Medicine for the Explorer

Like so many offerings, **Exploration Medicine: Being a Practical Guide for Those Going on Expeditions** (Williams and Wilkins, Baltimore, 1965. 426 pp., $11), edited by O. G. Edholm and A. L. Bacharach, is an edited version of the proceedings of a symposium held at the Royal Army Medical College in 1962. Owing to skillful editing, the multiple authorship has not resulted in tiresome redundancy or in many instances of conflicting advice. In his introduction Sir Raymond Priestley, the president of the Royal Geographical Society, says—and I agree—that the book should be required reading for every member of every party proceeding from the "known" to the "unknown" or the "little known." The text progresses in a logical fashion from planning and the principles of preventive medicine to the care of the injured, the management of medical emergencies, and the problems of survival. The last half of the book deals with particular environments: hot and cold climates, high altitudes, and underseas. The tone of each section is authoritative and dogmatic, but not overly technical. Because most of the contributors are or have been members of the armed services, the advice offered reflects contemporary experience and research in military medicine.

The dominant themes are knowledge, training, observation of the rules, and preparedness. In spite of elegant plans and abundant technical resources, every expedition faces the risk that sickness or injury or other vicissitudes may force it to abandon every objective except that of survival. In such emergencies the essential component becomes the human element—the undeviating intention never to give up, and the conviction that every hazard and difficulty will be overcome. The explorer who has read this book and who has it with him when trouble occurs should be able to cope with most of the difficulties that may arise.

The arm-chair explorer who is not likely to join any expedition can read this text with pleasure and fascination. The detached, almost clinical, style arouses curiosity and evokes vivid images of adventure and hardship and courage.

G. V. LeRoy

Metropolitan Hospital, Detroit, Michigan

On the Discovery and Introduction of the Poliomyelitis Vaccines

The unique and somewhat spectacular introduction of poliomyelitis vaccines provides an excellent opportunity to study the social structure of contemporary American science. The concept of big science, the primary role of a private health agency, the extensive promotional campaigns, the search by the government for its proper relation to science, and the creation of a popular hero are all important aspects of any study. Unfortunately, they are poorly treated in **Breakthrough: The Saga of Jonas Salk** (Trident Press, New York, 1966. 445 pp., $5.95), by Richard Carter.

Focusing on Salk, Carter narrates the development of polio vaccines. He recounts Salk's entrance into the field of polio research, his immunological studies, the development of a vaccine, the Francis field experiment, the Cutter vaccine problems, and the subsequent introduction of a live vaccine. However, Carter raises Salk to a level somewhere between hero and demi-god and thus provides little critical evaluation of the man or his work. In this attempt to glorify Salk, any truths that are present are invalidated by Carter's excesses. Much of this book would probably embarrass Salk himself. This is unfortunate, because the picture of Salk that emerges, in spite of Carter, is that of a highly competent and assertive scientist who, owing to circumstances somewhat beyond his control, became a popular hero and lost standing in the scientific community.

Running throughout is the theme that Salk fought the scientific "myth" which stated that dead virus vaccines could not and would not work. Carter concludes that the use of a live vaccine has been a cruel and dangerous hoax perpetrated on the American public for reasons of personal ambition and political expediency. It is true that the opposition to Salk's vaccine was made with greater vigor than probably purely scientific interests necessitated, but the fact remains that most virologists and immunologists believe that live virus vaccines of all types give a longer lasting immunity than comparable dead vaccines. Although much of what he says is true, Carter has so stacked his argument that it loses its credibility.

This book is directed toward a lay audience and seeks to prove a point rather than create understanding of contemporary science. Its one-sided presentation probably has done more harm than good to Salk, because it continues the image of Salk as public hero but does nothing to aid Salk's standing within the scientific community.

TIMOTHY O. LIPMAN

College of Physicians and Surgeons, Columbia University

Urban Planning

These books are useful additions to the growing literature on urbanism. Both are luxuriously but purposefully illustrated. Paul D. Spreiregen's **Urban Design** (McGraw-Hill, New York, 1965. 255 pp., $12.50) consists of an amplification of 12 articles originally published in the *Journal of the American Institute of Architects*. The book is addressed to architects, but it is a first-rate guide for all who want an insight into that profession's concepts of urban design. It offers a vision of what our cities could be to all who despair of the atrocities committed in the name of urban progress. In language and in a cascade of sketches, Spreiregen emphasizes that mass society does not demand a chaotic environment.

Percy Johnson-Marshall's **Rebuilding Cities** (Aldine, Chicago, 1966. 398 pp., $15) is a celebration of Spreiregen's argument. Professor of Urban Design and Regional Planning at the University of Edinburgh and formerly group planning officer of the London County Council, Johnson-Marshall brings a practical intelligence gained in the post-war reconstruction of London and Coventry to bear on the problems of reconstructing cities on a more humane scale. At first glance, Johnson-Marshall's case studies of the rebuilding of London, Coventry, and Rotterdam seem to stress the efficacy of heavy bombing in urban improvement. A closer look, however, makes clear that the war's devastation only provided an opportunity—an opportunity that can be replicated in urban renewal areas and in the development of new suburbs and communities. The important ingredi-