

clinical and scientific world would accept the credibility of experts. But impressionistic, "commonsense" diagnoses, however achieved, by however distinguished experts met together, are not enough. The Framingham reply is that sharpening the diagnosis would only serve to enhance the important relationships found.

On the other hand, there is no lack of forthrightness in Dawber's opinions on collecting, managing, and collaborating in the analysis of epidemiological data. He has clearly been stung by a world in which Framingham data, collected under a highly visible government contract, involving many Public Health Service officers and staff and long-term government funding, are considered the property of the institution that commissioned and sponsored the study:

The separation of the investigators collecting the data from those directly responsible for its analyses became a real problem. In spite of frequent meetings of all concerned, I found that as Principal Investigator, I had less and less control over the analysis. In addition, the staff at the National Institutes of Health became increasingly possessive of the data, ostensibly to preserve the confidentiality of medical records. The question of ownership of the data still has not been completely resolved and has arisen in other studies financially supported by NIH. My own insistence was that the data collected by an investigator in a study under his personal direction are primarily his. They must be available to him for analysis and reporting. The National Heart, Lung, and Blood Institute authorities took the view that the data were theirs, and were not to be released to anyone. Fortunately, we arrived at reasonably amicable arrangements whereby earlier data were made available to me. The lesson I learned was that under no circumstances should any scientific investigator allow his work to be controlled by others who act not strictly as co-investigators but as analysts of the findings of the research.

This is an understandable view. Perhaps a more appropriate view today would be that, after initial publications and major contributions are made, the principal investigator would then best encourage, consult, supervise, and share with others the exploitation of data obtained collaboratively.

The book contains many other pithy statements of the author's views, based on 30 years of experience. All of Framingham can be found here. The saltily seasoned judgment of the original and senior Framingham investigator is laudable.

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Bacterial Cell Surfaces

Microbial Cell Walls and Membranes. H. J. ROGERS, H. R. PERKINS, and J. B. WARD. Chapman and Hall, London, 1980 (U.S. distributor, Methuen, New York). x. 564 pp., illus. \$75.

This book comes at an appropriate time, for different disciplinary approaches are now converging on the study of the microbial cell wall. The book is a sequel to the highly successful *Cell Walls and Membranes* by Rogers and Perkins. A comparison of that book with the present volume reveals the many advances that have occurred over the past decade.

These authors together with Ward have completely rewritten their book. The new volume emphasizes the ultrastructure of bacterial envelopes, membrane composition and function, the structure and biosynthesis of peptidoglycan, additional polymers of the wall, autolysins, and the cell wall in growth and division. The mechanisms of antibiotics that inhibit the assembly of the wall receive major emphasis. In addition, the structure and biosynthesis of yeast and fungal walls are described.

The majority of the chapters give an intensive, thorough review of their topics. The mechanism of penicillin action is described with an in-depth, objective analysis. This topic, the biosynthesis of peptidoglycan, other antibiotics affecting bacterial wall synthesis, and the biosynthesis of teichoic acids receive extensive treatment and provide some of the highlights of the book.

The authors have omitted a number of topics that might have contributed to the central focus of the book. For example, there is no description of the relationship of any of the surface appendages, such as pili and flagella, with the membrane and the wall. Wall polysaccharides in Gram-positive organisms are given only a cursory view. This is surprising in light of the current interest in such bacteria as *Streptococcus mutans*, one of the cariogenic organisms. In addition, the role of the envelope in chemotaxis and bacterial adherence is not discussed. In one or two chapters some of the more recent information has not been included. For example, the important contribution of Schwarz and his co-workers (1978) concerning the arrangement of glycan chains in the sacculus of *Escherichia coli* is not described in the chapter on the structure of peptidoglycan even though the chapter contains references from 1979.

Scientists in a number of disciplines, including pharmaceutical chemistry, will

be attracted to this book. With supplementation, it would make a useful textbook for an advanced course in bacterial cell surfaces.

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Regional Tectonics

Sedimentation in Oblique-Slip Mobile Zones. Papers from a symposium, Auckland, New Zealand, Jan. 1979. PETER F. BALLANCE and HAROLD G. READING, Eds. Blackwell Scientific, Oxford, 1980 (U.S. distributor, Halsted [Wiley], New York). vi, 266 pp., illus. Paper, \$37.50. International Association of Sedimentologists Special Publication No. 4.

Strike-slip tectonic regimes have received considerable attention during the past five years, as witness a number of significant conferences and volumes on the topic. This is largely because intra-continental transforms, in particular, are spectacularly developed systems, are susceptible to relatively easy study, and are increasingly recognized as important in the search for hydrocarbons.

Not surprisingly, because the stratigraphic record associated with an oblique-slip fault is only properly preserved in fault-offstepping pull-apart basins, such basins feature in several papers in this symposium volume. The volume contains some papers, particularly those of Bluck on the late Devonian of the Midland Valley of Scotland, Steel and Gloppen on the early Devonian of western Norway, and van der Lingen and Pettinga on the Makara Basin in New Zealand, that are valuable additions to the literature in providing definitive and well-interpreted data sets. A sequence of papers (Spörl, Lewis, van der Lingen and Pettinga, Prebble, Ballance, and Norris and Carter) on basins associated with the Alpine Fault System of New Zealand and its terminations gives an excellent insight into the Cenozoic evolution of the New Zealand plate boundary system, although greater emphasis on basins of the Marlborough area would have been more useful in a volume on oblique-slip zones. Papers by Heward and Reading on the Carboniferous of Cantabria and Robertson and Woodcock on Cretaceous-Paleogene sediments associated with the Antalya Complex in Turkey are fine but seem a little out of place in this volume in that neither makes a convincing case for