The Textbook of Pharmaceutical Medicine
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7TH EDITION

WILEY-BLACKWELL
BMJ Books
A John Wiley & Sons, Ltd., Publication
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Professor John P. Griffin, BSc, PhD, MBBS, FRCP, FRCPath, FFPM graduated in medicine at the Royal London Hospital, where he was also in clinical practice. He was a lecturer in Physiology at King’s College, London and held the post of Head of Clinical Research at Riker Laboratories from 1967 to 1971. Professor Griffin joined the then Medicines Division of the Department of Health, now Medicines Healthcare Agency (MHRA) London, as a Senior Medical Officer, in 1971, and was subsequently appointed Medical Assessor to the Committee on Safety of Medicines. From 1977 to 1984, Professor Griffin was Senior Principal Medical Officer and Professional Head of Medicines Division in addition to being Medical Assessor to the Medicines Commission. As the Professional Head of Medicines Division he also attended the Scientific Sub-Committee of the Veterinary Products Committee of the Ministry of Agriculture, Food and Fisheries. During this time he was a member of the EC committee on Proprietary Medicinal Products and Chairman of the CPMP’s Working Party on Safety Requirements.

From 1976 to 1984 John P. Griffin served on the Joint Formulary Committee of the British National Formulary, during which period the first eight issues of the current format were produced.

John P. Griffin was the director of the Association of the British Pharmaceutical Industry from 1984 to 1994. During this time he was a member of the Executive Board of the European Federation of the Pharmaceutical Industries’ Associations and IFPMA. He chaired the ICH Safety Working Group from 1988 to 1994 and presented papers at ICH1 and ICH2 in the plenary sessions.

In 1992 he was invited to deliver the Thomas Young Lecture and was awarded the Thomas Young Gold Medal at St George’s Hospital Medical School, University of London.

Since June 1994, John P. Griffin has run his own independent consultancy company, which has provided independent and impartial advice to government on the development of a pharmaceutical policy, and to national trade associations and individual companies. John P. Griffin was Visiting Professor in Pharmaceutical Medicine at the University of Surrey for 6 years and was also Honorary Consultant Clinical Pharmacologist at the Lister Hospital in Hertfordshire, UK.

Professor Griffin was on the Board of the Faculty of Pharmaceutical Medicine for 12 years, was Chairman of the Board of Examiners of the Faculty of Pharmaceutical Medicine of the Royal College of Physicians for 7 years, and was Academic Registrar and served on the Task Force on Specialist Medical Training in Pharmaceutical Medicine. He has served on a number of Royal College of Physicians, London Working Parties including that on the 'Development of Clinical Pharmacology and Therapeutics in a Changing World'.

Professor Griffin is the author and co-author of over 250 publications on adverse drug reactions and iatrogenic disease, aspects of neurophysiology and clinical pharmacology and toxicology and drug regulation. Notable among his publications are the following four standard texts:


From 1991 to 2003 he served as Editor in Chief of *Adverse Drug Reactions and Toxicological Reviews*, a peer-reviewed journal produced quarterly by Oxford University Press.
In 2005 he was awarded the Faculty of Pharmaceutical Medicines Commemorative Medal for outstanding services to the Faculty.

**Professor John Posner, BSc PhD MBBS FRCP FFPM**

gained a BSc and PhD in pharmacology at King’s College London and qualified in medicine at King’s College Hospital in 1974. After holding various medical posts in London, he completed a residency in Internal Medicine at the Soroka Medical Centre in Beer Sheva, Israel. He subsequently worked as an Attending Physician at Soroka and Lecturer at Ben Gurion University of the Negev.

With the desire to spend more time in clinical drug research, John returned to the UK in 1982, joining the Wellcome Research Laboratories. He developed and validated models of analgesia in healthy volunteers and applied these to the evaluation of novel, peripherally acting opioids. He also used a variety of pharmacodynamic tests in the evaluation of drugs for epilepsy, stroke and migraine. Other areas of investigation included drugs for allergy, asthma depression and anti-infectives. Studies in patients included investigation of a novel agent for sickle cell disease and one of the first biologics for lymphoma.

In 1986, John was appointed Head of Clinical Pharmacology at Wellcome, becoming responsible for the evaluation of all new molecular entities emanating from Wellcome’s discovery research in the UK. He negotiated the design and build of a new clinical research facility at King’s College Hospital Medical School, where his department subsequently conducted their phase I studies. He continued to practise medicine and teach students on a part-time basis as Honorary Senior Lecturer in Medicine at King’s. With the acquisition of Wellcome by Glaxo in 1995, John was appointed an International Director of Clinical Pharmacology at GlaxoWellcome.

After a period with a consultancy and contract research organisation, John started working as an independent consultant in 1999. He continues to work in a wide range of therapeutic areas, assisting companies with their strategic planning, design, conduct and reporting of exploratory studies of novel compounds from ‘first-in-human’ to ‘proof of concept’. His work also includes preparation of clinical overviews, summaries and briefing documents for regulatory submissions worldwide, serving on data monitoring and governance committees and advising on licensing opportunities.

John has extensive postgraduate teaching commitments, organising and participating in courses for physicians and scientists in pharmaceutical companies and academia. He has been a long-standing, active member of the Board of Examiners of the Faculty of Pharmaceutical Medicine of the Royal College of Physicians and served as its Chair for a period of 3 years. John established a Diploma and Certificate in Human Pharmacology for the Faculty; the Diploma is now a recognised qualification for Principal Investigators. He continues to serve as Director of these programmes and has responsibility for a number of MSc modules at King’s College, London, where he is a Visiting Professor in the School of Biomedical Sciences. John has published extensively and is an Executive Editor of the *British Journal of Clinical Pharmacology*.

**Professor Geoffrey R. Barker, TD, BSc, MSc, FDSRCS, FRCS, FFPM** graduated from Guy’s Hospital Dental and Medical Schools with a 1st class honours degree in physiology, a distinction and honours in dental surgery and MBBS medicine in 1973. He held assistant lecturer posts in Dental anatomy, Physiology and Restorative Dentistry at Guy’s Hospital Medical and Dental Schools and subsequently completed his training to become a Principal in Medical Practice. Over the next several years Professor Barker continued to pursue his interests in clinical research, medical and surgical practice and gained a Masters in Medicine from Manchester University and Fellowships in London (FDSRCS) and Edinburgh (FRCS).

In 1987 he was awarded the Chair in Oral Surgery Medicine and Pathology for the University of Wales. In this role Professor Barker specialised in major reconstructive surgery, cleft lip and palate surgery, and the clinical development of osseo-integration for the replacement of lost bone with titanium implants. By application of oral pathology he also advanced the understanding of oral manifestations of underlying systemic diseases and their management.

In 1990, his continued interest in the translation of new treatment concepts from the laboratory bench into clinical practice resulted in the opportunity to join the pharmaceutical industry while continuing to hold a position as a consultant surgeon. As Medical Director for Astra Pharmaceuticals UK, Professor Barker played a key part in the development of acid proton pump inhibitors to treat and prevent gastro-esophageal reflux disease and peptic ulceration and was able to advance the use of once-daily inhaled steroids for respiratory disease and new management regimens for cardiovascular disease.
In 1997 Professor Barker joined the Medicines Control Agency working with product licensing. In 1999 he was appointed Global Head of Medical Affairs at Actelion Pharmaceuticals and, as a member of the senior management team, successfully steered the company through its IPO and the launch and marketing of its new treatment for pulmonary hypertension.

In 2001 Professor Barker moved to North Carolina to serve as Chief Medical and Scientific Officer for Quintiles Translational Corp, overseeing worldwide clinical trials and the continued development of new medicines. In 2004 he was appointed Adjunct Professor in Immunology at Duke University Medical Center, North Carolina. On retiring from Quintiles, Professor Barker joined Pappas Ventures, a leading health care venture capital fund investing in the development of new medicines and he continues to consult for several venture capital and pharmaceutical companies.

Professor Barker became a Member of the Faculty of Pharmaceutical Medicine in 1995 and Fellow in 1998 and was elected Registrar and a Member and Trustee of the Board of the Faculty in 2009.
This is the 7th edition of The Textbook of Pharmaceutical Medicine in the 20 years since its first publication. The size of the book has progressively increased and, with it, the breadth of expertise of its contributors. For example, there were 22 contributors to the 1st edition; 44 to the 6th edition and 54 to the current edition. The increase in expertise that this represents has changed the Textbook from being a good book targeted at pharmaceutical physicians to a one-stop shop and the outstanding information source in this field of medicine.

The success of a book depends on the quality of contributors and the editors would like to thank all of them for their delivery of high quality manuscripts. In particular we wish to acknowledge the diligence of those contributors who have contributed to all seven editions.

We would also like to thank those who have generously given permission to reproduce figures and documents; this is acknowledged in the appropriate places in the Textbook.

It is fitting to pay tribute to Professor John O’Grady, co-editor of the first five editions of the Textbook, who died in 2011. His expertise will be missed greatly.

It is fitting to thank our publishers, Wiley-Blackwell, for their exceptional continuing support over many years, particularly Adam Gilbert, Elisabeth Dodds and Rebecca Huxley, whose patience, courtesy and expertise have been outstanding. We are grateful to Aileen Castell for the invaluable help she provided during the production stage of this edition. We would like to thank Jan East for her exemplary copyediting skills on this and the 6th edition. We also wish to thank Mary Banks, who retired in September 2011 but was a pillar of strength in preparing previous editions and in the early stages of the current edition.

Finally, thanks are due to the World Medical Association (WMA) and the European Medicines Agency (EMA) for permission to publish key documents as Appendices. Others have allowed us to quote or use their material and this generosity is acknowledged in the text; however, a general thanks is appropriate at this point.