for CYP 1B1,³ and immunoblotting of brain subcellular fractions confirms this immunohistochemical finding. Furthermore, the CYP 1B1 protein has not been identified in any normal human tissues.

M C E McFADYEN
G I MURRAY

Department of Pathology, University of Aberdeen,
Foresterhill, Aberdeen AB25 2ZD, UK

W T MELVIN
Department of Molecular and Cell Biology,
University of Aberdeen

- 1 Rieder CRM, Ramsden DB, Williams AC. Cytochrome P450 1B1 mRNA in the human central nervous system. *J Clin Pathol: Mol Pathol* 1998;51:138-42.
- 2 McFadyen MCE, Melvin WT, Murray GI. Regional distribution of individual forms of cytochrome P450 mRNA in normal human brain. *Biochem Pharmacol* 1998;55:825-30.
- 3 Murray GI, Taylor MC, McFadyen MCE, *et al.* Tumour specific expression of cytochrome P450 CYP 1B1. *Cancer Res* 1997;57:3026-31.

Reply

Using an appropriate probe we clearly detected an mRNA of a size corresponding to that published for CYP 1B1. In an astrocytoma cell line the specific mRNA detected by the probe was upregulated by both dexamethasone and dimethylbenzanthracene (DMBA)-response elements for both are found in the 5' flanking region of the gene. In addition, using an anti-CYP 1B1 antibody and extracts of human temporal lobe, a protein of the appropriate size was detected by western blotting (our unpublished results). We have no explanation for the failure to detect CYP 1B1 by the above authors.

C RIEDER

Department of Medicine, University of Birmingham,
Queen Elizabeth Hospital, Edgbaston,
Birmingham B15 2TJ, UK

Book reviews

Principles of Molecular Medicine.

Jameson, JL, ed. (£128.00.) Human Press, 1998. ISBN 0 89603 529 8.

The title of this book *Principles of Molecular Medicine* is a good description of its contents. The book covers a comprehensive list of subjects and manages to provide plenty of detail without being too arduous to read. This book would be of interest, not only to clinicians in all specialities and in all stages of training, but to many clinical scientists who want an overall feel of the science-medicine interface.

There are some omissions but, taking in the context of the depth and complexity of this book's remit, the authors and the editor have done well to squeeze in as much as they have!

In general, this is an excellent volume, one copy of which would be highly useful in any clinical or research registrar's office.

J JANKOWSKI

Cell Growth and Oncogenesis. Bannasch P, *et al.*, eds. (£79.00.) Birkhauser, 1998. ISBN 3 7643 5727 4.

Is there any value in publishing the proceedings of meetings? The answer is yes provided it can be done fairly swiftly. This volume includes selected reviews and original papers from a meeting held in March 1996 but has only recently hit the bookshelves. The aim of the conference was to survey recent advances in research into cell growth and oncogenesis and it had gathered together many experts in the field for what looks to have been an exciting meeting. Not unreasonably, the organisers then wanted to publish some of the proceedings, which they state in the preface: "would be both appropriate and timely". Unfortunately, they failed to achieve the second aim.

The book includes a selection of papers from the meeting divided into the following three sections: (1) ion homeostasis, energy metabolism, and control of cell growth; (2) signal transduction, oncogenes, and growth factors; and (3) mechanisms in carcinogenesis. The review articles contain useful information although clearly, with such a delay in publication, they lack details of advances made over the past three years. Given the speed with which research in the area of cell growth and oncogenesis moves this means a considerable body of recent work is omitted. The research papers suffer even more by the delay in publication. A quick look through PubMed for the names of some of the authors showed that at least some of these papers have subsequently been published in peer reviewed journals, and several of the authors have written more recent reviews on the topics. Those familiar with cell growth and oncogenesis are not likely to get much from reading this book because they will already have seen the more recent publications. Those wanting to get up to speed in the area similarly will not gain much from the publication because there are many more up to date reviews published. Despite all the editors' hard work including, no doubt, haranguing authors to provide them with the chapters within a reasonable time period, it is hard to see who exactly will buy such a book. This book is by no means alone in this respect. Many other conference proceedings suffer in exactly the same way. Organisers of conferences need to be aware of the importance of swift publication of proceedings, as I am sure most are. In addition, perhaps publishers need to consider a format for rapid publication, which would be likely to increase their sales.

FIONA MACDONALD