Book review Mike Berridge The Edge of Life: Controversies and challenges in human health

Reviewed by Peter Doherty*

Though the past decades have seen a revolution in medical understanding and practice that has greatly improved health outcomes and increased human life spans, most of us have a very incomplete understanding of what has actually occurred. That need no longer be the case if we take the trouble to access this elegant little book by Malaghan Institute (Wellington) cancer researcher Mike Berridge.

The case for evidence-based medicine is put clearly, using language that everyone can understand. Complex ideas backed by years of detailed research are explained succinctly and in plain English. There is a complete absence of jargon and, at no stage, does the author 'talk down' to a non-scientist reader. The topics covered range from the 150-year-old plus history of infection and immunity, through the case for fluoridation of water supplies, to the recent focus on the importance of the gut microbiome, to the view that being 'too clean' can be bad for us, to the evolving area of regenerative medicine, and new insights from areas like epigenetics that are illuminating our understanding of cancer and, in fact, of who we are in the hereditary sense. The text is topical, lively and a pleasure to read.

Though shorter and, of course, much more up-to-date, the book reminds me of the widely read Lewis Thomas classic, *Lives of a Cell*, that provided such a clear exposition of medical advances in the 1960s and 1970s for intelligent, but non-specialist readers of that time. And locals will enjoy the fact that it is written from a New Zealand perspective.

Beyond the science, Mike Berridge also discusses the profound ethical issues that have arisen as a consequence of our newly accessed

capacity to manipulate the human genome. The era of cell and gene therapy is already here from the viewpoint of the researcher and, increasingly, the doctor and patient. These technologies can potentially impact each and every one of us. Democracy only functions well if voters are informed. Reading *The Edge of Life* provides an accessible and non-threatening 'in' to these complex and massively important issues.

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