

Book Reviews

Quantitative Research in Human Biology and Medicine, by SIGISMUND PELLER, Bristol, John Wright, 1967, pp. xii, 422, 63s.

This book contains thirty-seven chapters, each a largely self-contained essay on some aspect of the quantitative method in biology and medicine. The first eight of these deal specifically with historical topics and include commentaries, for example, on Harvey's discovery of the circulation of the blood, Mendel's basic theories and experimental findings, immunity against smallpox, the prevention of puerperal fever, and the observations of Snow on the mode of spread of cholera. Moreover, historical allusions and references pervade the whole book, and each chapter contains a combination of ancient and modern examples on its particular subject. The breadth of the author's reading and knowledge is remarkable, and, to judge from those subjects with which I am familiar, his historical summaries are detailed and authoritative:

Although the book is interesting to consult on specific topics, it is not easy to read through. The historical presentations do not form part of an adequately connected exposition. They are included as illustrative material contributing to a diffuse variety of tendentious themes, such as the fruitful contribution of 'logical medical statistics' to the development of biology and medicine, compared with the barrenness of the mathematical statistical approach, the virtues of epidemiological and clinical enquiries, compared with the deficiencies of laboratory experimentation, and the tendency of some scientific workers to ignore previous or rival workers in their field, or even to vilify them, to gain credit for themselves. On each theme the author appears to do justice to his thesis, but to be less than fair to the antithesis.

IAN SUTHERLAND

Jan Swammerdam (1637-1680). His Life and Works, by A. SCHIERBEEK, Amsterdam, Swets & Zeitlinger, 1967, pp. vi, 202, illus., no price stated.

This monograph was originally published in Dutch in 1947, and its present appearance in English belatedly fulfils a hope expressed many years ago by F. J. Cole. The translation has been well done in the sense that it reads like an original work, and the production is of a high quality. The author's method has been to reproduce virtually *in extenso* the comprehensive Introduction by Boerhaave to the *Biblia Naturae* (1737), but with additional material and commentaries interspersed throughout. His survey of the literature is judicious and comprehensive, and in this new edition he has taken the opportunity to incorporate occasional references to modern genetical theory, for instance, in order to illustrate how closely it resembles some of Swammerdam's ideas concerning embryological development: he was not nearly so naive as were later writers in contrasting 'preformation' and 'epigenesis'.

Swammerdam was a general biologist of genius, who saw structure and function as two aspects of a single phenomenon. He also recognized the fundamental similarities in all forms of living matter, in a way that is only just again becoming possible (and inevitable) with those interdisciplinary studies that modern molecular biology demands. If ever the relevance of history to modern biological science is to 'get across' to those contemporaries who think in terms only of the present and the immediate past, the position of Swammerdam, as outlined in this monograph, could with justice become a case-study or paradigm case.

BERNARD TOWERS

After completing a Postdoctoral Research Fellowship at Harvard Medical School he joined the faculty of West Virginia University, where he remained for most of his career. From 2001 to 2006 Dr. Johnson resided in the Sultanate of Oman, where he served as Founding Dean of a new medical school being built in academic partnership with West Virginia University. Following a brief period back home at West Virginia University, in 2008 he moved to Qatar to take the position of Associate Dean for Premedical Education at Weill Cornell Medical College in Qatar.Â I rented this book for my Human Biology class and it came in great conditions. The book was very informative and we used it a lot through the course. Read more. This book contains thirty-seven chapters, each a largely self-contained essay on some aspect of the quantitative method in biology and medicine. The first eight of these deal specifically with historical topics and include commentaries, for example, on Harvey's discovery of the circulation of the blood, Mendel's basic theories and experimental findings, immunity against smallpox, the prevention of puerperal fever, and the observations of Snow on the mode of spread of cholera. Moreover, historical allusions and references pervade the whole book, and each chapter contains a combination of ancient For qualitative research, research quality is typically assessed according to criteria such as rigor, trustworthiness, credibility and transferability (Golafshani, 2003). The goal here, as it is for most qualitative studies, has been to conduct an in-depth study of a specific case in order to "provide a rich, contextualized understanding of human experience" (Polit and Beck, 2010;1452). Using a single case study allowed me to collect in-depth descriptive material of the phenomenon and the context. This new edition also contains expanded coverage of the mechanisms of oxidative damage to lipids, DNA, and proteins (and the repair of such damage), and the roles played by reactive species in signal transduction, cell survival, death, human reproduction, defence mechanisms of animals and plants against pathogens, and other important biological events.Â Two new chapters discuss 'in vivo' and 'dietary' antioxidants, the first emphasising theÂ There is a detailed and critical evaluation of the role of free radicals and other reactive species in human diseases, especially cancer, cardiovascular, chronic inflammatory and neurodegenerative diseases.Â This book is recommended as a comprehensive introduction to the field for students, educators, clinicians, and researchers.