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reviews

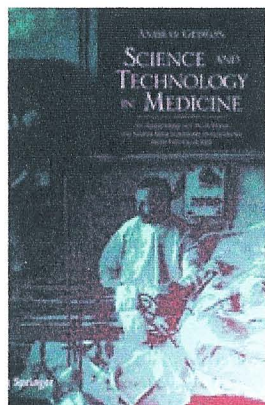
Book

Science and Technology in Medicine: An Illustrated Account Based on Ninety-Nine Landmark Publications from Five Centuries

Selecting a list of 99 of the most significant discoveries of the past 500 years from the vast medical literature is no easy task.

Gesner, the author of the pioneering *Bibliotheca Universalis* (1554-5), classified and listed the 12 000 works known at that time. Today, there are many millions of citations in Index

Medicus, and on PubMed and the internet. A collection like this is often more memorable for its exclusions rather than inclusions and, to an extent, Andras Gedeon's choice is a personal one, but most of the names included can certainly claim to be true pioneers.



Andras Gedeon

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Rating: ★★★★★

geniuses such as Sir Christopher Wren, whose initial controlled studies on intravenous infusions

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Gedeon has essentially written essays on the 99 landmark articles with short accompanying biographies of the pioneers and a summary of the original publications reproduced in facsimile from the original sources. These are accompanied by historical footnotes, setting the discoveries in context along with further accompanying illustrations.

The book's first landmark article dates from 1525 and details the artist Albrecht Dürer's attempt to first apply mathematics to the description of proportion and form of the human body. This went on to influence Vesalius's famous anatomical opus, *De Humani Corporis Fabrica*, in 1543.

Contributions range from more familiar names such as Paré and Lister in surgery, Leeuwenhoek, Pasteur, and Ehrlich in bacteriology, Humphry Davy and Snow's contributions to anaesthesia, to more modern diagnostic pioneers like Roentgen in x rays and Hounsfield's computed tomographic scanner.

Many of the pioneers were not practising doctors but pure scientists such as chemists, physicists, mathematicians, and engineers. Some were polymathic

were somewhat eclipsed by his contributions to mathematics and astronomy and his perhaps more memorable skills as an architect.

Pioneering 20th century discoveries include Watson and Crick's discovery of DNA, Kolff's discovery of the renal dialysis machine, Edler and Hertz's discovery of echocardiography, and Senning's first fully implantable cardiac pacemaker. Some of these names may not be familiar to all, but their discoveries have had a major impact on 20th century medicine.

Many of the ideas described here were met with scepticism initially and their true importance was only realised many years later. This volume illustrates the multidisciplinary foundation of scientific and medical progress throughout the centuries and serves to illustrate how often pure scientific discoveries subsequently lead to widespread clinical applications. The book is beautifully illustrated, informative, and entertaining, and serves to remind us of our rich medical heritage.

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