

BOOKS, JOURNALS, NEW MEDIA

monious. His tales are surreal, fateful, star crossed. His stories are reminiscent of the writings of Herman Hesse. Good literature, finely crafted, often serene, these stories are educational. I found them satisfying in their myriad images. This book gives the reader insight into why Indian psychiatrists have found such success in this country. It is enchanting.

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Industrial Pollution

Deceit and Denial: The Deadly Politics of Industrial Pollution, by Gerald Markowitz and David Rosner (*California/Milbank Books on Health and the Public*), 408 pp, \$34.95, ISBN 0-520-21749-7, Berkeley, University of California Press, 2002.

IRONICALLY, ON THE DAY THIS BOOK ARRIVED for review, a congressional report documenting the Bush administration's influence on the lead poisoning advisory committee at the Centers for Disease Control and Prevention was released.^{1,2} Corporate influence has now invaded numerous, supposedly neutral, scientific bodies in the federal governmental structure, and proindustry advocates are being appointed to many positions after "litmus test" vetting of candidates, often following precipitous dismissals of standing members.²⁻⁵ Over the short period during which this book was read, similar actions, such as those involving the study section of the National Institute for Occupational Safety and Health⁶ and the advisory committee to the National Center for Environmental Health, came to light and stirred editorials in leading scientific publications around the world.^{7,8}

In *Deceit and Denial* Markowitz and Rosner continue in the style of their excellent earlier book on silicosis, *Deadly Dust*, now reviewing the role of industry and politics in exposures that might potentially sicken many in our society. *Deceit and Denial* looks at two significant stories of industrial pollution: lead poisoning and the more recent story of vinyl chloride. Lead poisoning has been known for centuries, but that did not stop industrial entities from forcing on

the US public, especially through paint and gasoline, significant amounts of lead, which have been well documented to cause disease, especially among children. As one reads the story of deceit in adding lead into gasoline and fighting its removal, one recognizes a now all too familiar pattern of foisting serious exposure hazards on the public and unsuspecting workers, with resulting death and disease that is then denied. Similarly, the authors' account of toxic exposure to vinyl chloride in the Louisiana chemical belt of workers making vinyl plastic precursors documents the relative impotence of public health and the fiscal dominance of major companies, which maximize profits at the expense of the health of their workers and the public at large. Public health officials could not stop new hazardous processes in an area already known to workers and local residents as "Cancer Alley."

The authors highlight in detail the manner in which corporate influence operates when it comes to workplace and environmental safety and health, echoing, all too tragically, similar stories for tobacco, asbestos, and other exposures. *Deceit and Denial* provides a most readable narrative history and clearly documents the role of industry and interactions with government officials in producing unwanted outcomes, such as the continued use of lead long after health hazards were known.

Having personally participated in research on both lead poisoning and vinyl chloride-induced cancer, it was a pleasure to identify many of the leading lights of occupational and environmental health who have worked during the past decades to improve worker health and the public health. Even for those unfamiliar with the players, this is a riveting account that can convey a better understanding of the complex influences of corporate-government interactions and the cost to health.

The book is well laid out and illustrated with interesting and insightful examples and suffers only from some occasionally poor proofreading. For those with a scholarly bent, there is a detailed set of chapter notes, which cite

scientific literature, government regulations, and articles in the lay press.

Relevant to the events that the authors chronicle are actions of the Reagan administration and the current Bush administration. The former "constrained" the Occupational Health and Safety Administration (OSHA), the National Institute on Occupational Health and Safety, and the Environmental Protection Agency (EPA) (p 8). For instance, under Reagan OSHA "abandon[ed] its own recently passed [lead] standard" and "withdrew its own publications" on a number of environmental and occupational health issues and toxins (p 133). "The Reagan years saw a virtual cessation in OSHA's standard-setting and regulatory activities" (p 226) and plummeting in enforcement cases filed by the EPA (p 267). The authors present the actions of the current Bush administration in the same light, including appointing a former lead industry lobbyist as secretary of the interior, "abandonment of the recent ergonomic standard" (p 220), which was "the only significant standard OSHA had established in over a decade" (p 226), and calls for more studies on global warming and the like, which in their view contradict the sound precautionary principle.

After reading *Deceit and Denial* it would be appropriate to think about the use of the US court system to protect workers and others from environmental exposures. Given the role of industry, the collusion of government officials, and the disenfranchisement of groups, it is clear why the courts have often ended up as the last battle ground to protect health. While some might think this role inappropriate, a reading of this book clarifies why this happens.

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NEW MEDIA

Histology

Histology: An Interactive Virtual Microscope, by Ruth Wood and Joel Schechter, two CD-ROM set, requirements: Mac OS or Microsoft Windows, Internet Explorer 5 (recommended) or Netscape 4.5, CD-ROM drive, \$39.95, ISBN 0-87893-888-5, Sunderland, Mass, Sinauer, 2003.

THE TWO CD-ROMS THAT COMPRISE *Histology* contain images from glass slides used for the histology course at the Keck School of Medicine of the University of Southern California (USC). The authors note, "In the study of histology, students have traditionally used microscopes to study specimens on glass slides. Here we have attempted to recreate the look and feel of a microscope in a digital format."

Slides are organized in traditional fashion by tissue type and organ system. The first CD includes "Cells and Tissues," "Immune System," and "Skeletal Tissues." The second CD has slides of the endocrine, cardiovascular, respiratory, renal, and reproductive systems, the skin, and the liver and gastrointestinal tract.

The first screen contains a list of the chapters. Clicking on the immune system brings up a photograph of glass histologic slides complete with partly yellowed, fading, mostly hand-written labels from the USC Anatomy Department. The slides contain sections of

lymph nodes, spleen, thymus, ileum with Peyer's patches, and tonsil and a bone marrow aspirate smear. Clicking on the lymph node slide brings up an imperfectly cut, hematoxylin-and-eosin-stained histologic section ("magnification 1×"). Along one side of the screen is a five-sentence description. Superimposed on the tissue section are two rectangles, each encompassing about 2% of the image. Clicking on a rectangle leads to a higher (4×) magnification, again with a brief text and two more superimposed rectangles. Clicking on one of these rectangles leads to the next higher (20×) magnification with short text. For each image, the user has the options of hiding the rectangles and viewing identification labels. Other chapters are similar, some more extensive than others.

As a histology atlas, this program is passable. The quality of images is variable. Some of the photographs are poor, with sections sometimes dried out around the edges, folded, scratched, and thickly cut. Surprisingly, the dust was not always wiped off the slide before it was photographed. Perhaps this was done intentionally to recreate the experience of using a microscope with poorly prepared slides (possibly bringing back memories of previous histology courses); however, the poor slide quality detracts from the images. Certainly, an effort could have been made to optimize the slide set and clean the slides before preparing these CDs. As an alternative for those who enjoy computer-based learning, the Internet has several excellent histology Web sites, complete with beautiful images, descriptive text, and learning assessment exercises. These sites are identified easily by entering the term "histology" in a search engine, such as <http://www.google.com>.

As an interactive virtual microscope, this program is primitive. The user can move the slide around for some of the sections, but viewing at higher magnifications is limited to small, preselected areas. Sophisticated systems use automated capture programs that enable imaging of sizable sections at multiple magnifications in large databases.

In such systems, the viewer can move the slide around under any magnification, thereby allowing study of much larger areas and more closely simulating a microscope.

Virtual microscopy is available on the Internet (search "virtual microscopy"). For instance, *The Virtual Slidebox*, by Dick-Dee, Leaven, and Consoer, from the University of Iowa, (<http://www.path.uioowa.edu/virtualslidebox>), is organized similarly to the CD set, with a chapter listing and photographs of histology slides. Clicking on a slide allows the user to roam around the tissue section or blood or bone marrow smear at magnifications up to 40×. Descriptive text accompanies the images. The program has the following advantages over the CD set: it is free; it is more complete, with images of the eye and central nervous system; the images are better (though not as good as those on the histology atlases available on the Internet); and it more closely approximates the operation of an actual microscope. One disadvantage is the delay in loading the images (1 to 2 seconds using a high-speed Internet connection). A second disadvantage is that identifying labels are available only in a companion program, *The Annotated Histology Laboratory*.

Reasonably priced, these CD-ROMs can be recommended, with reservations, to histology students who are looking for computer-based learning but who do not have Internet access.

Michael J. Kornstein, MD
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RECEIVED

Anesthesiology

A Practical Approach to Cardiac Anesthesia, edited by Frederick A. Hensley, Jr, Donald E. Martin, and Glenn P. Gravlee, 3rd ed, 733 pp, with illus, paper, \$79, ISBN 0-7817-3444-4, Philadelphia, Pa, Lippincott Williams & Wilkins, 2002.

Biology, Molecular Medicine

Animal Biotechnology: Science-Based Concerns (National Research Council of the National Academies), 181 pp, paper, \$49, ISBN 0-309-08439-0, Washington, DC, National Academies Press, 2002.