

it is destined for libraries. It is a compendium of information that will prove useful for students of the law and age discrimination, and for those who believe that campaigning is most effective when based upon detailed comparative evidence.

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Catherine Y. Read, Robert C. Green and Michael A. Smyer (eds), *Aging, Biotechnology and the Future*, Johns Hopkins University Press, Baltimore, Maryland, 2008, 296 pp., hbk £30.00, ISBN 13: 978 0 8018 8788 8.

This book is a collection of 19 short essays on diverse issues concerning ageing, biotechnology and ethics. The editors suggest their purpose is to start a debate around the questions: 'Of aging, what can we know? About aging, what must we hope? With aging, what can we do? At the beginning of the 21st century, at the intersection of a demographic revolution, each of these questions requires us to reach across disciplinary and professional lines to draw on the best from philosophy, theology, medicine, life sciences, nursing and psychology' (p. xxi). The contributors are limited to those from these disciplines and are all American. The book has been compiled by a team from Boston, Massachusetts based on the REVEAL (Risk Evaluation and Education for Alzheimer's Disease) study on the implications for genetic testing for Alzheimer's disease. The book is a mixture of speculative ethics; largely the ethics of stem cells, anti-ageing therapies and trans-humanism but also of gene therapies, gene testing, and artificial reproduction; with research reports of studies of centenarians and the psychological implications of gene testing for Alzheimer's disease. There are some very good papers summarising the key points at issue with the new biological knowledge and its technological potential, along with the ethical and social policy concerns they raise.

The papers are grouped into five sections. There is an introduction with two papers, one a succinct and well-reasoned account from the Executive Director of the Ellison Medical Foundation, Richard L. Sprott, that sets out the nature and potential of new biological understanding of ageing, and the other an un-referenced opinion essay from the Director of Health, San Antonio, Texas, Fernando A. Guerra, on the ethics and potential of new biotechnology, particularly stem cell technology. The remaining four sections are entitled, 'immortality', 'centenarians', 'genetic testing', and 'ethical and social perspectives'. The highlight for me was the interesting, well-balanced research reports on studies of those aged over 100 years. This section contained three papers, an excellent overview of what has been learned from studying centenarians from Thomas T. Perls, an account of the Georgia centenarian study from Leonard W. Poon, and a critical response to studies of centenarians from Dianne Scott-Jones. The final section has four papers and although entitled 'Ethical and social perspectives' is written exclusively by ethicists.

At the centre of the book are five papers based on the REVEAL and the related REVEALED study. They cover, 'Genetic susceptibility to Alzheimer disease',

'The implications of genetic testing for Alzheimer disease', 'Genetic testing for Alzheimer disease: the REVEAL study', which presents the methods and findings of the research, 'Psychological issues in genetic testing', and a critique of the practical usefulness of genetic testing 'Genotype, phenotype, and primary care: why the new genetics technology is not ready for primary care' by a primary care physician. The five papers form a highly informed and interesting debate of a very specific issue of the use of APOE genotyping in a predictive manner for Alzheimer's disease, but there is little discussion of its import for of the larger issues about the future of old age around which the volume is framed.

The volume offers a number of papers on the same issue with different perspectives, which is a positive contribution to debate, but some are highly polemical and not all are well situated within the existing extensive literature on the subject. The volume overall lacked a good demographic perspective and some papers appeared unfamiliar with basic demographic concepts such as life expectancy, life span, and age-specific mortality. Perhaps the dominance of medical perspectives in the volume prevented a clear discussion of the nature and relationship of old age and the diseases of old age, which are controversial within the biological research community and are also key concepts in many of the ethical issues. The volume would have been strengthened with some social science and demographic perspectives to contextualise the debates and issues. The authors write explicitly for an American audience and make no attempt to address health policy, procedures and institutions outside the United States. This is especially important for the international readership of *Ageing & Society* as there is a highly specific history and politics to stem-cells research in the US. The volume would also have benefited from inclusion of perspectives which provide a critique of science and medicine as institutions in the early 21st century. Critical approaches from the philosophy of science and the sociology of science would locate the current enthusiasm for genetics and stem-cell technologies by providing cultural, historical and societal contextualisation and a more measured view of the place of science and medicine in society to that taken for granted and unexplored within the volume. *Ageing, Biotechnology, and the Future* is an insufficiently comprehensive overview of the subject of ageing and bio-technology to replace Post and Binstock (2004) as the best introductory text for students and researchers.

In my view, the field of bio-technology and ageing requires more informed empirical social science about the people, practitioners, older people themselves and their opinions and activities in the field. Such research as has been done reveals great diversity and confounds many of the assumptions behind the ethical debates, important and well rehearsed as they are. Above all, what is missing from these ethical debates is engagement with the wishes and views of older people themselves.

Reference

Post, S. G. and Binstock, R. H. 2004. *The Fountain of Youth: Cultural, Scientific, and Ethical Perspectives on a Biomedical Goal*. Oxford University Press, Oxford.

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