

# Pioneers of Medicine without a Nobel Prize\*

*Gilbert Thompson (Editor)*

\*Thompson G (Ed). *Pioneers of Medicine without a Nobel Prize*. London: Imperial College Press, 2014. ISBN 978-1-78326-383-7. Hardback. 296 pp USD128 (also available as softcover and eBook)

The Nobel Prize was established in 1901 using a bequest from Alfred Nobel and is probably the most highly regarded international award. Nobel prizes are currently awarded annually in several categories, including Physiology or Medicine, and winners are termed Nobel Laureates.<sup>1</sup> The Nobel Prize for Physiology or Medicine is awarded for “discovery of major importance in life science or medicine. Discoveries that have changed the scientific paradigm and are of great benefit for mankind are awarded the prize, whereas life time achievements or scientific leadership cannot be considered for the Nobel Prize”.<sup>1</sup> While many medical researchers have been recognised with the Nobel prize for Physiology or Medicine, many famous medical researchers over the years did not win a Nobel Prize. *Pioneers of Medicine without a Nobel Prize* brings together chapters describing discoveries which have had a major impact on medical science and the practice of medicine, but where the medical scientists involved did not win a Nobel Prize. *Pioneers of Medicine without a Nobel Prize* appears to be a companion volume to another title published by the same author, *Nobel Prizes that Changed Medicine*.<sup>2</sup>

*Pioneers of Medicine without a Nobel Prize* is presented as a 23.5 x 16 x 2 cm hardback publication. The front cover is simple in design with some basic graphic art work. The work contains a table of Contents, a Foreword by Sir Mark Walport, a Preface, an Acknowledgements section, a list of the details of the 21 Contributors, 15 Chapters and an Index, as well as a number of historically relevant figures, photographs and plates. There is no list of figures/plates or glossary. The chapters or essays (and the names of contributors) contained in *Pioneers of Medicine without a Nobel Prize* include “Ch. 1. Archibald E. Garrod: The Founding Father of Biochemical Genetics” (David J. Galton); “Ch. 2. Nikolai Anitschkow: The Birth of the Lipid Hypothesis of Atherosclerosis and Coronary Heart Disease” (Daniel Steinberg); “Ch. 3. Willem-Karel Dicke: The Role of Gluten in Coeliac Disease” (Chris J.J. Mulder and Karel A. Dicke); “Ch. 4. Richard

Doll: The Link Between Smoking and Lung Cancer” (Tony Seed); “Ch.5. Albert Sabin: The Development of an Oral Poliovirus Vaccine” (Derek R. Smith and Peter A. Leggat); “Ch. 6. René Favaloro: Pioneer of Coronary Artery Surgery” (Stephen Westaby); “Ch. 7. Christiaan Barnard and Norman Shumway: The Heart Transplant Pioneers” (Stephen Westaby and David Marais); “Ch. 8. William Kouwenhoven and Paul Zoll: The Introduction of External Cardiac Massage, Defibrillators and Pacemakers” (Max Lab); “Ch. 9. Inge Edler and Carl Hellmuth Hertz: The Development of Ultrasound for Clinical Use” (Bhavna Batohi and Paul S. Sidhu); “Ch. 10. Cyril Clarke, Ronald Finn, John Gorman, Vincent Freda and William Pollack: The Prevention of Rh Haemolytic Disease of the Newborn” (David J. Weatherall); “Ch. 11. Herbert Boyer and Stanley Cohen: Recombinant DNA” (Anne Soutar); “Ch. 12. Harvey Alter and Michael Houghton: The Discovery of Hepatitis C and the Introduction of Screening to Prevent Its Transmission in Transfused Blood” (Leonard B. Seeff and Marc G. Ghany); “Ch. 13. Willem Kolff and Belding Scribner: The Development of Renal Haemodialysis” (John Turney); “Ch. 14. James Till and Ernest McCulloch: The Discovery of Stem Cells” (Joe Sornberger); and “Ch. 15. Akira Endo: The Discovery of Statins” (Gilbert Thompson and Hiroshi Mabuchi). The back cover of the book gives a brief description of the book and its publisher.

The searchable archives of the Nobel Prize organisation include information released after 50 years concerning nominators.<sup>3</sup> It is interesting that only one of the persons described in *Pioneers of Medicine without a Nobel Prize* was listed as the nominator for someone else who did go on to win a Nobel Prize up to the embargo period at least. Following a search of the Nomination Database for the Nobel Prize, only Albert Sabin acted as a Nominator and this was for the second of four nominations of Max Theiler, who did go on to win the Nobel Prize for Physiology or Medicine in 1951.<sup>3</sup> Otherwise the essays contained in this book describe some remarkable people and some extraordinary discoveries that were never recognised with a Nobel Prize. In many cases, the names of these people live on in major research institutes around the world, for example the Sabin Vaccine Institute in the USA, which was founded in honour of Albert Sabin (Ch. 5) in 1993.<sup>4</sup> It is curious

that Austin Bradford Hill was not formally included in the biography related to Doll's discovery (Ch. 4) of the link between smoking and lung cancer,<sup>5</sup> but Hill was mentioned in the Chapter. It is significant that the discoveries described in *Pioneers of Medicine without a Nobel Prize* are still having considerable impact today.

The editor, Gilbert Thompson, is a former gastroenterologist and Emeritus Professor in Clinical Lipidology at the Hammersmith Campus of Imperial College London. He is a Past Chairman of the British Atherosclerosis Society, the British Hyperlipidaemia Association and the Forum on Lipids in Clinical Medicine of the Royal Society of Medicine. He is also a Distinguished Fellow of the International Atherosclerosis Society. He has published more than 300 papers and seven books. Most of his work has been in the field of lipoprotein metabolism and atherosclerosis.

*Pioneers of Medicine without a Nobel Prize* is the first compilation of essays on medical scientists and physicians, who, despite significant contributions to medicine and medical science, did not win a Nobel Prize. The concise style and interesting selection of subjects help to make the book easy to read. It will broadly appeal to all health professionals and medical scientists with an interest in some of the major discoveries that have shaped medicine and medical science, as well as medical historians. It is likely that this book is a one off edition, unless it is revised, reprinted or expanded in the future, so those wanting it for their medical history library in its current form are strongly encouraged to purchase a copy of *Pioneers of Medicine without a Nobel Prize*.

### Declaration of Interests

The reviewer was the second contributor to one chapter to this book (Ch. 5. Albert Sabin: The Development of an Oral Poliovirus Vaccine).

### References

1. Nobel Prize. Nomination and Selection of Medicine Laureates. URL. <http://www.nobelprize.org/nomination/medicine/> (Accessed 6 December 2014).
2. Thompson G. *Nobel Prizes that Changed Medicine*. London: Imperial College Press, 2011.
3. Nobel Prize. Nomination Database. Search for Persons. URL. <http://www.nobelprize.org/nomination/archive/> (Accessed 6 December 2014)
4. Sabin Vaccine Institute. Home page. URL. <http://www.sabin.org/> (Accessed 6 December 2014)
5. Doll R, Hill AB. Smoking and carcinoma of the lung. *BMJ* 1950; 2: Sep 30: 739-748

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