# book reviews

## Medicine and art

**By Alan and Marcia Emery. Published by the Royal Society of Medicine Press in association with the Royal College of Physicians, London 2003. 112pp. £40.**

Alan Emery is a professor of neurology, and his wife Marcia is an historian and librarian; both are hands-on artists. This book reflects, and acts as an appreciation of, their combined authority.

They have assembled some 53 pictures which illustrate a wide range of medical and social conditions. Some show early holistic healing practices or the times when observation of the pulse and urine constituted 'medicine'; graphic reminders of the impotence of doctors in the past. Others give a virtually photographic record of sensitive emotional states – among them Picasso's moving teenage painting of a doctor's visit, *Science and charity* – or the conditions in a mental asylum – *The hospital at Arles* by Van Gogh, and *The madhouse* by Sergei Chepik are examples of these. The last depicts an asylum in Russia only twenty years ago.

More recent paintings portray the beginning of modern medical practice, such as vaccination or Laennec with his stethoscope listening to a chest. Several classic pictures by famous artists are included.

The picture reproductions are good, although colour values are never quite good enough to satisfy a painter. (The wide white borders might better have been avoided.) The book ends with a fascinating list of about 150 pictures which illustrate a huge range of medical disorders, and gives the title, artist, date and location of each.

Any doctor should enjoy and learn something from this large format (A4) and elegant coffee table book. It serves to remind us of the great benefits, both to doctors and to patients, of hanging good, large pictures on hospital walls – and even more of the wonderful absorption and mental relief which comes from the practice of art.

DEREK R BANGHAM
*Retired Medical Research Council Scientist*

## The road to Stockholm: Nobel Prizes, science and scientists

**By Istvan Hargittai. Oxford University Press, Oxford 2002. 360pp. £19.99.**

Just over a hundred years ago the first Nobel Prize was awarded (to Röntgen). In the sciences, at least, it is without question the most prestigious of all prizes, yet few people know about the process of selection. Hargittai explains this in detail, discussing Alfred Nobel's will and several later statutory amendments. Nobel's expressed wish to reward 'those who, during the *preceding year*, shall have conferred the greatest benefit on mankind,' was discarded as unworkable. For most discoveries, benefits are not so immediately obvious or certain. In the run-up to the awards each year a certain amount of lobbying takes place, sometimes with effect, so the judgement is not always free of national or political influence. The final choice has been described as a lottery, which in a sense it is; selecting no more than three recipients per field from the vast number of scientists with their array of contributions must at times be arbitrary. As a rule, the award is given for a great discovery rather than overall greatness, for a specific contribution rather than a lifetime of achievement.

Occasionally, things go wrong. Johannes Fibiger was awarded the Medicine prize in 1926 for showing that a parasitic worm could cause stomach cancer in rats. Later, it turned out to be an artefact; the tumours in fact resulted from vitamin A deficiency. This disclosure raised suspicions about claims of tumourigenesis, and probably delayed the award to Peyton Rous. He had described genuine tumour-inducing viruses in 1910 but was not honoured until 1966 when he was eighty-seven years old. The 1949 medicine prize went to Edgar Moniz, who introduced prefrontal lobotomy for schizophrenia or manic depression – an operation that later fell into disrepute and has since been abandoned.

A whole chapter is devoted to deserving scientists who did not win the Prize. Oswald Avery first showed that DNA was the substance of heredity and was a clear candidate, but died in 1955, just two years after Crick and Watson's final elucidation of his discovery, and seven years before they received their Prize. The Nobel Prize is not awarded posthumously; but had Avery lived, he would almost certainly have shared it. There are other worthy candidates who have been deprived because of their premature death. High on the list is Sol Berson who, with Rosalyn Yalow, discovered immunoassays; the award to Yalow was a surrogate recognition of his contribution. The premature death of Rosalind Franklin has left residual controversy about her role in the unravelling of DNA. Her senior colleague, Maurice Wilkins, shared the award with Crick and Watson, but it is widely felt that she would have won it had she lived. It is said that Charles Best was not honoured for his role in the discovery of insulin because no one had nominated him. The non-recognition of Salvador Moncada's studies on nitric oxide has not adequately been explained.

In preparation for this book, Hargittai interviewed about 70 Nobel laureates and a similar number of other scientists. He is thus able to devote whole chapters to the influence of mentors and the place of work. Carleton Gajdusek attributes much of his success to his choice of Caltech, and James Watson to that of Indiana University. Both institutions housed several winners of the Nobel Prize and others who must have come close. In the UK, Cambridge's Laboratory of Molecular Biology, an offshoot of the renowned Cavendish Laboratory, occupies pride of place. Hargittai asked his subjects what had originally turned them to science; many cited Paul de Kruif's *The microbe hunters* as an early influence – a book which was almost statutory reading in my boyhood. His analysis of

other factors that distinguished those who won from those who did not makes fascinating reading.

Although much has been written about individual Nobel scientists and the topics that led to their awards, this is the most comprehensive, readable and informative account. One is left with a better understanding of the complexity of the selection process and of the inspiration, motivation and perseverance that lie behind great science, and also with an appreciation of the fine line that distinguishes winners from losers. Eugene Garfield said that 'evaluating Nobel science is like comparing a masterpiece by Rembrandt to one by Matisse.' Somewhere along the line judgement is needed, not about whose work is better, but about whose work is likely to make the most impact. The amount of science being carried out in laboratories throughout the world by hugely talented scientists must lead to occasional arbitrary choices, but very, very few of those who have won the prize have not deserved it.

SIR RAYMOND HOFFENBERG
*President, 1983–89, Royal College of Physicians*

# letters TO THE EDITOR

Please submit letters for the Editor's consideration within three weeks of receipt of the Journal. Letters should ideally be limited to 350 words, and can be submitted on disk or sent by e-mail to: Clinicalmedicine@rcplondon.ac.uk.

### Physicians in a foreign land

Editor – We were interested and encouraged by Paul Streets' editorial on patient empowerment and the changing role of the physician (*Clin Med* January/February 2003, pp 7–8). He reports that diabetes is an area where innovative approaches to patient involvement in care are taking place. He goes on to urge examination of skillmix issues and tackling 'professional demarcation under the guise of protecting patients'. According to Streets, we should go back to the drawing board and 'radically reappraise who does what'. He states that specialist patient groups like Diabetes UK will work to ensure that change is achieved 'without compromising quality'.

Whilst wholeheartedly supporting the general direction of Paul Streets' polemic, we would urge a degree of caution before embarking on a wholesale dismantling of existing specialist diabetes services for the sake of role diversification, devolved care and patient empowerment.

Diabetes is a good example of a medical specialty that generally delivers high quality care in a structured environment. However, we know that there are not enough specialists and that many clinics are poorly supported.[1] We also know that some patients find it difficult to access hospital-based services. Nevertheless, we do not believe that the answer to the problem is a headlong rush into a primary care based diabetes service using untested innovations such as GP specialists, nurse consultants and prescribing pharmacists.

We would remind Paul Streets that a consultant diabetologist has to navigate a highly structured 5-year specialist-training programme leading to the award of a Certificate of Completion of Specialist Training (CCST). Most diabetologists also practise specialist endocrinology and make a large contribution to acute general medicine. Diabetologists are committed to delivering high quality diabetes care and, because most are long serving, they are able to provide long-term continuity of specialist care for their patients.

The Association of British Clinical Diabetologists (ABCD) strongly supports the development of specialist skills by other professionals properly trained to deliver specialist diabetes care providing that there is no loss of quality and that there is a clear understanding of respective roles and responsibilities. For example, ABCD is working closely with the Royal College of General Practitioners to develop a training and competency framework for the General Practitioner with a Special Interest in diabetes.

However, a recent survey by Diabetes UK[2] has shown substantial deficiencies in GP diabetes care, and Pierce[3] has shown that GP exposure to diabetes CME is seriously inadequate in many areas. Thus, it seems clear that it is going to take several years to develop adequate specialist diabetes skills in primary care. Furthermore, we believe that this will only happen if there is strong clinical and educational support from local specialist diabetes consultants. However, many specialist diabetes services are seriously under-resourced and