

follow-up experiments that would provide evidence for or against a particular hypothesis. The authors deserve credit for enthusiastically tackling complex and often awkward aspects of human biology and for writing in an accessible style. Unfortunately, though, they take their title too literally and their “just-so stories” end up being as defined: delightful, but empty.

Saheli Sadanand
Yale Graduate School
of Arts and Sciences

Ethics and Newborn Genetic Screening: New Technologies, New Challenges. Edited by Mary Ann Baily and Thomas H. Murray. Baltimore: The Johns Hopkins University Press; 2009. 376 pp. US \$50.00 Hardcover. ISBN: 978-0801891519.

Ethics and Newborn Genetic Screening addresses the ethical and policy issues surrounding technological advances that have allowed routine testing for dozens of rare diseases. This book describes newborn screening programs with an historical arc, depicting what is at its root a classic case of technology outpacing self-reflection. The arc covers everything from the original controversial screening program for phenylketonuria to the modern ease of checking as many boxes as one wishes without adding any considerable cost or effort. It is sometimes taken for granted that more testing is better, but this book makes a case for rational testing, outlining reasons and practical methods to make it happen at a national level.

The book is a compilation of essays by a wide variety of experts. Each is concerned with a very different aspect of newborn screening. The variety of perspectives weaves a story that is complex and sometimes contradictory, but always thought provoking. Some particularly fascinating chapters are dense overviews of entire schools of thought, almost self-contained primers on public health.

A chapter by editor Mary Ann Baily interweaves the issue of fair distribution of testing burdens and benefits with that of

healthcare distribution in general. This exposes one of many odd paradoxes of our healthcare system: our willingness to spend state and federal money to test for conditions that our fragmented system will later allow to go untreated. Our affection for newborns apparently does not extend to the resulting adults.

Scott Grosse writes a terrific overview of cost-effectiveness analysis, using examples of newborn genetic screening as a vehicle to explain this frequently used tool. His views are balanced by a firsthand perspective from an advocate for genetic screening, who is both a concerned mother and geneticist. This could be the most valuable chapter for those of us with a scientific background, as her reasoning is rational yet sometimes contrary to the traditional criteria for good screening tests.

The opening and closing chapters by the editors provide the rationale for the compilation, framing the general issue to be discussed. The theoretical framework complements many of the chapters with narrower, more concrete subject matter. Overall, the book is a well-assembled treatment of newborn screening, sure to spark discussion in medical and bioethical communities.

Anthony Marfeo, MS4
Yale University School of Medicine

Immunology: Clinical Case Studies and Disease Pathophysiology. By Warren Strober and Susan R. Gotsman. Somerset, NJ; Wiley-Blackwell; 2009, 432 pp. US \$52.95 Paperback. ISBN: 978-0471326595.

Immunology: Clinical Case Studies and Disease Pathophysiology is a well-written transcript that underscores the importance of understanding basic immunology to translational modern medicine. Using 26 in-depth case studies, the reader is familiarized with immunodeficiency diseases, autoimmunity disorders, malignancies and immediate hypersensitivity, and mast cell disorders. Each case study is presented in a detailed immunological background supported by real data and handy references. The problem set

at the end of each chapter, plus full-color photographs and illustrations, facilitate understanding of the complex diseases being discussed. The authors also include a chapter on laboratory tests used in the diagnosis of immunological disorders, thereby allowing the reader to appreciate the importance of laboratory medicine in clinical outcomes. The authors execute their case studies well in the larger context of disease occurrence in the general population, providing a complete overview of the disease process from manifestation diagnosis through treatment. This book is a great study aid and reference guide for all immunologists. It would make an ideal text for anyone interested in understanding immunological disease from both diagnosis and treatment standpoints.

Uzma Alam, PhD
Yale University School of Medicine
Department of Epidemiology
and Public Health

Making Cancer History: Disease and Discovery at the University of Texas M.D. Anderson Cancer Center. By James S. Olson. Baltimore: The Johns Hopkins University Press; 2009. 392 pp. US \$35.00 Hardcover. ISBN: 978-0801890567.

In 1981, history professor James Olson was diagnosed with epithelioid sarcoma and in 2000, with brain cancer. As a cancer patient, he endured radiation therapy, chemotherapy, brain surgery, and amputation of his left forearm. He uses his own ordeal as an illustrative example in *Making Cancer History*, a meticulous history of the institution where he was treated: the University of Texas M.D. Anderson Cancer Center. Olson combines biographies of prominent M.D. Anderson personalities with the global histories of cancer research and treatment to show how advancements in basic science and patient care have reduced suffering and extended lives. Although he renounces any claim to being dispassionate about the institution that saved his life, Olson tells the story as a historian, not omitting the failures

and controversies that must accompany any mission as ambitious as curing cancer.

Since its establishment in 1941, the M.D. Anderson Cancer Center has followed the philosophy of “treat to cure,” which is echoed in their current mission: “to eliminate cancer in Texas, the nation, and the world.” One of its first presidents, R. Lee Clark, made plans to repurpose the center should a cure for cancer be found within the decade. Such optimism seems incredible, but the progress Olson documents is a testament to the vision of the early pioneers. At the time of the center’s founding, the standard cancer treatment was radical surgery, which removed the tumor, surrounding tissue and lymph nodes, and often involved amputation. In the years that followed, M.D. Anderson sought to replace radical surgery with minimally invasive treatments such as chemotherapy and radiotherapy and became a world leader in cancer prevention and investigation of environmental cancer causes.

Through its almost 70-year history, M.D. Anderson has been headed by only four individuals, and Olson’s book is largely organized around the administrative eras represented by these four men. From this emphasis on leadership emerges one of the book’s central themes: Discovery does not happen in isolation, it is a product of institutional culture which is itself the product of inspired leaders. The administration quickly recognized that treatment of such a complex disease requires two-way interaction between scientists trying to understand the disease and clinicians who have to face the human side of cancer. The institutional structure has been continuously adjusted to maintain a collaborative, multidisciplinary environment. Even Olson’s occasional diversions into dry details such as hospital finance and Texas university politics illustrate the multiple levels on which events and individuals shape an institution.

Although *Making Cancer History* appears to present a limited scope — the history of a single hospital and its people — Olson’s “biography” shows M.D. Anderson both as a microcosm for the worldwide progress against cancer and a model for the