

Jan Egebjerg, Arne Schousboe and Povl Krogsgaard-Larsen, **Glutamate and GABA Receptors and Transporters: Structure, Function and Pharmacology**

London: Taylor & Francis, 2002. 435 pages  
Hardback. Paperback £99  
ISBN: 0 7484 0881 9

*Reviewed by Dr Mary Collins (Chebib), Senior Lecturer in Pharmaceutical Chemistry at the Faculty of Pharmacy, the University of Sydney, Sydney, Australia*

It is not surprising that a book devoted to reviewing the receptors and transporters of the excitatory and inhibitory amino acids, glutamate and  $\gamma$ -amino butyric acid (GABA) should come from Denmark – and in particular from The Danish University of Pharmaceutical Sciences (formally known as The Royal Danish School of Pharmacy). This university has expertise centring on the design and development of therapeutics that target these receptors.

The editors have been personally involved in making major contributions to this vast and exciting field, and in this endeavour draw on the expertise of a large number of very eminent researchers. As contributing authors, these experts very elegantly simplify the exhaustive and complex information in the literature. Their aim is to summarise and put into perspective the vast amount of information available in the literature, which focuses on the structure, function and pharmacology of glutamate and GABA receptors and transporters.

The book is set in six parts, the majority devoted to glutamate and GABA receptors. Only a small section is devoted to glutamate and GABA transporters. Parts one and two cover the ionotropic and metabotropic glutamate receptors, respectively. Parts three and four cover the ionotropic and metabotropic GABA receptors, respectively. Part five covers glutamate and GABA transporters and, finally, part six looks at the pathophysiology and therapeutic prospects of these receptors and transporters. Each part is broken down into several chapters, with each chapter covering aspects of the structure, function and pharmacological properties. For instance, in reviewing glutamate receptors, the authors cover classes of receptors, subunit compositions that make up the different receptor subtypes, diversity of these receptors, how the

subunits assemble, receptor trafficking, and the pharmacology and physiology that distinguishes between the different families. This format is mirrored for GABA receptors and for the transporters. Finally, the book summarises work on knockout and transgenic mouse models, which contribute to the understanding of the physiological roles which certain glutamate and GABA receptor subtypes play in health and disease, for example looking at the effects these receptors play in neurological disorders such as schizophrenia and epilepsy. Such a chapter produces the evidence or grounding required to implicate certain disorders that may be associated with these receptors or receptor subtypes. This leads on to the final chapter of the book, which looks at the approaches being undertaken in drug design and development that target these receptors as treatments for certain neurological disorders.

A minor criticism of the book is that information about GABA<sub>C</sub> receptors was not treated in any real depth, and should be considered by the editors to be included in future editions. This is in contrast to the rest of the book where other topics were covered in great depth.

The book is well laid out with a very helpful table of contents and an excellent index for quick referral. The references used in the book are collected after each chapter and so a chapter can be referred to as a review article, posing little problem when identifying and requiring further information for a particular subject area. However, it should be noted that the latest referenced journal is from early 2000 and already much has developed since then in this exciting field.

Who is the book intended for? The book is made up of a collective review or summary of particular areas of structure, function and pharmacology of glutamate and GABA receptors and transporters. Each chapter can be read and comprehended as an individual entity. It will be most useful to researchers and PhD and Master students undertaking their degrees in the field as a quick reference book. Although the book is for a specialised reader, it is comprehensive enough for undergraduates doing their BSc or BPharm who have a potential interest in the area.

I found the book to be very interesting, fully comprehensive and a must have in my collection. Such a book will not only help me in my research but will help me to bring up to speed new research students who venture into this exciting but complex area of research.

**Robin J Harman and Pamela Mason, Handbook of Pharmacy Healthcare, Second edition**

London: Pharmaceutical Press, 2002.  
592 pages Hardback. Hardback £39.95  
ISBN: 0 85369 507 5

*Reviewed by Dr Dai John, a Senior Lecturer in Clinical Pharmacy, Law, Ethics and Practice at the Welsh School of Pharmacy, Cardiff University*

The second edition of the *Handbook of Pharmacy Healthcare* is divided into four parts. Part A contains definitions, together with brief outlines of the aetiology and symptoms, of many diseases. Non-pharmacological management and treatment options for diseases are also included where appropriate and reference is made to the corresponding section in the British National Formulary (BNF) if the reader wishes to consult current drug treatments. Some of the strengths of this book for pharmacists are the linking of Part A with the BNF, and that the information on the diseases is concise, therefore quick to

read and digest, and also easy to find. The Handbook could prove useful, therefore, to pharmacists and pre-registration graduates who want to consult a text to find an answer quickly, for example, in a community pharmacy with patients waiting for information.

Part B includes chapters on general advice on topics such as the elderly, child health, responding to symptoms, and counselling and concordance. The two chapters in Part B that may be accessed by pharmacists quickly for specific information, for example in response to questions from patients and the public, are Chapter 19 (Diagnostic procedures) and Chapter 20, which contains a list of addresses of self-help and professional groups, many including telephone numbers and addresses of web pages.

The editors state that Part C 'has been written to provide pharmacists with a quick reference guide to the possible causes of certain symptoms'. Part D is a Glossary that contains terms used without explanation in the text.

In summary, this textbook should prove useful to those who wish to have quick, easy access to concise descriptions of the aetiology, symptoms and management/treatment of many diseases, which is conveniently cross-referenced with the BNF.