Book Reviews

Human Physiology - the Basis of Medicine. Gillian Pocock and Christopher D Richards. Oxford University Press, 3rd Edition, 2006. Paperback. 656pp. £36.99. ISBN 978-0-19-856878-0.

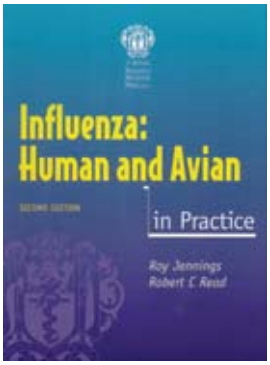
This well-established text-book, now in its Third edition, provides an attractive, authorative and integrated review of organ function and systems interactions in the normal body. The authors have two particular aims – to emphasise cellular physiology and to discuss the relevance of normal function to disturbed organ function or patho-physiology. The clear diagrams and coherent text will attract the more thoughtful undergraduate students of Medicine or Science in their first or second years (over 600 pages and 1.8 kg weight). It gives a sound basis for later studies in Pharmacology and Pathology, and for good clinical practice.

The highlights for me were the excellent sections on the Nervous System and Reproduction, with coverage of the physiology of the mother, foetus and neonate. Cardiovascular and respiratory systems have thorough coverage. There is little material particularly relevant to students of Dentistry, but this could be easily remedied. Use of the Index is essential to obtain the full story on a particular topic. The references given at the end of sections and for each diagram should be an advantage when students focus on a particular topic in a 'student-selected component', now some 25% of the curriculum.

There have been dramatic changes in the undergraduate curriculum in the last 10 years. Now every Medical school has the freedom to achieve a different balance of knowledge between normality and disease within their course. Basic concepts of organ dysfunction are introduced from the start of many 'integrated' professional courses, creating problems for authors. Clinical Physiology is largely a separate section at the end of this text, but detailed content is lacking. This is a professional decision of the authors. Physiology and physiologists are concerned with normal organ function and system interaction. Their logical approach gives a background rationale that aids the transition from school biology to the multi-facetted, instant challenges of clinical life. Clinicians have experience and up-to-date knowledge in recognising and assessing organ dysfunction in the complex environment of the acutely-ill patient, where biological variation and multi-system failure are common-place. Using this text for a term in the Queen's medical course I found a relative lack of material on topics such as electrolyte disorders and renal failure, the causes of autonomic failure and the long-term consequences of diabetes mellitus. Management of Type 2 diabetes frequently requires more than diet. Specific text-boxes could summarise the risks of hypernatraemia, hypokalaemia and hyperkalaemia (ventricular fibrillation is not mentioned). This book would be unsuitable as a preparation for post-graduate specialty examinations.

The attractive, discursive style of this text is particularly designed for a traditional preclinical course, as specified in the Preface. It would be a useful resource for 'lost' students, particularly those with a weak background in school Biology. However students of an 'integrated' curriculum would be at a loss when preparing for 'case-based' tutorials and examinations in years 1 and 2.

J Desmond Allen



Influenza: Human and Avian in Practice. Second Edition. Roy Jennings, Robert C Read. The Royal Society of Medicine Press, London. September 2006. Paperback, 80pp. £18.95. ISBN 978-1-85315-698-4

Influenza is a common respiratory tract infection responsible for considerable morbidity and mortality each year. A wide variety of clinicians will encounter patients in their clinical practice. The current worldwide outbreak of highly pathogenic avian influenza (H5N1) has raised awareness of the spectre of another human influenza pandemic. This short (70 pages) text outlining the nature of influenza viruses, the complex epidemiology and potential evolution of a pandemic virus together with an update on management of seasonal influenza is the second edition (2006) of a work first published in 2002.

The stated readership target group is very general - "medical practitioners working in either the general community or industrial or company based practices". We feel however that the book does not succeed in serving this target group. There is a wealth of technical detail which is likely to be well beyond the needs of a generalist readership. Additionally there is substantial overlap between the individual chapters.

There were also elements which are factually incorrect. On page 65 (Laboratory diagnosis) the authors mention "diagnostic techniques still at the experimental stage and not yet available for routine use include the polymerase chain reaction (PCR)" This is entirely erroneous, molecular techniques are widely available with a network of 19 labs covering the whole of the UK offering molecular diagnosis. In many areas PCR based techniques are the mainstay of both diagnosis on clinical samples and of sentinel surveillance schemes. The statement would have been true 5-10 years ago.

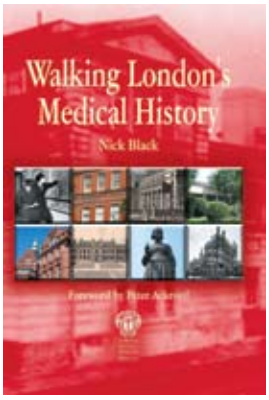
Much of the book covers material that is discussed in the influenza chapters of standard medical texts. Where the book gives added information is in Chapter 4. Chapter 4 entitled "Relationships between avian, mammalian and human influenza viruses" stands out as a useful discussion of the importance of the non-human species for medical practitioners.

The book concludes with an excellent list of websites from which up to the minute information can be obtained.

This is a fast moving area and interested individuals may find it more useful now in 2008 to read a more recent review.

Anne Loughrey, Conall McCaughey

Walking London's Medical History. Professor Nick Black. The Royal Society of Medicine Press. October 2006. Paperback, 240pp. £15.95. ISBN 978-1-85315-619-9.



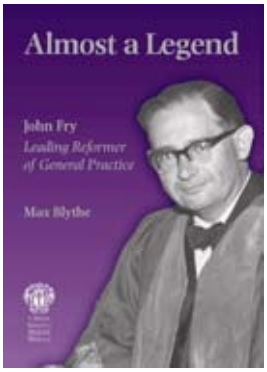
The title of this book would suggest that the reader would need to be in London and have a strong pair of walking boots at the ready. However while the book does provide a walking guide, it also makes an excellent read in its own right. This is because the author provides a fascinating insight into the historical development of healthcare which is relevant not only in London but in the country as a whole. The author Nick Black is well qualified to provide this as his "day job" is Professor of Healthcare Services Research at the London School of Hygiene and Tropical Medicine. He has many talents to draw on in the book and not only writes well for example describing the emerging Soho as a "foreign land in a sea of Englishness" but also has a discriminating eye for the architectural merits of the buildings he describes. The book is well illustrated with many photographs and historical prints that allows the reader to take a virtual tour if he or she is not able to visit the capital.

There is an excellent brief introduction on the historical development of healthcare services over the last few hundred years from Church almshouses to socialist state planning. The book then presents the reader with seven walks described in different chapters and each of the chapters takes an historical theme. The themes include the transition of the medicine from trade to profession, the influence of the Church and City, the mergers of the major teaching hospitals and the development of primary care. The walks do not take you to the blue plaque houses of the great physicians or the hallowed halls of the historic and famous hospitals but presents an eclectic and idiosyncratic selection of buildings in central London which illustrate the themes. It includes some unknown gems such as the story of Mary Seacole who was the offspring of a freed black slave from Jamaica and a Scottish army officer. She preceded Florence Nightingale to the Crimea to nurse the wounded British soldiers at the battle front and was ungraciously dismissed by Florence Nightingale as a "brothel keeping quack" but was greeted by 80,000 members of the public to honour her work in the Crimea. Another was the work of Dr George Armstrong who ran the Dispensary for the Infant Poor and treated private patients for three days a week through the front door and poor patients for three days a week through the back door but unfortunately did not get the financial balance correct and ended up in the debtor's prison. The book also pays tribute to international nature of medicine in London and the ideas which were imported from overseas. The foundation of the voluntary hospitals derived from the influence of the French Huguenots and the development of professional societies from models in Italy and Austria.

At times the tours are like an archaeological excavation showing where the old hospitals and medical institutions flourished and died but are now marked only by hotels and office blocks. The author recalls details of 10 leprosy hospitals, 21 private schools of anatomy that competed for bodies for dissection (so much so that the Surgeon in one school John Sheldon was horrified to be presented with his sister's body!) and innumerable specialist hospitals covering every system and every nationality. These have come and gone over the centuries but it does demonstrate that it is not just present physicians that have to deal with change. It has been with us since the start of medicine and it is driven by social and well as technological change. History provides many lessons and with these we can understand the present and possibly the future better. There is a chapter describing the mergers of the great teaching hospitals in London into larger and more specialised hospitals often taking the medical care out from the city centre to suburbs. It may seem like a logical and permanent solution to today's health planners, but undertaking these walks through London should teach us that today's changes are just the next chapter in the evolution of healthcare. Those walking through London in 100 years from today will view a different medical landscape and see today's solution as a historical past. What will they make of today's mega-hospitals with advances in biotechnology, nanotechnology and universal electronic networks?

Professor Michael A Patton.

Almost a Legend – John Fry, Leading Reformer of General Practice. Max Blythe. The Royal Society of Medicine Press. November 2007. Hardback, 272pp. £29.95, ISBN 978-1-85315-707-3.



To those of a certain age John Fry was one of the doyens of General Practice. His book on common diseases was a staple and he was well known through the pages of the magazine Update. Ask younger colleagues however about John Fry and you will often get the reply "John who?" Perhaps this is what the author means by "Almost a Legend". He argues that "time has tended to obscure the weight of what Fry achieved". Fry did a lot to raise standards in general practice through his service on numerous committees and through his writing, confronting British General Practice on issues such as over prescribing, failures of communication and neglect of patient records.

To those of us who knew him, or knew of him, John Fry was the "facts and figures" man. Long before computers, if you wanted to know about the prevalence, say, of diabetes, you consulted Fry's book. Fry of course authored or co-authored many books – over 60, and was a prolific publisher in the pages of the British Medical Journal, Lancet and many other Journals at a time when very few general practitioners were publishing. He was an evidence-based practitioner

long before "Evidence Based Practice" was invented. His published observations from practice, for example, helped to debunk the whole fashion of Tonsillectomy, demonstrating a twenty-fold difference in tonsillectomy between richer and poorer communities.

This book will appeal to the student of medical history and would be of interest to those entering general practice to obtain some insight into how their specialty evolved in modern times. The book is well written and scholarly and gives the reader a real sense of the evolutionary processes affecting general practice in the mid twentieth century with the foundation of the College of General Practitioners, the emergence of departments of General Practice in medical schools and the establishment of a programme for doctors in training. Tracing Fry's career one gets a glimpse of health care pre NHS, the establishment of the NHS and its impact on practice and the mysteries of the GP contract.

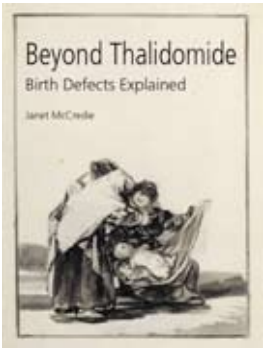
Even among those who knew of John Fry many will be unaware of his origins. Born Jacob Freitag in Poland he came to England in 1929 at the age of seven with his family. His father was also a general practitioner. The author paints a vivid but economical picture of Fry's private life which tends to concentrate on his early years; his academic and sporting successes at school, living above the "shop" with his parents and his medical school days. I was struck by the almost surreal image the author painted of the period when Guys Hospital, where Fry was a medical student, had decamped to Kent during the war years and the Battle of Britain being waged in the skies above them - "dogfights over Sherwood Park".

The work is well documented and there are extensive notes and references to the main text. Apart from the usual index, there is a subject index, a list of John Fry's extensive committee work for the Royal College of General Practitioners and a Bibliography detailing some 65 books authored or co-authored by Fry, various reports and a long list of research and discussion papers published by year.

Perhaps this book describes a bygone age of the solitary practice-based researcher, but Fry's capacity for work and the sheer extent and breadth of his research output is truly inspirational and the book is an enjoyable and informative read.

Kieran McGlade

Beyond Thalidomide - Birth Defects Explained. Janet McCredie. The Royal Society of Medicine Press. October 2007. Hardback, 432pp. £35.00. ISBN: 978-1-85315-741-7



This is a fascinating read. We all think that we know all there is to know about the Thalidomide tragedy: a relatively unregulated drug industry developed a new drug; they promoted it lavishly; doctors, lulled by its apparent lack of toxicity even at doses over 100fold, uncritically prescribed it to many patients as a panacea for many conditions; pregnant women used it for morning sickness and the rest is history.

This book represents the distillation of a lifetime's work dedicated to researching the history, aetiology, pathogenesis and pathology of the birth deformities associated with this drug. Janet McCredie is a clinical radiologist by trade. However, she has led an internationally recognised research group including neurologists, neurophysiologists orthopaedic surgeons and embryologists. She has been much honoured by the profession for her work.

In her preface she apologises for the fact that that she "….lapses into (the) first person singular….". But it is this very act that makes the book so accessible. It becomes a personal story of discovery and she has a knack of explaining her hypotheses and the evidence of her own team and others in language that is completely accessible to the professional and interested lay person alike.

The book begins by detailing the history of the drug and then chronicling the deformities seen. Subsequently she reproduces a series of landmark papers with explanations. For example, in Chapters 11 and 12 she reproduces two papers on the Neural Crest theory of congenital abnormality. She does so without updating the references significantly which helps put them into better context in the development of her theories. Penultimately, she puts into context those syndromes that produce similar abnormalities to Thalidomide and draws them into her hypotheses that Thalidomide's actions are primarily neuropathic and that the birth defects are due to its neuropathic effects on the developing neural crest.

I would commend this book as an invaluable text to those who deal with Thalidomide cases and to those engaged in teratogenic studies. However, it is also a book that should be read as an elegant exposition of a lifetime's work and one that demonstrates how an active intellect coupled with knowledge and persistence can move forward the boundaries of knowledge. It is also a reminder that we do not know and we cannot say that what we do is ever safe in medicine.

Neil McClure