

## Book Reviews

Rita Hoots

Department Editor

### MICROBES

**Intimate Strangers: Unseen Life on Earth.** By Cynthia Needham, Mahlon Hoagland, Kenneth McPherson & Bert Dodson. 2000. ASM Press (1752 N St. NW, Washington DC 20036). 191 pp. Hardback \$39.95.

 This book is the final phase of a major national educational initiative to increase public awareness of microbiology. This initiative, called "The Microbial Literacy Collaborative," is a project of the American Society for Microbiology in association with a number of other organizations, including NABT. The project was designed to help acquaint the public with microorganisms and to show the many ways that microbes affect humans in everyday life. Major products of this effort include: (1) a four-part television series titled *Intimate Strangers: Unseen Life on Earth*, first shown on PBS in November 1999, (2) a college telecourse titled *Unseen Life on Earth* released by Oregon Public Broadcasting, available in January 2000, (3) a series of laboratory exercises in a workbook titled *Microbe World Activities* created in conjunction with NABT, (4) a Web site that draws all of the material together at [www.microbe-world.org](http://www.microbe-world.org), and (5) this book, the subject of this review.

**Rita Hoots**, Book Reviews Editor, is a Professor at Woodland Community College and teaches classes in the biological sciences, human anatomy, and chemistry. Her various degrees in the sciences, counseling, and education come from the City University of New York, University of Wisconsin-Madison, California State University-Sacramento, and the University of California-Berkeley. Before entering the education field, Hoots was for many years a researcher in cell ultrastructure and immunology. Her predominant passion in education is directed to the popularization and illumination of science for the public. Her address is: **Science Dept., Woodland Community College, 41605 Gibson Rd., Woodland, CA 95776; e-mail: rahoots@ix.netcom.com.**

This vividly illustrated work brings microbiology to the layperson in a manner that is both interesting and enjoyable. Fans of the PBS series will recognize illustrations and photographs from that series and will note how closely the book mirrors and enhances that production. Together the video series and book provide a strong foundation for public literacy in microbiology.

The four major sections of the book correspond with the four episodes of the PBS presentation. The section "Keepers of the Biosphere" features recycling and microbial activities in the rain forest and oceans in a review of microbial ecology. "The Tree of Life" is the taxonomic section of the book that features particularly well-done sections explaining the use of rRNA genes to build genetic trees, endosymbiosis and horizontal gene transfer. "Dangerous Friends and Friendly Enemies" covers the interaction of microbes and humans, including both symbionts and pathogens. "Creators of the Future" deals with bioengineering and stresses the increasing importance of microbes to human affairs in the future.

*Intimate Strangers* was written for individuals who want to know what microbiology is all about. Its style, illustrations and readability make it a joy. It fills its niche well and provides an inviting avenue through which teenagers and adults can learn about microbes and become acquainted with their activities and their effects on humans and the biosphere.

K. Michael Foos  
Indiana University East  
Richmond, IN 47374

### EPIDEMICS & PANDEMICS

**Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus that Caused It.** By Gina Kolata. 1999. Farrar, Straus, and Giroux. (19 Union Square West, NY 10003). 330 pp. Hardback \$25.

 The title provides an apt summary of this well-written science story. There is much information here about the 1918 influenza pan-

demic, but there is also substantial coverage of influenza in general. For example, there is an excellent summary of the events that led up to and followed the 1976 swine flu influenza vaccination effort. There is also a gripping account of efforts to find the 1918 influenza virus, and the personalities of the scientists involved in that work.

For me, one measure of the value of a book is whether I can use some of the information from it in my classes. This book easily passed muster in that department. In fact, I have used several stories and anecdotes from the book in my classes already. There are many stories worth sharing. For example, there is a very detailed presentation of experiments, that used prisoners as "guinea pigs," to show how influenza passed from person to person. This information could be used to set the stage for a discussion about research ethics or to show students how much things have changed in terms of experimentation on humans. There is also a nice section about how modern molecular methods made studying an 80-year-old virus possible, a good story for introducing modern techniques in biology.

In sum, this book contains a wealth of information that could help spice up a lecture on infectious disease, virology, molecular biology, or other topics. It is a true story that reads like a novel and will be well worth the time for most biology teachers, particularly those with an interest in infectious disease.

Patrick Guilfoile, Ph.D.  
Associate Professor of Biology  
Bemidji State University  
Bemidji, MN 56601

### BIOGRAPHY

**Carl Sagan: A Life.** By Keay Davidson. 1999. John Wiley & Sons, Inc. (605 Third Ave., New York, NY 10158-0012). 540 pp. Hardback \$30.

**Carl Sagan: A Life in the Cosmos.** By William Poundstone. 1999. Henry Holt and Company (115 West 18th St., New York, NY 10011). 473 pp. Hardback \$30.