PREFACE

The Scientific Working Group on Chemotherapy of Leprosy (THELEP), a component of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR) has, since 1976, been promoting research on several aspects of chemotherapy of leprosy, including better ways to evaluate antileprosy treatment through experimental chemotherapy. In addition, TDR has a major interest in strengthening the research capability of developing countries in this and other areas. As a result of these interests, a Workshop on Experimental Chemotherapy of Leprosy, co-sponsored by TDR and the Sasakawa Memorial Health Foundation (SMHF), was held in Osaka, Japan, from 11 to 20 November 1986. This Supplement of the International Journal of Leprosy carries the papers presented at that Workshop.

Until the 1960s, leprosy research greatly lagged behind all other research, mainly as a result of the inability to either cultivate *M. leprae in vitro* or to reproduce the infection in animal models. The first major breakthrough in this direction came in 1960 through the monumental work of Dr Charles C. Shepard when he established the mouse foot pad model. Although this model allows only limited multiplication of *M. leprae,* it has, through the years, remained the cornerstone of experimental chemotherapy research. Without this important development, progress in leprosy research would not have been possible over the past two and a half decades in such areas as screening of new drugs (including precise measurement of their antibacterial activity), monitoring of bacterial killing in patients under treatment, testing for drug resistance, testing for efficacy of candidate vaccines and others. The mouse foot pad technique was particularly valuable in mapping the problem of dapsone-resistance in different parts of the world and, as a result of this, recommendations on how to overcome the problem were made in 1981 by the WHO Study Group on Chemotherapy of Leprosy for Control Programmes on multidrug therapy (MDT). Based on these recommendations, the implementation of MDT as a part of leprosy control became possible and so far over one million leprosy patients have benefited from such improved treatment.

The establishment and application of the mouse foot pad technique was soon followed by other more sensitive and somewhat complex models. These involve the use of the thymectomized-irradiated mouse, the neonatally thymectomized rat, the nude mouse and the nude rat. In spite of their complexity, these later models play an important role in the better understanding of chemotherapy of leprosy. Leprosy workers all over the world look forward to even better and less complex models that will enable leprosy and its treatment to be understood better.

The publication of this supplement was very generously supported by the Sasakawa Memorial Health Foundation.

Dr S. K. Noordeen
Chief Medical Officer
Leprosy Unit
World Health Organization