The answers, as one would expect, vary a good deal from case to case, but the essential need for models of this sort to bridge the gap between purely in-vitro studies and application in man is convincingly demonstrated.

H. P. Lambert

The epidemiology of human mycotic disease

As Dr L. Ajello emphasises, on p. 290 of this book, the true incidence of mycotic disease and its socioeconomic impact are still unknown. Fungal diseases, particularly the cutaneous mycoses, are common and constitute a real public health hazard. The subcutaneous and deep-seated (systemic) mycoses, though less frequently encountered in Western countries, exact a considerable toll of lives and pose practical and fundamental problems for physician and pathologist alike.

The Editor has done a service to medicine by compiling the major epidemiological features of the mycoses of man in a single, readable and adequately referenced volume. There are few texts that deal generally with the mycoses, and few, indeed, that can serve pathologists both as a reference source and as refresher material. This book should prove useful to the tyro, no less than to the expert, and can be recommended to both.

Rosalinde Hurley

Cell membrane receptors for viruses, antigens and antibodies, polypeptide hormones, and small molecules

Published reports of meetings are generally either out of date by the time they appear on the market, or printed by cheap and rapid processes in such a manner that they come to resemble a PhD thesis or a florist's guide rather than a scientific tome. The Ninth Miles International Symposium on cell-membrane receptors is neither. Although the date of the symposium is carefully withheld from the reader, the number of references to papers published in 1975, and some even in 1976, testify to a rapid and efficient editorial process. Equally commendable are the layout and production of the book. Clear tables and figures, including some excellent electron micrographs, accompany each chapter. The latter word is used deliberately, for that is what the main presentations of the symposium have become: a clear summary of the current status of the field for expert and general reader alike, followed by a well-balanced account of the most recent results, fully but not inordinately referenced. A refreshing change from the type of chapter so often found in Annual Reviews.

The book is divided into four main sections. The first, on polypeptide-hormone receptors, covers recent work on the binding of insulin, growth hormone, prolactin, luteinising hormone and chorionic gonadotrophin. Not only is the isolation and function of the receptors described but also—exemplified by an interesting chapter on insulin receptors in disease by C. R. Kahn—their physiological significance.

The second section, on virus receptors, deals with picornaviruses, adenoviruses, paramyxoviruses, RNA tumour-viruses and poxviruses. Cunningly inserted is a short summary on the "glycophorin" of red cells, by V. T. Marchesi, on the grounds that it is, among other things, the receptor for influenza virus.

The third section describes the receptors on B and T lymphocytes, the consequences of IgE binding and the rather complex macrophage-lymphocyte system. One wishes that this part had been a little longer.

The final section is on receptors for small molecules. It ranges from the acetylcholine
receptor and the β-adrenergic receptors, and their relation to adenylyl cyclase, through opiate and prostaglandin receptors, to the inhibition of adenylyl cyclase in Escherichia coli by glucose. Interestingly though the latter effect is in relation to catabolite regulation in microbes, its relevance to the adenylyl cyclase system of animals is questionable.

Throughout one is struck by the careful balance achieved in each section, which reflects as much credit on the Chairman of the Program Committee (Purnell W. Choppin), as on the two editors concerned with the production of the book. It is becoming increasingly apparent that no biochemist, whatever his field, can afford to ignore the subject of membranes. This account of the most important components of surface membranes—the cellular receptors—will be appreciated by a wide audience. The financial contribution of Miles Laboratories towards the symposium was worth while and timely. Perhaps they might be encouraged to extend their patronage of subsequent symposia to underwriting part of the production costs. In that case, the scientific community at large will benefit as much from their generosity as the participants of the symposium.

C. A. Pasternak

Acute diarrhoea in childhood

The recent explosion of knowledge of infantile gastro-enteritis has several sources, notably in the pathophysiology of cholera, in the aetiology of diarrhoea of domestic animals, in viral causes of diarrhoea and in mucosal defence-mechanisms. The Ciba Foundation rightly judged the time ripe for one of its famous symposia, held in London in October 1975 and now published as a book full of good things. The largest emphasis is on cholera and ion transport (four papers) and on viral gastro-enteritis (five papers). Many other aspects are discussed, and the proceedings would almost serve as a general account of modern views on gastro-enteritis but for one curious omission; although much mention is made of Escherichia coli infection there is no specific discussion of the significance of enterotoxin production by E. coli in human diarrhoeal disease. The individual papers are nearly all excellent, authoritative and up to date, and the discussions largely avoid the embarrassing banality which lively encounters at a meeting so often assume in cold print. Moreover, the editors avoid a common annoyance of printed discussions by including references to the discussion points as well as the main texts. It may be invidious to pick out one paper from so many good ones, but the closing contribution from Jon Rohde, called "Taking science where the diarrhoea is", does deserve special mention. While acknowledging the major success by which fundamental transport studies led to the use of oral glucose-electrolyte solution in the field, he shows how many gaps there are between ideas and their application. A broad ecological and sociological view is essential if research in diarrhoeal disease is to lead to improved child health in the poor countries of the world.

H. P. Lambert

The role of culture collections in the era of molecular biology

Despite its rather misleading title, this slim volume is not a textbook but thirteen contributions to a souvenir volume to celebrate the 50th Anniversary of the American Type Culture Collection (ATCC) held in September 1975. They are a stimulating and speculative set of essays; some deal directly with culture collections and others more remotely.

An entertaining foreword by S. T. Cowan is followed by a brief account of the history of the ATCC by its Director, Richard Donovick. C. Lamanna stresses the museum aspect