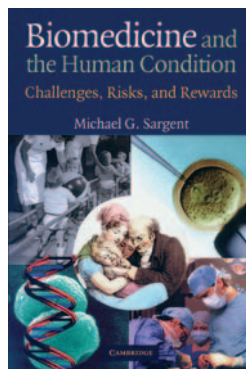


Biomedical stories

Suresh I.S. Rattan

Biomedicine and the Human Condition: Challenges, Risks, and Rewards
by Michael G. Sargent
Cambridge University Press, New York,
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My curiosity to read Michael Sargent's book on *Biomedicine and the Human Condition* was kindled by the author's association with the National Institute for Medical Research (NIMR; Mill Hill, London, UK), which brought back memories of my PhD studentship there more than 25 years ago. Reading the book has left me doubly rewarded—I enjoyed the nostalgia of “the good old days” and appreciated this series of well-told (hi)stories about biomedicine and human beings.

The book is a personalized account that, rather than merely describing a chronological directory of events, goes forwards and backwards, uncovering and discovering the growth and development of various ideas and practices. Sargent's writing style is simple and unambiguous, with a gentle and non-patronizing tone. He is well read and well rooted in Judaeo-

Christian mythology, to which he tries to relate all human ideas, actions and their applications. Almost every chapter of the book begins with some reference to stories from the *Old Testament*, and although Sargent has tried hard to maintain a secular, scientific and rational approach, one can easily feel a kind of spirituality and connection to ‘higher order’ organization. This is a positive aspect of his thinking and expression.

The preface explains Sargent's intention to write this book “for a general reader interested in learning about biomedical innovation in its historical and cultural context without the burden of detail”. He has surely kept his promise and has given us a fantastic treat of a story, which describes how humans gained control over their biological destiny, for better or worse. There is enough scientific information for those readers without much biological training, and a comprehensive list of references to guide readers towards detailed or original sources of information. However, for a reader with an academically biological background, most of the scientific information is too simple and trivial.

The book is organized by topic, not necessarily in linear chronological order. The first chapter is an introduction to the history of the establishment and the growth of various institutions and philanthropic movements that promoted biomedical research. In particular, these include organizations such as the Carnegie Institution (Washington, DC, USA), Rockefeller Foundation (New York, NY, USA), and governmental support in establishing national organizations in the USA and European countries for the pro-

motion of biomedicine. Sargent tells the story of the evolution of biomedicine one topic at a time, starting with reproductive technology, the genetic basis of diseases, cellular physiology and dysregulation, later life effects of *in utero* exposures and experiences, and the role of infections, nutrition and toxic chemicals. This is followed by a not-so-deep discussion of the process of ageing and the origin of age-related diseases, the problems of the physiological and genetic bases of cancer, immune inefficiency and devastating epidemics. The remaining four chapters deal with the technological aspects of drug discovery, gene interventions, stem-cell therapies, human-body redesign and personalized medicine.

As the subtitle is *Challenges, Risks, and Rewards*, each of the chapters has a final section covering these topics for the subject under discussion. This is where the social and ethical leanings of the author become apparent, and Sargent reveals himself as a humanist and internationalist who is fully aware that the uses of—and access to—the fruits of the success of biomedicine are highly disparate. His only hope is that humans today and in the future will not forget the remarkable history of humanity. Despite hardships, the human race has shown the ability to improve the human condition, and will continue to do so. The book will prepare you to do the same.

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