

PREFACE

Although our laboratories have always been separated by thousands of miles, the two of us have communicated, collaborated, and competed with one another for about 30 years. The climate of inquiry at the time we started our research was such that we viewed ourselves as mycobacteriologists who happened to conduct studies on taxonomy, physiology, laboratory diagnosis, biochemistry, and immunology, rather than as taxonomists, physiologists, etc., who happened to study mycobacteria. This attitude clearly influenced the structure and function of these volumes. Thus, as we tried to decide which aspects of the mycobacteria to emphasize after we were invited to undertake this project, we made the megalomaniacal decision to emphasize *all* aspects of mycobacteriology.

In our attempts to assess the potential audience for such a book, we were impressed by the range of disciplines that are impacted by the field. In addition to practitioners, teachers, and students of medical microbiology, we expect this book to be useful to practitioners and investigators in the following areas:

Human medicine (infectious diseases, oncology, and tropical medicine); public health; veterinary medicine (pets, zoos, agriculture, and fisheries); medical industries (drugs, diagnostic reagents, serologic products); immunology (adjuvants, mechanisms of cell mediated immunity, cancer); petroleum and lipid chemistry; soil and water microbiology. Although we are advocates of polythetic taxonomy, we overcame our innate antipathy to dichotomous keys and used the key approach to organize a book that was intended to embrace the mycobacterial universe. The first division of the subject was into two volumes, one embracing the intrinsic properties of the bacteria themselves, the other encompassing the interactions of the bacilli with their hosts and natural environments. Further subdivision of the two volumes into major categories of information, and fairly sharply circumscribed subjects within each category, led to an outline that defined more than 50 chapters. It has been our good fortune over the years to meet and know most of the leading mycobacteriologists in the world, and this made it easier to select and get commitments from experts in each of the topics addressed in these chapters. It was our intent to invite as authors those scientists with a history of productive investigation in the chapter areas assigned to them and, thereby, to minimize their need to review subjects in which they had not been actively involved. We believe we have succeeded in this regard.

One price to be paid for a commitment to encyclopedic coverage is timeliness. Because some authors had other obligations that interfered with their ability to meet manuscript deadlines, other authors, more prompt with their submissions, found their manuscripts slipping out of date. New deadlines were later assigned to enable the early birds to update their chapters. We believe we have achieved a reasonable compromise between timeliness and depth and breadth of coverage. The purpose of these volumes, then, is to provide a very comprehensive baseline of information for teachers, students, and investigators in all fields upon which the mycobacteria impinge. This, in turn, should provide useful insights into where to begin to a search

in the current literature for the most recent information. Those who wish to pursue a given topic in greater detail may scan the bibliographies of appropriate chapters to obtain a list of journals and years in which to begin their prospective reviews.

Clearly, the individual contributors could not be expected to agree totally with the limits set by us on the topics for each chapter. Some overlap was inevitable. We did not attempt to edit out these occasional redundancies of coverage, since they might be expected to yield useful perspectives derived from different points of view.

We want to emphasize that we tried to select as authors investigators who were still fully engaged in pursuit of their subjects. After a perusal of the bibliographies in these volumes, the reader may quickly identify seminal contributions from several investigators whom we chose not to impose upon subsequent to their formal retirements, but upon whose fundamental contributions much of the current work has been built. Among these major forces in the field of mycobacteriology, we pay tribute to John Hanks, Gertrud Meissner, Gardner Middlebrook, Noel Rist, Ernest H. Runyon, and Frank G. Winder.

And finally, we want to apologize publicly and ruefully to Beverly Kubica and Esther Wayne for all of those lost weekends when nurturing this book interfered unreasonably with nurturing our families. Now that it's over, we hope to renew our acquaintances!

George P. Kubica
Lawrence G. Wayne