From Medieval Microbiology to Modern Medicine: A Concise History of How We Got to Where We Are Today

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If one studies microbiology or medicine at all, prominent names and stories promptly rise to the surface. In this concise history of microbiology and medicine, the author brings those familiar stories to life. This is a well-written—even intriguing—historical chronicle of medical advances and microbial understanding. Robert Gaynes’ illuminating discussion ranges from Hippocrates’ foundational concepts of medicine to the challenges of creating an effective HIV vaccine.

Being a ‘late adopter’ of a love for history, I now find books such as this informative and enlightening sources of accurate historical insight. Having taught microbial history to untold numbers of undergraduate students, many names and details were very familiar. Within the pages of this well-crafted discourse, Gaynes includes curious and sometimes intimate details about the people and discoveries which have sculpted the faces of microbiology and modern medicine.

Including detailed chapters on the thoughtful discoveries, lives and sometime even peculiar habits of Hippocrates, Avicenna, Fracastoro, van Leeuwenhoek, Jenner, Semmelweis, Pasteur, Koch, Lister, Ehrlich, Fleming, and Wald,
the book provides an interesting read through thousands of years of medical history. In Gaynes' own words, "This book is intended not just for the physicians or students of medicine but to be accessible to anyone with an interest in microbiology, infectious disease, and medical history." The language and style Gaynes has chosen make this book an excellent historical source for introductory undergraduate microbiology students. Likewise, medical students and public health professionals will undoubtedly learn much about the history behind their chosen profession by reading this book.

The book is packed with details which I found new and enlightening, even after over 30 years of studying and teaching microbiology. One salient example surrounds the development and promotion of the smallpox vaccine by Edward Jenner. I had not realized the personal financial investment and travel commitments which Jenner necessarily made in the promotion and adoption of his newly developed vaccine. I had not known that the British government was hesitant to finance the production and distribution of the vaccine.

Gaynes includes the text of a personal letter written by United States President Thomas Jefferson to Edward Jenner. Jefferson wrote, "Having been among the early converts, in this part of the globe, to (your vaccine's) efficiency, I took early part in recommending it to my countrymen." In that same letter Jefferson continues his communication to Jenner: "Yours is the comfortable reflection that mankind can never forget that you lived."

Gaynes' elucidation throughout the chapters of this book should ensure the same outcome for each discovery, contribution, and scientist discussed.

Gaynes has crafted a book which I certainly will find myself reading again and again. It is a book in which anyone, from medical professionals to introductory microbiology students, will discover 'new' scientific and medical intrigue. This book is highly recommended for any educator or student of microbiology, public health or medicine. Educators at the high school, undergraduate, graduate, and medical school levels will benefit from reading Germ Theory. It is similarly well-suited for microbiology, biology, and medical students at these same levels.

Find a copy soon. You will have your eyes opened, and be glad you did.

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