INTERNATIONAL JOURNAL OF LEPROSY

Volume 56, Number 4
Printed in the U.S.A.

NEWS and NOTES

This department furnishes information concerning institutions, organizations, and individuals engaged in work on leprosy and other mycobacterial diseases, and makes note of scientific meetings and other matters of interest.

Hermann Kober
1988 Damien-Dutton Award Winner

The Damien-Dutton Award winner for 1988 is Hermann Kober of the Federal Republic of Germany. The Award was presented to Mr. Kober by Dr. W. Felton Ross, recipient of the 1987 Award, at the XIII International Leprosy Congress held in September at The Hague, The Netherlands.

Having been a journalist by profession, Mr. Kober was one of the co-founders of the German Leprosy Relief Association (GLRA) in 1957, and has been a member of the Board of GLRA ever since—as Head of the Public Relations Department, Treasurer, and Executive Director. He wrote a lot about leprosy and his knowledge of the disease and its social consequences has come from his many trips to Africa, Asia, and Latin America.

Under his guidance, the GLRA has engaged in leprosy research since the late 1960s. He formulated the motto: "Help for leprosy patients by leprosy research," and it was the GLRA in close cooperation with the Research Institute of Borstel which pioneered the implementation of multidrug therapy in leprosy.

In the 1960s when the GLRA started to spread its activities all over the world and its Executive Director realized that institutions in other countries were working in

the field of leprosy as well, it was Hermann Kober who was one of the initiators of the European Federation of Anti-Leprosy Associations (ELEP)—a body which started to coordinate the antileprosy activities of all its member-associations. In the late 1970s, ELEP also accepted membership of one Japanese and two American leprosy organizations, and thus became an international institution—International Federation of Anti-Leprosy Associations (ILEP).

Within ILEP Mr. Kober has been giving particular attention to the problem of training in leprosy, and he presides over a special working group which deals with all matters related to training in leprosy. Acting as Vice-President since 1986, Mr. Kober became President of ILEP in June 1988.

We extend our congratulations to Mr. Kober on this well-deserved honor.—RCH

Previous Recipients of the Damien-Dutton Award

1953 Stanley Stein, U.S.A.
1954 Rev. Joseph Sweeney, KOREA
1955 Sister Marie Suzanne, FRANCE
1956 Perry Burgess, U.S.A.
1957 John Farrow, U.S.A.
1958 Sister Hilary Ross, U.S.A.
1959 Dr. H. Windsor Wade, PHILIPPINES
1960 Mgr. Louis Joseph Mendelis, U.S.A.
1961 Dr. Kensuke Mitsuda, JAPAN
1962 Rev. Pierre de Orgeval, FRANCE
1963 Eunice Weaver, BRAZIL
1964 Dr. Robert G. Cochrane, U.K.
1965 John F. Kennedy, U.S.A. (Posthumous)
1966 Peace Corps, U.S.A.
1967 Dr. Howard A. Rusk, U.S.A.
1968 Dr. Franz Hemerijckx, BELGIUM
1969 Dr. Victor George Heiser, U.S.A.
1970 Dr. Dharmendra, INDIA
1971 Dr. Chapman H. Binford, U.S.A.
1972 Dr. Patricia Smith, VIETNAM
1973 Dr. Jacinto Convit, VENEZUELA
1974 Dr. José N. Rodriguez, PHILIPPINES
1975 Dr. Oliver Hasselblad, U.S.A.
1976 Dr. Yoshio Yoshie, JAPAN
1977 Drs. Paul and Margaret Brand, U.S.A.
1978 Dr. Fernando Latapi, MEXICO
1979 Dr. Stanley G. Browne, U.K.
1980 Robert Watelet, ZAIRE
1981 American Leprosy Missions, U.S.A.
1982 Dr. Ma Haide, PEOPLE'S REPUBLIC OF CHINA
1983 Murlidhar Devidas Amte (Baba Amte), INDIA
1984 Mother Teresa, INDIA
1985 Dr. John H. Hanks, U.S.A.
1986 Samuel J. Butcher, U.S.A.
1987 Dr. W. Felton Ross, U.S.A.

Brazil. *I Congress of the Association of Former Students of Professor Azulay.* On 24 and 25 July 1987, the I Congress of the Association of Former Students of Professor Azulay was held. There were 4 symposia and 50 communication sessions, and the 425 participating dermatologists heard two presentations by Prof. Jorge Abulafia of Argentina.

China. *Manual of multidrug therapy published.* For popularizing the implementation of multidrug therapy (MDT) regimens recommended by the World Health Organization for both multibacillary and paucibacillary leprosy patients in the entire country, a manual of the MDT of leprosy was published by the Ministry of Public Health. Its contents include: education, training, survey, examination, diagnosis, classification, skin smear and biopsy, regimens of treatment, case-holding, lepra reaction and management, relapse, surveillance and prevention of deformities of leprosy. Dr. Ma Haide is Editor-in-Chief of the manual and Drs. Ye Ganyun and Li Huangying, Associate Editors-in-Chief.—Ye Ganyun

Scientific/educational film "Leprosy" produced in Shanghai. For the purpose of dissemination of the scientific knowledge of leprosy to the public, in order to overcome the social ostracism toward leprosy patients, the Shanghai Scientific Educational Film Studio in cooperation with the Institute of Dermatology, Chinese Academy of Medical Sciences, produced and issued a

film entitled "Leprosy." The film is 30 minutes long and deals with the history, methods of transmission, symptoms and signs, diagnosis, multidrug therapy regimens, rehabilitation and control programs of leprosy. Drs. Ma Haide, Ye Ganyun, and Li Jiageng were scientific advisors on the film.—Ye Ganyun

Germany. *DM 30.7 million in donations for the GLRA.* The German Leprosy Relief Association (GLRA) achieved a result of around DM 30.7 million in donations in 1987. This sum again made it possible for the relief association which was founded in 1957 to meet its responsibilities to people suffering from leprosy in Africa, Asia, and Latin America.

In 1987 the GLRA supported 270 centers worldwide in 44 countries as well as 15 leprosy research projects. The Bundesministerium für wirtschaftliche Zusammenarbeit (BMZ) contributed DM 1.25 million in 1987 to specific individual measures. The European Community (EEC) has supported the work of the GLRA from 1982 until today with a total of DM 388,000. With the result for 1987, the GLRA registered a total income from donations since its foundation amounting to DM 498.3 million.

More than 1 million leprosy sufferers received care, treatment, and social aid during this period. Around 250 voluntary workers overseas, coming from the most varied medical and social professions, have so far been directly active in the projects supported by the GLRA. At present, there are around 45 workers with temporary contracts working abroad.—(GLRA news release)

Singapore. *2nd Asian Dermatological Congress.* The 2nd Asian Dermatological Congress will be held in Singapore on 23–26 November 1989. The Congress will serve as a forum for scientists, research workers, and clinicians involved or interested in the latest advances in dermatology. Toward this end, there will be a wide variety of plenary lectures and symposia as well as pre- and post-Congress workshops and free communication sessions. For details contact: Dr. Giam Yoke Chin, Hon. Secretary, Organizing Committee, % National Skin Center, 1 Mandalay Road, Singapore 1130.

Switzerland. *Basic vaccinology.* Vaccination is the most efficient and cost-effective public health measure for the control of infectious diseases. Unfortunately, however, there are many infectious diseases for which vaccines are not yet available or are not satisfactory. Several WHO programs are concentrating their efforts toward controling some of these diseases, and each of these programs has a major commitment to vaccine development.

Although substantial progress has already been made in identifying molecules from various microorganisms that could function as targets for protective immune responses, purified or subunit antigens are frequently not able to induce long-term protective immune responses in genetically heterogeneous populations. The WHO Basic Vaccinology program has therefore been set up to support research aimed at optimizing antigen presentation and delivery to the host and in targeting the immune response that can be elicited by candidate vaccines.

In order to clarify the priorities for such support, a meeting on basic vaccinology was held at WHO, Geneva, 8–11 December 1987. Five research areas were identified that would be relevant to the objectives of the program and below are outlined, in order of priority, the major recommendations made by the participants.

Recommendations

1. Comparative study of the use of different vaccine delivery vehicles and adjuvants and their effects on relevant immune responses toward defined vaccine antigens

The objective of such investigations is to determine whether an existing multiple-injection vaccine, e.g., diphtheria toxoid or hepatitis virus B surface antigen, can be made as effective using a single-injection approach. Currently, a number of vaccines in use require repeated administration in order to induce protective immunity, a difficulty that presents both economic and delivery problems. Alteration of vaccine delivery in such a way that a single-injection protocol would be effective is therefore desirable. As an initial step, a well-defined control study to compare alternative delivery systems and adjuvants as a means of inducing prolonged immunity to well-char-

acterized vaccine antigens in an animal model should be commissioned and carefully guided and monitored by WHO and the Steering Committee on Basic Vaccinology.

2. Improvement of systemic and local immunity to orally administered vaccines

Oral administration of vaccines has distinct advantages, not least of which is the ease and acceptance of this mode of delivery. Critical to the feasibility of using oral vaccines is the use of appropriate formulations that induce systemic and mucosal immunity. The basis whereby an orally administered vaccine initiates local immunity or permits the induction of systemic immunity is still, however, inadequately understood. Also, the biochemistry of the interaction between M cells and bacteria requires to be studied, as does the feasibility of using attenuated bacteria or certain of their cell-surface components, such as pili, to enhance antigen-presenting cells or M-cell function.

3. T-cell epitopes and cytotoxic lymphocyte induction for use in subunit vaccines

In this instance, the goals are to define the rules for selecting functional specific epitopes and the generation of cytotoxic T lymphocytes (CTL) by exogenous, noninfectious antigens.

The generation of a subunit vaccine in humans requires that both B cells and T helper (Th) lymphocytes recognize the antigen. Since MHC-restricted activation of Th cells requires the association between peptide antigenic fragments and class II molecules, the capacity of a subunit vaccine to induce T-cell-dependent antibody responses is limited by its ability to bind to class II molecules. Furthermore, since class II molecules are highly polymorphic, epitopes that can be recognized by a spectrum of haplotypes need to be identified if they are to be immunogenic in a genetically heterogeneous population.

The induction of CTL may be of value in generating immunity in immunocompromised hosts or to certain infectious agents not available or susceptible to neutralization by antibodies. In such cases, efforts should be made to define the optimum conditions for priming CTL *in vivo* with noninfectious material, including defined peptide epitopes and complete proteins.

4. Defining the rules for generating B- and T-cell memory to vaccines

A basic problem is how to induce B- and T-cell memory and quantitate the response at a population and/or single-cell level.

The capacity of a host to respond in an anamnestic manner to an infectious organism following vaccination depends on immunological memory, a long-recognized phenomenon whose cellular and molecular bases require to be better understood. The means by which to obtain and—more importantly—to sustain cellular memory are therefore empirical at best. Studies aimed at comprehending and quantitating immunological memory should therefore be carried out since the results could lead to the design of vaccines whose formulation and administration could be tailored to achieve a predictable memory response.

5. Influencing and/or selecting the effector cell functions generated by vaccines

Since antibody selection occurs frequently during natural infection, it should be possible to identify the mechanism that governs such selection by vaccines. Significant advances have been made in understanding the control and regulation of the immune response of Th cells; in particular, the induction of certain antibody isotypes has been linked to the activity of different T-cell subsets and the various lymphokines they secrete. It may therefore be possible to design vaccines and/or vaccination procedures that will specifically select and enhance the effector immune responses that are instrumental in protection, while avoiding those responses that are immunopathological. However, in order to achieve this goal, the rules that govern the differential stimulation of T-cell subsets and the differential production of lymphokines have to be determined. Among possible approaches to this problem are studies to: determine whether or not the differential induction of T-cell subsets requires different antigen-presenting cell pathways; clarify whether different epitopes or macromolecular forms of vaccines preferentially stimulate one T-cell subset; and investigate whether different

T-cell subsets are preferentially activated at different anatomical sites.

Requests for single copies of the document, which includes a detailed summary of the proposals made at the meeting, should be addressed to: Dr. J. Louis, Microbiology and Immunology Support Services, World Health Organization, 1211 Geneva 27, Switzerland.—(Based on: *Report of a meeting on basic vaccinology, Geneva, 8–11 December 1987*. Unpublished document MIM/BV87.2). Bull. WHO **66** (1988) 519–520.

Field research in leprosy. The TDR Components on the Chemotherapy (THELEP) and Immunology (IMMLEP) of Leprosy have established a new joint subcommittee on field research in leprosy. The objective of the first meeting, held in Geneva in April 1988, was to promote leprosy-related field research in the following areas: field-testing of new tools—drug regimens, vaccines and diagnostic assays—for leprosy control and development and evaluation of the delivery of leprosy control measures in endemic countries.

The subcommittee's role will be to identify and promote promising areas for field research in leprosy and to support areas of research which need to be strengthened, including the role of social and economic factors in leprosy, studies of effectiveness (including cost-effectiveness) of current control programs, and the management and, more importantly, prevention of disabilities.

The subcommittee identified specific field research topics for the short-to-medium term, which fell under five broad headings: methodological research concerned with diagnosis and related problems; etiological studies on the epidemiology and natural history of leprosy; studies on secondary prevention and the efficacy of such treatment(s); operational studies aimed at measuring and improving the effectiveness of leprosy control programs.

Scientists wishing further information, including indications of possible study methods and protocols, and/or research proposal forms should write, as appropriate, to Dr. Ji Baohong, Secretary, THELEP Steering Committee, or to Dr. H. D. Engers, Secretary, IMMLEP Steering Committee, at the following address: World Health Organization, 1211 Geneva 27, Switzerland.—H. D. Engers and Ji Baohong in *TDR news*

Interrelations of tropical disease and HIV infection; TDR and GPA call for research proposals. Infections with human immunodeficiency viruses (HIV) are now worldwide. The impact of these infections is expected to be great, especially in areas where the prevalence of HIV infection has already become very high. In some areas of the tropics affected, in particular in some countries in Africa and Latin America, people's health is already compromised by the enormous load of tropical endemic disease and malnutrition. Although little is known about the interactions of HIV infections with other diseases in the tropics, any interactions that do occur may substantially increase these burdens. Further, HIV infections may seriously interfere with current efforts at controlling these tropical diseases.

In order to stimulate research on these issues, an informal consultation, co-sponsored by the UNDP/WORLD BANK/WHO Special Programme for Research and Training in Tropical Diseases (TDR) and the WHO Global Programme on AIDS (GPA), was held at the Kenya Medical Research Institute (KEMRI) from 1 to 4 December 1987. Its objectives were to review present information about interactions of HIV and tropical diseases, to determine the major research issues concerning these interactions, to develop study design outlines to resolve these issues, and to disseminate the conclusions of the consultations in order to encourage the research.

Part I of this report summarizes the information presented at the consultation and outlines the main issues. Part II provides study design outlines for high-priority research on interactions between tropical diseases and HIV infections. This report is being widely circulated to potential investigators; TDR and GPA consider these studies to have high priority and funds will be allocated for research proposals directed toward these issues.

Research proposal forms may be obtained by writing to the World Health Organization, 1211 Geneva 27, Switzerland, addressing requests for proposal forms on HIV infection and malaria, schistosomiasis, filariasis, trypanosomiasis, leishmaniasis or

leprosy to Director, TDR, and on HIV infection and tuberculosis or other diseases to Director, GPA.—(Summary of report of an information consultation held at the Kenya Medical Research Institute 1–4 December 1987)

New postgraduate fellowships in epidemiology. TDR announces the introduction of a new category of research training grant to provide postgraduate on-site training in field research projects for suitably qualified health or health-related professionals from developing countries. Training will be geared to the development of advanced epidemiological skills needed for the design and conduct of clinical and community trials and other epidemiological investigations. Support for related disciplines—entomology, ecology, biostatistics and social sciences—will also be available. These grants, generally covering a 2- to 3-year period, will be awarded on a yearly basis, subject to satisfactory performance and availability of funds.

Elibigility: Candidates for these grants should have adequate post-graduate training in epidemiology or the related disciplines mentioned above. Candidates must also have a stable employment position in their own country, preferably within a health research or training institution or disease control program. Preference will be given to candidates who plan a career in epidemiological research in their home country.

How to apply: Interested scientists should write for the official application forms, which may be submitted throughout the year. Applicants may themselves suggest a suitable ongoing field research project for their training or they may ask TDR to help them identify an appropriate project. Grantees are expected not only to participate in the activities of the main project to which they are assigned but also during the first year of training, to formulate a research project of their own preferably linked to the main project. When circumstances dictate, TDR will consider support for operational expenses connected with the grantee's research activities.

All requests for further information and application forms should be addressed to: Dr. R. H. Morrow, Jr., Secretary, Scientific Working Group on Epidemiology, World Health Organization, 1211 Geneva 27, Switzerland.

Promotion of research on leprosy reactions and nerve damage. During the last decade, advances in research on the chemotherapy and immunology of leprosy have led to significant improvements in leprosy control tools, which, in some endemic areas, have dramatically changed the pattern of leprosy.

Little or no progress has been made, however, in research on leprosy reactions and nerve damage—two important areas of prevention and treatment. The involvement and later destruction of the peripheral nerves is a specific universal characteristic of leprosy, and the consequences, particularly deformities and disabilities, are of great significance both to the patient and to the community.

The onset of nerve damage in leprosy can be either rapid or insidious. However, recent information indicates that insidious "quiet nerve paralysis" (silent neuritis) is far more common than previously suspected.

Leprosy reactions, apart from producing considerable physical and mental discomfort, are a major cause of nerve damage and consequent disability. Leprosy reactions can sometimes occur even after the cessation of multidrug therapy, potentially undermining patient confidence in the efficacy of modern treatment. Furthermore, some of the advantages expected of fixed-duration multidrug therapy—diminished workload and lowered costs of leprosy control—may be offset by requirements for the treatment of leprosy reactions, which requires care that is often more demanding than chemotherapy itself.

The apparent lag in the development of new methods for the prevention and treatment of nerve damage and leprosy reactions is due largely to the fact that the pathogenesis of these processes is not fully understood. In addition, to date no suitable animal model has been developed for the study of nerve damage or leprosy reactions. Consequently, fundamental research is urgently needed to develop a better understanding of the mechanisms involved in both disease processes. Animal models should be established, and new methods of preventing and

controlling nerve damage and leprosy reactions, including systems for screening such methods, should be developed. These research activities represent a challenge to both clinicians and basic scientists.

The TDR Steering Committees on the Chemotherapy (THELEP) and the Immunology (IMMLEP) of Leprosy have singled out these activities in their strategic plans for future research. Interested scientists are invited to submit research proposals related to nerve damage and leprosy reactions. Specific research topics include: development of suitable animal models; elucidation of effector mechanisms in peripheral neuritis and leprosy reactions, including definition of the antigens involved and of the role lymphokines/cytokines play in the inflammatory process; development and/or identification of new drugs for better treatment of neuritis and leprosy reactions.—H. Engers and Ji Baohong in *TDR news*

U.S.A. *Slides and tapes on leprosy subjects available from American Leprosy Missions (ALM).* The 12 sets of slide/tape subjects presented in the training sessions at the XIII International Leprosy Congress at The Hague are currently available in English. Tapes and text scripts in French, Spanish, and Portuguese should be available in the future. The World Leprosy Rehabilitative and Engineering and Training Center (WLEREC) has agreed to make this material available (in English only) on video tapes in three formats appropriate for various parts of the world. The subjects and total cost, including postage, are shown in the table below.

Send orders for any of this material, specifying topic required, language, and quantity of items, and make check payable to: American Leprosy Missions, One Broadway, Elmwood Park, New Jersey 07407, U.S.A.

Item		Price/set	Price/unit (includes air mail)
A	Slides & script (English, French, Portuguese, or Spanish)	US $110	US $14
B	Slides, audiotape & script	$125	$15
C	Videotape/Betamax/NTSC	$30	English only
D	Videotape/VHS/NTSC	$30	
E	Videotape/VHS/PAL	$30	

No.	Topic	Author
1	Immunology of Leprosy	B. R. Bloom
2	Histopathology of Leprosy	C. K. Job
3	Diagnosis of Leprosy	R. E. Pfaltzgraff
4	Eye in Leprosy—I	V. C. Joffrion
5	Eye in Leprosy—II	V. C. Joffrion
6	Reactive Phenomena	L. J. Yoder
7	Nerve Damage in Leprosy	P. C. Brand
8	Management of Neuropathology	G. Warren
9	Chemotherapy of Leprosy	R. R. Jacobson
10	Health Education in Leprosy	P. J. Neville
11	Epidemiology and Control	M. F. Lechat
12	Information System	C. B. Misson

Dates for 1989 seminars at Carville. Dates for the major 1989 medical seminars to be held at the GWL Hansen's Disease Center, Carville, Louisiana, are:

Management of the Insensitive Foot
January 24–26
October 24–26

Hansen's Disease Seminar
February 14–15
May 23–24
November 14–15

Hansen's Disease of the Eye
March 13–17

Management of the Insensitive Hand
May 9–11

International Seminar on Hansen's Disease
(in cooperation with American Leprosy Missions)
April 9–15
Workshop on Supervision—April 17–21
and
September 10–16
Workshop on Training—September 18–22

Pathology Seminar
October 3–4

For details, contact: Director of Education and Training, GWL Hansen's Disease Center, Carville, Louisiana 70721, U.S.A.