

Cures vs Profits. Successes in Translational Research. By James Lyons-Weiler. World Scientific, 2016. Softback. Pp. 360. Price GBP 18.00. ISBN 978-981-4730-14-3

Massimiliano Veroux*

Vascular Surgery and Organ Transplant Unit, Department of Medical, Surgical Sciences and Advanced Technologies GF Ingrassia, University Hospital of Catania, Via Santa Sofia, 86, 95131 Catania, Italy. *Correspondence e-mail: veroux@unict.it

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Clinical medicine has evolved rapidly in recent years mainly because of the growing success of translational medicine. The increasing knowledge about cell biology in the pathogenesis of cancer and, above all, the sequencing of the human genome have contributed significantly to the recent advances in the understanding, diagnosis and therapy of many life-threatening diseases. This book reviews the most recent and key successes in biomedical research, providing a critical view of the results obtained and how these could be improved.

A long, enjoyable, preface introduces the key points of the book and, particularly, the close relationship between the need for a cure and the profits from available treatments, together with an ardent defense of public trust and ethics in science. Ethics in medicine should be the dogma for all who deal with health, but this is dramatically counterbalanced by fraudulent treatments in which dishonest medical doctors profit personally. The need for public funding of biomedical research, and the link between clinical medicine and the pharmaceutical industry drive the reader to the key ethical question of the book: why don't doctors want to cure their patients? The answer is intuitive, but impressive, since the profits of both health professionals and the pharmaceutical industry may strongly influence the decision-making in clinical medicine, and this appears clearly evident when discussing the over-diagnosis of attention deficit hyperactivity disorder (ADHD), vaccine safety and chemotherapy for cancer.

Organizationally, the book is divided into 15 chapters selected to cover topics in biomedical research with the greatest potential appeal to those managing common problems as well as those interested in recent progress in science. The book presents in an enjoyable and readable way most of the recent advances in clinical medicine, offering a very objective and neutral approach, and leaving the readers to formulate their own personal opinion on what they are reading.

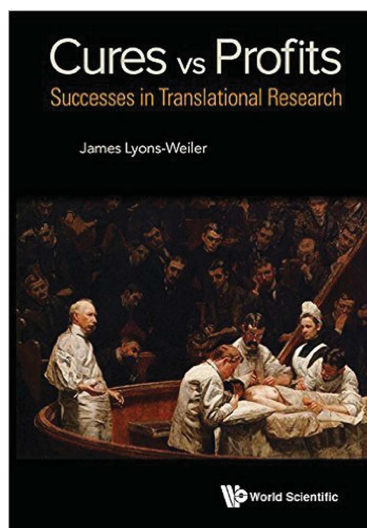
Each chapter begins with a true-life story introducing the theme, and is complemented by interviews from experts and people directly involved in the research. The book is written in a conversational-like tone, providing even the average reader an easy way to understand medical terminology and concepts.

Almost all of us, during our life, might be personally interested in one or more chapters: cancer diagnosis and treatment; the efficacy of grapefruit in reducing blood pressure; chemosensitivity and chemoresistance assays; genomics and personalized medicine; vaccine safety; early detection of life-threatening and disabling neurological disorders; and the new surgical techniques for the treatment of cancer.

Readers might be impressed by the new molecular-based test for evaluating the most effective chemotherapy for an individual patient or the possibility to clear cancer by stimulating our immune system, or the high rate of ADHD overdiagnosis and the wide use of dangerous and useless medications, or the potential fraud in vaccine safety research at the Centers for Disease Control and Prevention (CDC).

While presenting the lesser known aspects of biomedical research, the author provides an optimistic and forward-looking view of trying to change the public health system.

However, every hard-won triumph pays the price for its success, and the book will become rapidly, and hopefully, out of date due to the growing improvements in translational and clinical medicine. Although the book is not devoted only to health



professionals, the absence of indexing does not facilitate fast searching or the use of this book as a clinical tool. Moreover, some concerns expressed by the author may be not applicable outside the USA, because of differences in the legal system and in health system funding. Although in some chapters the statistical methods described for improving the power of RCT (randomized controlled trials) may not be easily understood by those without a prior medical background, I personally found the book enjoyable to read and informative.

Who should read this book? This book is devoted to those interested in the progress of clinical medicine, allowing everyone to critically review recent successes in biomedical research, and to formulate a personal opinion based on the facts reported. This is a book that typically leaves the reader thinking seriously about the subjects discussed, even long after finishing reading. Nevertheless, after reading this book one might feel confused but, on the other hand, truly optimistic about the future of medicine and our well-being.