S190 Workshop Proceedings

CLOSING SESSION: RECOMMENDATIONS CHAIRPERSON: PROFESSOR BAOHONG JI

Recommendations

New tools are required to accelerate the elimination of leprosy, and to enable prevention and improved treatment of disabilities. Therefore, biomedical and operational research must remain important activities in the future. The important topics in biomedical research are listed below (not in order of priority).

- An effective chemoprophylaxis may be useful in individuals at high risk of leprosy, and effective immunoprophylaxis may represent a means of eliminating leprosy from residual areas of high endemicity. The cost-effectiveness of the prophylactic measures should be studied.
- New drug regimens, employing new, more rapidly bactericidal drugs, should be developed in order to simplify and shorten multi-drug therapy, without compromising efficacy, acceptability and cost-effectiveness.
- Rapid methods for detection of drug resistance, especially resistance to rifampicin, should be further validated and applied.
- Concerted efforts should be made to identify relapses after multi-drug therapy.
- Tools are required for detection of infection by *Mycobacterium leprae* in the community, and for early diagnosis of the disease, particularly of multibacillary leprosy.
- An improved understanding of the mechanisms of nerve damage and reactions, so as to enable prediction and prevention of these complications, is essential.
- Improved treatment of leprosy reactions and of impairment of nerve function, to overcome the limitations of treatment by steroids and thalidomide, is needed.
- An improved understanding of the immune response to the organism, and identification of correlates of protection are required.
- The opportunities provided by sequencing the genome of *M. leprae*, which has just been completed, should be exploited to identify new drug targets, immunologically important molecules, and base sequences useful for strain typing.
- The rapid advances just announced in sequencing the human genome should be used to study host-parasite interaction and the pathogenesis of leprosy at the molecular level.
- Continued supply of the special reagents and materials required for leprosy research should be ensured.
- It is crucial that researchers and those who work in the area of leprosy control coordinate their work, to ensure that research efforts are concentrated on the development of those tools most needed in the field, and that operational research is carried out to promote application of the tools. Coordination could best be accomplished by regular meetings among the involved scientists, together with representatives of leprosy control programmes.

Closing

Friends and colleagues

It is a privilege and an honour to have been given the duty of saying the last words before closing this important Workshop on leprosy research at the turn of the century and millennium. In addition, the choice of the words is easy, for the following reasons.

I believe that all of you, like me, wish to thank the Association Française Raoul Follereau for having hosted the Workshop, and for having provided all possible help and support. I wish also to thank Mrs Jeanne-Marie de Follin and Mrs Isabelle Vernhes, who helped us so much during the last three days. And I should not forget the cook, who did her best so that you would enjoy 'the cuisine Française'.

Turning to scientific matters, I wish to congratulate Professor Ji Baohong for having been at the heart of the organization of the Workshop, and for having devoted so much of his time, energy and anxiety for its success. Without his stamina, the meeting would not have been a success. All of the other members of the organizing committee—Dr Jo Colston, Dr Cairns Smith and Dr Yo Yuasa—also deserve our thanks. They succeeded in attracting the prominent scientists and in having them deliver the most recent information.

I am both unwilling and unable to assess the scientific excellence of the Workshop, but I am convinced that, like me, you consider it to have been a first-rate meeting that brought scientific information of the highest quality, and resulted in clear, rational, and concrete recommendations.

The remaining topic is that of future leprosy research activities. I think that, hand in hand with the World Health Organization and other national, e.g. the US National Institute of Allergy and Infectious Diseases, and international organizations, the same organizing committee should prepare the next workshop on leprosy research in 2 years' time. I know from the president of the Association Follereau that we would again be welcome in this Follereau setting, and I suggest that the programme of the next meeting be a little more oriented to operational research. The topics to be covered might include:

- 1. How to prevent people from becoming infected with *Mycobacterium leprae* and developing leprosy?
- 2. How to suspect, investigate, and identify those infected with *M. leprae*, and those who have leprosy?
- 3. How to treat the patients in the most efficient way?
- 4. How to cure the patients and verify that cure has been obtained?

To close, I wish again to thank the organizers and the scientists who agreed to share their knowledge, and to wish everyone a good way back home and 'au revoir'.

Professor Jacques H. Grosset