

## 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.*

**Argentina.** *Details provided on HD activities.* Grupos de Investigación de la Enfermedad de Hansen (GRIHAN) is a voluntary agency in Argentina which strives to promote research on HD through multidisciplinary involvement of all scientific areas and also to improve the concepts and attitudes of the public at large towards this disease.

Among its many activities GRIHAN has 1) promoted experimental investigations using three species of autochthonous armadillos, 2) provided rehabilitation study grants for physical therapists, 3) instituted a literature prize for the best novel dealing with the subject of HD, and 4) participated in the annual "Semana de la Lepra," a week dedicated each spring to HD health education.

The members of the Directive Council of GRIHAN are: President, Luis M. Baliña; Vice-President, Dr. José E. Cardama; Secretary, Dr. Raul P. Valdez; Treasurer, Victor de Amorrortu; Members, Drs. Juan J. Avila, Juan C. Gatti, Claudio Charosky, and Horacio Costa Córdova. The address of the association is Servicio de Piel del Hospital Argerich, Av. Almirante Brown 240, 1155 Buenos Aires, Argentina.—(Adapted from materials provided by Dr. Luis M. Baliña)

*Tuberculosis conference announced.* The XXV World Conference of the International Union against Tuberculosis will take place in Buenos Aires at the San Martin Cultural Center in April 1982. The Conference will include themes of interest to thoracic physicians, clinicians, microbiologists, hygienists, epidemiologists, social workers, sociologists, and persons involved in administrative activities related to the problem of tuberculosis. The official languages of the Conference will be Spanish, English, and French with simultaneous

interpretation in all three languages during all Conference sessions. A social program, sight-seeing excursions, and exhibition space will all be provided.

Preliminary registration forms may be sent to: The Secretariat of the XXV World Conference of the IUAT, Av. Santa Fe 4292, 1425 Buenos Aires, Argentina. Additional conference details may be obtained from: Dr. Annik Rouillon, Executive Director, International Union against Tuberculosis, 3 rue Georges Ville, 75116 Paris, France.—(Adapted from materials provided by Dr. S. G. Browne)

**Belgium.** *Epidemiological data made available.* The Damien Foundation has published a limited number of copies of an atlas of leprosy information giving detailed data on the leprosy situation in 75 countries. This atlas has been assembled by Prof. M. F. Lechat, Mme. C. B. Mission, and Mlle. M. Cap and consists of the following sections: 1) a prevalence map by region showing the ratio of registered patients against the population of the region; 2) a map showing projects supported by ILEP members; 3) statistical data showing population by region, number of registered patients, prevalence of the disease, number of patients in ILEP-supported projects, and estimated numbers of persons with leprosy as well as the number of treated patients in selected countries.

The authors request that all parties able to provide additional information to update this atlas on an ongoing basis contact them.

Persons interested in this atlas should contact FOPERDA, rue Stévin 16, 1040 Bruxelles, Belgium.—(Adapted from information provided by Dr. M. F. Lechat)

**Ethiopia.** The Ministry of Health of the Ethiopian Government and the All Africa Leprosy and Rehabilitation Training Centre

(including the Armauer Hansen Research Institute) (ALERT) have concluded and signed a revised agreement for continuation of the project for the provision of training in all aspects of leprosy using the existing facilities of ALERT in Addis Ababa and environs. The following extracts from the agreement summarize major provisions of it:

#### Article I

##### Purpose:

In accordance with the terms of this agreement ALERT under the auspices of the Ministry shall continue the medical and administrative management in order to keep up the standard necessary for continuation of activities as an International Training Centre where men and women shall be trained in all aspects of leprosy with special emphasis on the training of qualified teachers and leaders in the fields of control, medical and surgical treatment, and physical and social rehabilitation of sufferers from leprosy, particularly as it applies to the African Continent.

#### Article III

##### Obligations of the Ministry:

The Ministry hereby undertakes to fulfill the following obligations:

1. To continue granting ALERT the privilege of utilizing free of charges, all buildings and equipment of the Addis Ababa Leprosy Hospital and the premises around it.

2. To grant ALERT the right to manage, direct and supervise the activities of ALERT in accordance with the Ethiopian Government rules and regulations.

#### Article IV

##### Obligations of ALERT:

ALERT hereby agrees to undertake the following obligations and commitments:

1. To continue an effective management and maintenance of ALERT as well as add to the Budget such additional funds as shall be required in the opinion of the Board of Directors to fulfill in the best way the objectives of the Project.

4. To continue to build up and maintain a leprosy service in a limited area, which shall demonstrate comprehensive medical

care and rehabilitation of leprosy patients as part of the National Leprosy Control Service which is linked with the general health services.

5. To organize conferences, training courses, seminars and in-service training programmes in collaboration with the Governments of the African countries and with the international and voluntary organizations.

6. To contribute through research to the knowledge of leprosy.

7. To encourage and assist Medical Faculties and other training institutions in Ethiopia and other African countries to accept responsibility for the training and research in the fields of leprosy, and to encourage and assist Ministries of Health in the Continent of Africa to develop such services in the fields of control, medical and surgical treatment, and rehabilitation of sufferers from leprosy.

8. To encourage and assist rehabilitation agencies in Ethiopia and other African countries to include sufferers from leprosy in such rehabilitation efforts that may be relevant and feasible.

#### Article V

5. All works and buildings, including any expansion of the existing facilities which may be made by ALERT, as well as equipment fixed therein, educational and medical equipment and materials forming a part of the completed project (excluding research equipment provided by the sponsors of the Armauer Hansen Research Institute which will remain the property of the Institute) shall become and remain the property of the Ethiopian Government, but shall remain exclusively at the disposal of ALERT during its existence in Ethiopia.

#### Article VI

##### Final dispositions:

1. This amended agreement shall come into effect from 11th December 1980 provided it has been signed by the two parties by that date, and shall replace the agreement signed by the two parties on November 5th 1974. The agreement shall remain effective for an indefinite duration (in perpetuity), provided however, that its terms and conditions may be modified or altered

upon the mutual consent of the two parties as of 11th December 1985. The agreement may be terminated by either party on due notice of withdrawal of not less than one year before the date of termination.—(Summarized from the revised agreement as provided by Mr. Bernt Johannessen)

*Additional details on immunology conference at AHRI provided.* The following information supplements the preliminary report on the Armauer Hansen Research Institute (AHRI) conference entitled "Immunological Aspects of Leprosy, Tuberculosis, and Leishmaniasis," held in Addis Ababa on 27–30 October 1980 and originally reported in *Int. J. Lepr.* **48** (1980) 447.

The conference was officially opened by Comrade Dr. Teferra Wonde, Minister of Health and member of the Central Committee of COPWE. In his opening statement, Dr. Teferra stressed the significance of the conference since it was dealing with major health problems of the developing world. The Minister of Health pointed out that in order to derive the best benefit from medical research, the aims and objectives of such an endeavor should be well defined. He explained that research should be priority-oriented, multi-disciplinary, and have maximal impact on health services. To this end Dr. Teferra stressed both the contributions of the Tropical Diseases Programme of the World Health Organization as well as of the Ethiopian government.

Professor Morten Harboe also spoke at the opening ceremony and traced the history of previous immunological conferences in Africa, and Dr. S. K. Noordeen of the Special Programme for Research and Training in Tropical Diseases of WHO discussed the possibility of increased participation by other African countries in these studies and activities.—(Adapted from *The Ethiopian Herald* 37 October 28, 1980, 1,8)

**Federal Republic of Germany.** *World Leprosy Day celebrated.* On the occasion of the 28th World Leprosy Day (25 January 1981), commemorated by about 150 nations on the last Sunday of January of each year, the members of the International Federation of Anti-Leprosy Associations appealed to the public to remember that there are still about

20 million people worldwide who are victims of leprosy.

World Leprosy Day, initiated in 1954 by Raoul Follereau, has always been an occasion for ILEP to appeal to the public for support. The 24 leprosy relief groups comprising the organization support approximately 800 leprosy projects and health programs in nearly 100 countries as well as leprosy research, health education, and medical training. For 1980, the total relief budgets of all ILEP members amounted to approximately US\$43 million.

In the Federal Republic of Germany, ILEP is represented by the German Leprosy Relief Association (GLRA), the Hartdegen Fund, and the Protestant Leprosy Relief Association Tübingen.—(Adapted from materials provided by the Deutsches Aussätzigen-Hilfswerk)

**France.** *Epidemiology meeting held.* The Sixth Scientific Meeting of the Association des Epidémiologistes de Langue Française (A.D.E.L.F.) took place at the Institut Pasteur in Paris on 24–25 November 1980. The general topic of the meeting was "Evaluation of Preventive Intervention in Public Health." Leprosy was chosen as a model of development and evaluation of preventive measures, and Dr. Hubert Sansarrić, Chief, Leprosy Unit, WHO, discussed the problems encountered in the design of vaccine trials as part of the development of a leprosy vaccine in the IMMLEP project of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases.—(Adapted from materials provided by Dr. M. F. Lechat)

**India.** *Neuritis workshop meets in Karigiri.* The Schieffelin Leprosy Research and Training Centre: Karigiri Neuritis Workshop took place on 12–14 March 1980. The principal objective was to prepare a protocol for trials (particularly multicenter trials) of the place of surgery in the treatment of leprosy neuritis with particular reference to defining standard criteria to assess the results of such studies.

Presentations of the pathology and mechanisms of nerve damage in leprosy, of the principles of sensory evaluation of nerve damage, and of possible symptoms to quan-

tify different parameters of nerve damage occupied the first part of the meeting. Then, after presentation of two draft protocols designed to assess the value of nerve surgery in the management of leprosy neuritis, the rest of the meeting consisted of workshop sessions.

After a period of initial discussion, it was clear that there was general agreement that surgery had a place in the overall management of truncal neuritis in leprosy. Neuritic pain was usually relieved, and nerve function was improved when both the case and the operation were carefully selected. The fact that some cases showed diminished function after surgery emphasized the need for the sort of careful study which could lead to better selection of cases and better definition of the type of operation to recommend.

There was agreement that nerve surgery was a supplement rather than an alternative to medical management. There was, however, no general consensus as to the specific type of surgery that should be performed, the indications for surgery, or its timing. Similarly, there was no ready consensus on the medical management of neuritis so that a standard regimen for medical treatment was not available.

For these reasons it was decided that the Workshop should concentrate on developing an "evaluation protocol" for assessing the treatment (medical or surgical) of neuritis. This protocol is intended to define a group of tests and give details on how they should be performed. Provided that all or some of these tests were undertaken as part of the evaluation of medical and surgical treatment, it would be possible for different centers undertaking different trials to present their results in comparable forms. The majority of the Workshop time was occupied with producing the evaluation protocol.

The participants at the Workshop were as follows:

1. Dr. Johs Andersen, Addis Ababa, Ethiopia
2. Dr. Martin Gregot Andersen, Roseburg, Oregon, U.S.A.
3. Dr. N. H. Antia, Bombay
4. Dr. Berbudi, Tangerang, Indonesia

5. Dr. Paul W. Brand, Carville, Louisiana, U.S.A.
6. Dr. Frank Duerksen, Asuncion, Paraguay
7. Dr. Ernest P. Fritschi, Karigiri
8. Dr. John Hargrave, Darwin, Australia
9. Dr. J. H. James, Nairobi, Kenya
10. Dr. C. K. Job, Vellore
11. Dr. Roland Kazen, Magburaka, Sierra Leone
12. Mr. S. L. Kolumban, Karigiri
13. Dr. Ben Naafs, Edam, The Netherlands
14. Dr. D. D. Palande, Sakkottai
15. Dr. V. N. Pannikar, Karigiri
16. Dr. J. M. H. Pearson [Chairman], Hyderabad
17. Dr. D. J. Pring, Salur
18. Dr. M. S. Milakanta Rao, Bangalore
19. Dr. A. J. Selvapandian, Vellore
20. Dr. H. Srinivasan, Chingleput
21. Dr. Phyllis M. Taylor, Karigiri
22. Dr. Julia K. Terzis, Montreal, Quebec, Canada
23. Dr. E. S. Thangaraj, New Delhi
24. Dr. R. H. Thangaraj, New Delhi
25. Dr. Grace Warren, Manorom, Thailand

—(Adapted from materials provided by Dr. J. M. H. Pearson)

*Bombay Leprosy Project issues 1979 Annual Report.* The Bombay Leprosy Project, begun in 1976, and under the sponsorship of the German Leprosy Relief Association (GLRA), has released its 1979 Annual Report summarizing its activities in case detection, treatment, health education, public relations, physiotherapy, inpatient care, rehabilitation, and research.

The Bombay Leprosy Project, under the direction of Dr. R. Ganapati, encompasses an area of 29.15 sq km with a population of approximately 1 million. The report contains a mass of statistics too great to summarize in a short note. The degree of difficulty and the significance of its activities are underscored, however, by the fact that in 12 slums in which 34,755 subjects were intensively examined out of an enumerated population of 42,775 (81% coverage) during 1979, 412 active leprosy cases were diagnosed, giving a prevalence of 11.9/1000.—(Adapted from the report)

*Central JALMA Institute for Leprosy issues 1979 Annual Report.* The Central JALMA Institute for Leprosy, Taj Ganj, Agra, is the only major leprosy institution in North India offering facilities for specialized treatment of leprosy. The outpatient department of the hospital treated 11,500 patients in 1975; by 1979, this number had grown to 21,607. The 50 bed hospital admitted 974 patients during 1979. Clinical and therapeutic studies at the Institute are described; these include six in immunology, four in microbiology, three in morphology, and eight in biochemistry. Activities in animal experimentation, field studies, and training are also discussed. A list of 25 papers published during 1979 and 20 papers presented at conferences together with a list of 31 eminent visitors to the Institute complete the report.—(Summarized from the report)

*Gandhi Memorial Leprosy Foundation—summary of 1979 activities.* The Gandhi Memorial Leprosy Foundation, established in 1951, is a voluntary agency with its headquarters at Wardha. It has five leprosy control units, six health education units, two training centers, and a referral hospital.

The five control units are working with annual population surveys covering nearly 90% of the control area population. The health education units are found in the urban areas at Wardha, Midnapur, Khurda Road, Poona, Vijayawada, and Bardoli. These units contacted a total of 554 physicians individually, conducted 129 group meetings with a total attendance of 4295, conducted six courses for teacher-trainees (attendance, 449), 39 school programs (attendance, 6881), 19 public meetings (attendance approximately 7700), and 32 short term courses (attendance, 1309). The Referral Hospital at Wardha examined 1352 suspected cases of leprosy and confirmed a diagnosis in 993 of them. A total of 443 persons with leprosy were admitted as inpatients during the year. The Foundation's two training centers at Wardha and Chilakalapalli conducted training courses for medical officers, health educators, and paramedical workers. During the year each of these institutions conducted two training courses apiece for paramedicals while the center at Wardha also conducted two

courses for health educators and one for medical officers.

The World Health Organization Seminar on Health Education was held at Wardha from 12–25 March 1979. Additionally, the Foundation actively participated in the celebration of Anti-Leprosy Week by sponsoring both group meetings as well as school programs.—(Adapted from materials provided by Dr. S. P. Tare)

*Hind Kusht Nivaran Sangh issues 1979 Annual Report.* The Annual Report of the Hind Kusht Nivaran Sangh for the year 1979 under its President, Shri Neelam Sanjiva Reddy, has appeared. Great progress has been made in the country in leprosy control programs. It is evident that voluntary and government agencies are increasingly becoming alert to the urgency of this many-faceted problem of leprosy.

A brief account of the national leprosy control program of the Government of India, WHO, and a few of the prominent voluntary agencies in the field of leprosy work is given in an appendix to the report.

The Annual General Meeting of the Sangh was held on 5 May 1979 at Rashtrapati Bhavan with the President, Shri Neelam Sanjiva Reddy, as Chairman.

The Fifteenth All India Leprosy Workers' Conference was held in the Salt Lake Area in Bidhannagar, Calcutta from 21–25 February 1980, at the invitation of the West Bengal State Branch in collaboration with the German Leprosy Relief Association, the Leprosy Mission, Damien Foundation, and Emmaus Suisse. Attendance at the conference was unprecedented with approximately 1400 delegates.

The training of physiotherapy technicians in leprosy has been found to be extremely useful in the antileprosy campaign, and as such it is one of the important services rendered by the Sangh. During the year the following three types of training courses were conducted: 1) leprosy physiotherapy technicians' course; 2) refresher course for trained leprosy physiotherapy technicians; and 3) orientation course for medical officers in leprosy physiotherapy. Two courses are conducted every year at the Christian Medical College and Hospital, Vellore, and one course every year at the

Leprosy Hospital and Training Centre, Purlia.

The Sangh has placed great stress on health education in leprosy, and it considers health education as its primary function. A variety of health education material, both in English and Hindi, is brought out by headquarters on various aspects of leprosy. State branches are encouraged to produce such material in their local languages, and incentive grants are given occasionally.

The Leprosy Seals Sales Campaign was again pursued during the year as a part of the health education program and for raising funds by the branches of the Sangh and voluntary institutions for leprosy work. As a result of sustained efforts by various leprosy institutions and the Sangh's branches, 3,281,450 seals were sold during the year.

*Leprosy in India*, a quarterly scientific journal dealing with research and general aspects of leprosy, continues to be published by the Sangh. The journal, which made a humble start in 1929 as "Notes" for circulation among workers in India, has grown into a full-fledged journal and is considered to be one of the foremost international journals in leprosy. The total number of subscribers to the journal is approximately 1100 (Indian 945, foreign 155).

The sponsorship program initiated by the Committee of 1000, Council of Adoptable Children, New York, for the foster care of children born of leprosy patients, in collaboration with the Maharashtra State Branch and the Indian Council of Social Welfare, Bombay, has continued satisfactorily.

There were 20 state branches at the beginning of the year, and with the formation of a new branch in the Union Territory of Chandigarh early during the year, there are now 21 state branches.—(Adapted from the report as prepared by Dr. Yudhvir Singh, Chairman, Governing Body, Hind Kusht Nivaran Sangh)

*Notes on activities of the Indian Association of Leprologists.* The Indian Association of Leprologists is a professional association of physicians engaged in antileprosy work. The members include full time leprologists, basic scientists, and practitioners of different areas of medicine and surgery. At the close of the Association's official year, 31 October 1980, its member-

ship numbered 332, drawn from all parts of India and abroad. The current President is Dr. P. Kapoor, a leprologist noted for his work in leprosy control in Maharashtra State.

The Association conducts biennial conferences in which leprosy control, treatment, rehabilitation of leprosy patients, and technical aspects of leprosy research are discussed. In addition, the Association also organizes or participates in the presentation of seminars and workshops in which specific problems of leprosy are discussed. The last biennial conference held in Madras included 269 delegates, and a total of 88 papers were presented. At present, the Association has under consideration proposals to institute travel fellowships for young physicians to encourage interest in leprosy and enrich their knowledge of the subject.

Persons wishing to communicate with this group should write to Dr. H. Srinivasan, Honorary Secretary, Indian Association of Leprologists, Central Leprosy Teaching & Research Institute, Chengalpattu-603 001, Tamil Nadu, India.—(Adapted from materials provided by Dr. Srinivasan)

*Organization and activities of Hind Kusht Nivaran Sangh explained.* The President of India is the President of the Hind Kusht Nivaran Sangh (Indian Leprosy Association), and he nominates the Chairman, Honorary Treasurer, Honorary Secretary, and five members of the Governing Body. At the Annual General Meeting on 29 April 1980 the following persons were nominated: Mr. N. R. Laskar, Chairman; Mr. G. Ramachandran, Honorary Treasurer; Lt. Gen. R. S. Hoon (Ret.), Honorary Secretary; Dr. Dharmendra serves as Vice-Chairman.

The Sangh, with the cooperation of several international organizations, convened the All India Conference of leprosy workers in Calcutta in February 1980. Approximately 1500 persons attended. It was decided at that time to hold regional conferences each year in place of a national meeting since the number of persons attending was so great and to hold an All India Conference only every 4 or 5 years.

The Sangh is actively engaged in preparations for the XII International Leprosy

Congress to be held in New Delhi in November 1983. Dr. Dharmendra is the Working Chairman of the Congress and Dr. R. H. Thangaraj is the Organizing Secretary.

Persons wishing to communicate with this group should write to Mrs. Annakutty Roche, Organizing Secretary, Hind Kusht Nivaran Sangh, 1 Red Cross Road, New Delhi-110 001, India.—(Adapted from materials provided by Mrs. Roche)

*Silver jubilee of Hemerijckx Government Leprosy Centre celebrated.* In July 1980, the Hemerijckx Government Leprosy Centre, Polambakkam, celebrated its silver jubilee with a ceremony at the institution. The center was first established in 1936 by Dr. R. G. Cochrane as an epidemiological study center cum night segregation center in keeping with the scientific thinking of the period. In 1955, Dr. Franz Hemerijckx took over direction of the institution and inaugurated a campaign of mass case detection and treatment at ambulatory clinics set up along road sides. This program was progressively extended to cover 800 villages with a population of approximately 700,000. After 25 years of intensive control work, serial surveys have shown a definite and progressive decline in both the prevalence and incidence of lepromatous leprosy.

During the silver jubilee celebrations a seminar was conducted for field workers, and the annual Franz Hemerijckx Memorial Prize was distributed to the best field workers in the state. Also, a new X-ray machine was dedicated by the Health Minister of Tamil Nadu, Dr. H. V. Hande.

An endowment fund has been created to award an annual prize to final year medical students at Madras and Chingleput Medical Colleges for proficiency in leprosy and to promote field training of young medical graduates to encourage their interest in leprosy work as a career. The government is also considering a proposal to convert the institution into a research center for epidemiological studies in leprosy.—(Adapted from correspondence from Dr. M. Christian)

*The Leprosy Mission in Southern Asia details services.* The Leprosy Mission in Southern Asia is a Christian society ministering to the needs of persons suffering

from leprosy irrespective of caste, creed, race, or religion; taking care of the deformed and the disabled; and working towards the eradication of leprosy. The Mission administers programs in 36 of its own centers as well as aiding in 39 other centers to which it gives partial support. The Mission's centers are geographically distributed as follows: Bangladesh (1), Bhutan (3), Burma (1), India (30), and Nepal (1). The chief areas of activity in these centers are village and urban control programs, inpatient care, reconstructive surgery, rehabilitation, vocational training, training of leprosy personnel, patient care for children, care of the aged and crippled, research, financial support for students in medical and paramedical training programs, limb centers for orthopedic appliances, and production of micro-cellular rubber for patients' shoes. Additionally, the Mission issues an Annual Report each March and PRABHA, a pictorial review, each October.

Persons wishing to communicate with this group should write to Dr. R. H. Thangaraj, Secretary for Southern Asia, The Leprosy Mission, 402 Sheetla Building, 73-74 Nehru Place, New Delhi-110 019 India.—(Adapted from materials provided by Dr. Thangaraj)

*Two research conferences held at Acworth.* The IX Workshop on Leprosy was conducted by the Acworth Leprosy Hospital Society for Research, Rehabilitation and Education in Leprosy (RRE Society) on 9 June 1980 under the Chairmanship of Dr. K. D. Sharma. The occasion also marked the tenth anniversary celebration of the inception of the Society. Mr. S. S. Naik, Honorary Secretary of the Society, summarized the highlights of the decade's activities and achievements which included 1) a series of epidemiological investigations based on surveys of schools and slums in Bombay; 2) studies on rehabilitation of leprosy patients and the establishment of a sheltered carpentry workshop for infectious patients; and 3) health education involving programs directed towards the medical profession and students. Dr. V. V. Dongre, Jt. Honorary Secretary, outlined future activities of the society. The RRE Society presented the following papers at the Workshop: 1) Integration of lep-

rosy into general health service in an urban area—a feasibility study (Revankar, C. R., Jha, S. S., Dongre, V. V. and Ganapati, R.); 2) Prevalence of leprosy in slums in Bombay including a leprosy colony (Ganapati, R., Revankar, C. R. and Khot Sunda, M.); and 3) Nasal biopsies in children without signs of leprosy (Pandya, S. S.).

The Consensus Conference on Classification of Leprosy, jointly organized by the Indian Association of Leprologists (IAL) and the RRE Society was held on 29 November 1980 at the Acworth Leprosy Hospital. The conference also constituted part of the RRE Society's 10th year celebration.

The confusion arising principally out of different nomenclature used in the existing Indian system of classification was discussed, and an attempt was made to evolve a simple classification based on clinical and bacteriological features, uniformly acceptable to paramedical workers, medical officers, and scientists.

Dr. K. V. Desikan, Director, Central JALMA Institute for Leprosy, Agra, prepared a working paper for the meeting, which was discussed by 36 expert members of the IAL. A five-group system, including a place for early (indeterminate) lesions was arrived at; this system would be nearer to the international classification. Additionally, the features of indeterminate leprosy as well as other types were discussed. This modified Indian classification awaits acceptance at present by the general body of the IAL.—(Adapted from materials provided by Mr. S. S. Naik)

**Italy.** *Pope meets with ILEP members.* His Holiness Pope John Paul II granted a private audience to the members of ILEP on the occasion of their 24th Working Session, which was held in Rome in December 1980. On this occasion Pope John Paul II expressed his appreciation to the members of ILEP for their efforts in the struggle against the worldwide problem of leprosy.—(Adapted from materials provided by D. Martineau, Co-ordinating Bureau, ILEP)

**Japan.** *Japanese leprosy conference held.* At the occasion of "1980, The Year of Leprosy Global Relief," created by Mr. Ryoichi Sasakawa, a session on "Health and Peace" was organized in Tokyo on 25

September 1980 under the joint sponsorship of the Sasakawa Memorial Health Foundation, Leprosy Relief Conference, and the Japan Science Society. Guest speakers included Dr. Harfdan Mahler, Director-General of WHO, and Prof. M. F. Lechat, President of the ILA. The meeting, which was attended by a large audience, was one more illustration of the considerable efforts developed by the Sasakawa Memorial Health Foundation to help leprosy patients and promote leprosy control and research.—(Adapted from materials provided by Dr. M. F. Lechat)

**Liberia.** *Integration of leprosy and tuberculosis services discussed.* The World Health Organization Regional Office for Africa (Brazzaville) sponsored a five day conference on Integration of Leprosy and Tuberculosis Services beginning on 26 November 1979. Nineteen participants from nine countries in Africa and a number of international observers participated. The objectives of the conference were 1) to identify current trends and developments in integration and tuberculosis control into the activities of general health services, including primary health care; 2) to review the experience in some countries of the region in combined tuberculosis/leprosy services and to assess the possibility of their expansion in the framework of technical cooperation among developing countries (TCDC); 3) to examine approaches and develop technologies and specific operational measures to foster integration of leprosy and tuberculosis services.—(Summarized from conference materials)

**Malaysia.** *Information provided on Malaysian Leprosy Relief Association (MaLRA).* MaLRA, which was formed in 1959, is concerned with the total problem of leprosy: patient care and welfare, public education, rehabilitation, integration, and leprosy control. Four types of memberships are available in the Association: Life, Sustaining, Ordinary, and Junior.

Branches of MaLRA are located in Johore, Penang, Kelantan, Perak, Trengganu, and Sarawak. Additionally, MaLRA contributes substantially to the support of the Infant Jesus Sisters' Children's Home,



which provides care for 27 children of Sungei Buloh Leprosarium.

Further information on MaLRA may be obtained from: Mr. E. J. Lawrence, Secretary General, Malaysian Leprosy Relief Association, Lot 337, 3rd Floor, Wisma M.P.I., Jalan Raja Chulan, Kuala Lumpur, Malaysia.—(Adapted from materials provided by the association)

**Mexico.** *Details provided on two national leprosy associations.* The Mexican Leprosy Society (Sociedad Mexicana de Leprología, A.C.) was founded in 1946 and includes professionals working in the National Campaign Against Leprosy, along with other distinguished professionals in this field, throughout Mexico and especially in Mexico City. At present there are 100 members. In 1981, the group's meeting was held from 4–6 May in the City of Culiacan, in northeastern Mexico. Investigators from Mexico, the U.S.A., and a number of other countries were present.

Persons wishing to communicate with this Society should contact: Dr. Diego Fernández de Castro, President, Sociedad Mexicana de Leprología, A.C., Ave. Chapultepec No. 284-5° Piso, México 7, D.F., México.

The Asociación Mexicana de Accion Contra la Lepra, A.C., was founded in 1948. Its activities consist of the following: 1) teaching of pre- and postgraduate dermatoleprology courses on a daily basis; 2) social and economic help to leprosy patients and their families; 3) publication of *Dermatologia*, the scientific journal of the Association; 4) weekly medical-social sessions; 5) provincial visits by young doctors, social workers, and others to engage in case detection and follow-up of known contacts; 6) daily medical consultations with 200 persons in dermatoleprology; and 7) monthly conferences for nurses, social workers, physicians, and others to disseminate knowledge about the disease.

Persons wishing to communicate with the Association should write to: Dr. Fernando Latapí, President, Asociación Mexicana de Accion Contra la Lepra, A.C., Dr. Vertiz 464, Esq. Av. Central, México 7, D.F., México.—(Adapted from materials provided by Drs. Fernández and Latapí)

**Nepal.** *Details provided on leprosy care activities.* Leprosy care in Nepal dates from approximately 1857 when King Surendra Bir Bikram Shah Deva ordered the provision of shelter, food, and clothes to persons with leprosy to be given out at the location of what has become the site of the Khokana Leprosarium. Treatment of the disease dates from 1934 when a leprologist from India, Dr. Hari Krishna Lal, was appointed. There are presently two leprosaria in the country, Khokana Leprosarium and Malunga Leprosarium. The prevalence rate of the disease has been estimated at 10/1000 with 30% of these persons suffering from some kind of deformity and/or disability.

His Majesty's Government organized the Leprosy Control Programme in 1963, and in 1969, under the chairmanship of Her Royal Highness Princess Shanti Rajya Luxmi Devi Singh, the Nepal Leprosy Relief Association (NELRA) was founded.

Khokana Leprosarium, the larger of the two in Nepal, had 537 registered leprosy patients in February 1979 with 1729 persons, including children and other family members, within the facility. The presence of nonpatients within the facility has been a serious problem for a number of years because all of these persons, patients and nonpatients alike, must share in the limited resources of food, clothing, medical care, etc., available. This situation is in the process of undergoing improvement at present. A "Custodial Care Centre" for seriously handicapped patients requiring life-long care is being planned at Khokana Leprosarium. "Transit Homes" for patients capable of being integrated into society after diagnosis and appropriate treatment of their disease are also being planned. These will consist of villages located far enough from the leprosarium to allow patients in these areas to learn to feel outside of the isolated environment as well as to learn appropriate self care and job skills to become fully integrated into society once more. Most important perhaps, NELRA has already begun a "Children Welfare Programme" for the children of leprosy patients, providing both care and education, in order to allow them to prepare to live productive, normal lives.

As with many voluntary agencies, the

Nepal Leprosy Relief Association faces continuing financial problems. NELRA has no regular source of income. His Majesty's Government provides some yearly donations. NELRA is also helped by several foreign associations, the principal ones being Action for a World in Solidarity, a social organization in West Germany for children's welfare programs and the German Leprosy Relief Association for programs relating to Khokana Leprosarium.

For persons interested in further information, inquiries may be addressed as follows: Dr. K. B. Shrestha, Secretary General, Nepal Leprosy Relief Association, P.O. Box 433, Marwari Sewa Sadan, Maharaj Gunj, Kathmandu, Nepal.—(Adapted from materials provided by Dr. Shrestha)

**Nigeria.** *International meeting of microbiologists held.* The Sixth International Conference on the Global Impacts of Applied Microbiology (GIAM VI) was held at the University of Lagos on 30 August–7 September 1980. The special session on leprosy was chaired by Dr. M. F. Lechat and included presentations on *M. bovis* (Dr. I. Alhaji), Leprosy cases in India (Drs. S. Goyle and V. Virmani), Epidemiology (Dr. M. F. Lechat), Recent problems in chemotherapy (Dr. L. Levy), Primary prevention (Dr. S. K. Noordeen), *N. cardiosis* (Drs. O. U. Osoaybakadna and A. N. U. Njoku Obi), Leprosy control in Nigeria (Dr. R. Pfaltzgraf), Problems and trends in leprosy research (Dr. H. Sansarricq), and Cell-mediated immunity (Dr. S. N. C. Wemanbu).—(Adapted from materials provided by Dr. M. F. Lechat)

**Pakistan.** *Leprosy control in Pakistan detailed.* Dr. Ruth Pfau, Advisor on Leprosy to the Government of Pakistan, has reported on leprosy control activities during the period November 1979 to March 1980. The report includes a description of the organization and present work, needs, steps undertaken to meet those needs, and plans for 1980 for leprosy work being conducted in Sind, Punjab, Azad Kashmir, the Northern Area, the Northwest Frontier Province, Baluchistan, and Islamabad. The report includes a description of the training facilities for leprosy staff, and appendixes

provide a wealth of epidemiological information regarding cases in Pakistan. The report concludes with a description of the social and rehabilitation services being provided in that country.—(Adapted from the report as provided by Dr. Zarina A. Fazelbhoy, Honorary Secretary, Governing Body, Marie Adelaide Leprosy Centre)

**People's Republic of China.** *Dr. O. K. Skinsnes lectures in China.* During June 1980, Dr. Olaf K. Skinsnes, former editor of the INTERNATIONAL JOURNAL OF LEPROSY, visited Guangzhou and Beijing where he delivered several scientific reports on leprosy research. In Beijing, Dr. Wu Zheng-jian, Vice-President of the Chinese Academy of Medical Sciences, and Dr. Ye Gan-yun, Deputy Director of the Institute of Dermatology of the Academy, discussed possibilities of further cooperation in the fields of research and training programs on leprosy with Dr. Skinsnes.—(Adapted from materials provided by Dr. Ye Gan-yun)

**Philippines.** *Tropical medicine congress meets.* The Tenth International Congress on Tropical Medicine and Malaria met in Manila, Philippines, on 9–15 November 1980. The session on leprosy included the following papers: Advances in leprosy research (W. F. Kirchheimer); Leprosy endemicity in India—A changing profile (B. R. Chatterjee); A screening survey on leprosy and the possible role of village leaders in case detection in Muheza District, Tanzania (E. van Praag); All Africa Leprosy and Rehabilitation Training Centre (ALERT), goals and activities (J. K. Nsimbambi); Parameters influencing the "in vitro" cultivation of *M. lepraemurium* (F. Portaels and S. R. Pattyn); Trace elements and vitamin A metabolism in the various leprosy sub-types (R. Sher); Lymphocytotoxic antibodies in leprosy: Preliminary data (M. Nuti, *et al.*); Drug development for therapy of leprosy studies in cell-free and whole cell systems of mycobacteria (J. K. Seydel, *et al.*); Eradication of leprosy and tuberculosis using isoprodian + rifampicin (background and findings) (E. Freerksen); and Thalidomide in the treatment of erythema nodosum leprosum in

Malaysia (A. B. G. Laing).—(Adapted from conference materials)

**Spain.** *Two leprosy courses to be held at Fontilles.* El XVII curso internacional de leprología para médicos, organizado por el Sanatorio San Francisco de Borja de Fontilles y patrocinado por la Orden de Malta, con la colaboración de la Escuela Profesional de Dermatología de la Universidad de Valencia, Ministerio de Sanidad y Seguridad Social y Profesores de Dermatología de las Facultades de Medicina tendrá lugar en el Sanatorio de Fontilles desde el 23 de septiembre al 5 de octubre de 1981, dirigido por el Dr. J. Terencio de la Aguas, Director Médico del Sanatorio. El XXIV curso para misioneros y auxiliares sanitarios tendrá lugar desde el 13 octubre al 31 de octubre de 1980.

Los aspirantes a este Curso deberán dirigir sus instancias al Comité Ejecutivo Internacional. 3 Place Claparede, GINEBRA (Suiza) antes del 30 de julio de 1981 y al mismo tiempo al Sanatorio de San Francisco de Borja, Fontilles (Alicante, España). Para el XVII curso se dará preferencia a los que trabajen en Centros leproológicos, Universidades, o pertenezcan al Cuerpo de Dermatólogos Oficiales del Estado. Para el XXIV curso se dará preferencia a los que trabajan en misiones. En segundo lugar a los que tengan el proyecto inmediato de trabajar en misiones. En segundo lugar a los que tengan el proyecto inmediato ellas y en centros leproológicos, siendo necesario presentar certificación del superior en este sentido.

La asistencia a este Curso es gratuita ya que los gastos de organización son costeados por la Orden de Malta. Los cursillistas deberán permanecer en régimen de internado en el Sanatorio de San Francisco de Borja.

Los Candidatos que obtuvieren la Beca y no pudieren asistir al Curso, no podran cederla a otros, sin previa consulta con el Director del Curso.—(Adapted from course brochures)

**Switzerland.** *Annual report issued.* The Fourth Annual Report of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases covers the period from 1 July 1979 to 30

June 1980. The 360 page report covers activities related to all six diseases emphasized by the program. A 23 page chapter deals with the activities of IMMLEP and THELEP in leprosy. As summarized:

“Research in the Programme is carried out by two Scientific Working Groups, concerned with Immunology and Chemotherapy respectively. Research in leprosy was subject to an independent in-depth review by STAC in 1979, which endorsed and commended the objectives and progress of research.

“Steady progress has been made in research in immunology during the past year. The supply of *M. leprae* from armadillos is satisfactory, and antigen analysis and purification is progressing as a basis for vaccine development and the improvement of diagnostic tests. Work is also in progress to improve tests to detect *M. leprae* specific antibodies in human serum. A study in Japan, using a fluorescent antibody test previously developed in the Programme, showed positivity in more than 60% of individuals living in an endemic area who had clinical signs indicating a possibility of leprosy. This confirms previous findings that infection with *M. leprae* in endemic areas is much more prevalent than overt clinical findings would suggest.

“Previous evidence that injection of killed purified *M. leprae*, without adjuvant, protect mice from infection and induce delayed hypersensitivity in mice and guinea pigs, has been confirmed. Plans are moving ahead for the preparation of material which meets recognized safety requirements for human studies, and pre-vaccination studies which will determine the ability of *M. leprae* preparations to induce skin test conversion are being planned to begin in 1981.

“Research on the chemotherapy of leprosy has been very largely concerned with drug trials and the necessary ancillary tests for the detection of persistent viable microorganisms. Clinical trials of combined drug regimens are in progress in Mali and India and have so far involved 57 patients. Field trials of a combined drug regimen are in preparation, and possible sites are being investigated. Studies of dapsone resistance are also in progress.

“Evaluation of the effectiveness of chemotherapy crucially depends on knowing

whether live *M. leprae* persist in the body. Since *M. leprae* cannot yet be grown in culture, viability is assessed by the injection of biopsy material into immunosuppressed rodents. (Immunosuppression is required since *M. leprae* multiply in large numbers in these animals only in the absence of an effective immune response.) Such animals are expensive and difficult to maintain, and their availability could well be a bottleneck for progress. Thus far the thymectomized irradiated mouse is the animal chiefly used. The Programme is now studying the suitability of congenitally athymic nude mice, neonatally thymectomized rats, and a recently discovered congenitally athymic nude rat.

"Another consequence of the inability to cultivate *M. leprae* *in vitro* is the obligatory use of infected animals for drug screening. Since this is slow and expensive, attempts are now in progress to develop *in vitro* systems based on the cultivation of *M. leprae* in human and mouse macrophages. Other cultivable mycobacteria are also being studied as possible substitutes for *M. leprae* in drug sensitivity tests. In a very interesting development, it has been shown that dapsone is similar in its mechanism of action in *M. lufu* and in *M. leprae* but different in *E. coli*. Dapsone analogs are now being screened for potential activity against *M. leprae* in an *M. lufu* screen."—(Adapted from report summary; material furnished by Dr. Adetokunbo O. Lucas)

*Plans made for IYDP.* The Council of World Organizations Interested in the Handicapped (C.W.O.I.H.) (in which the ILA is represented by Dr. Stanley G. Browne) met in Geneva in December 1980 to deal with preparations for its participation in the International Year of Disabled Persons (IYDP) during 1981.

In his report to the Council of C.W.O.I.H., Dr. Browne referred to the interest of the ILA in IYDP and informed the meeting that member organizations of ILEP were actively involved in many countries. The emphasis nowadays, as far as leprosy is concerned, is on prevention of deformity through early diagnosis and adequate medical treatment rather than on expensive and not wholly satisfactory at-

tempts at alleviation of the sequelae of peripheral nerve damage.

Many members of the ILA are doubtless already involved through their National Committees in preparations for IYDP. The others are urged by the Council to insure that those whose disability or handicap is due to leprosy are not forgotten in national programs and activities. IYDP provides many opportunities for enlisting public concern and assistance on behalf of those leprosy sufferers whose disability is due to a combination of physical deformity and social stigma.—(Adapted from materials provided by Dr. S. G. Browne)

*Research in epidemiology of leprosy.* The third meeting of the Trans Disease Scientific Working Group on Epidemiology of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases met in Geneva from 29 September–2 October 1980. The meeting dealt with methodological issues in relation to the epidemiology of leprosy with special reference to vaccine trials and specific studies relevant to, and necessary for, the control of leprosy. Priority areas for research to deal with these problems were summarized as follows: 1) collection of baseline information; 2) definition of early leprosy; 3) development and use of immunological tests to recognize leprosy infection; 4) long term mass chemotherapy with dapsone; 5) dapsone resistance; 6) retrospective study of the effect of BCG using a case control design; 7) refining mathematical models; 8) social/environmental factors involved in transmission; 9) re-infection; and 10) disease interaction.—(Adapted from meeting summary)

*Tanzania. Epidemiology conference held.* The Scientific Conference on the Epidemiology of Leprosy was held in Arusha from 26–29 July 1978. The Conference was organized by the Tanzanian Leprosy Association in cooperation with the Government of Tanzania. It was opened by Dr. A. Chiduo, Director of Manpower and Development, Ministry of Health. The Patron of the Conference was Dr. Stanley G. Browne.

One of the aims of the Tanzanian Leprosy Association is to follow recent de-

velopments in the treatment and control of leprosy and transmit this information to all those responsible for the discharge of these functions. The first activities of the Association, following its inauguration, were to bring together the leading doctors in this field in Tanzania with prominent international authorities who could bring them the latest scientific developments. The subject chosen was the epidemiology of leprosy since the knowledge of this discipline forms the basis of all planning in the fight against this disease. It is planned in the future to cover other basic subjects.—(*Adapted from the introduction by G. D. Georgiev and K. Balslev; conference report provided by Dr. E. van Praag, Executive Secretary, Tanzania Leprosy Association*)

**The Netherlands.** *Educational materials available.*\* Dr. D. L. Leiker, in collaboration with Prof. W. Peters of the London School of Hygiene and Tropical Medicine, and the World Health Organization, has prepared a series of 84 slides concerning "*Leprosy in the Dark Skin*." The series is available on microfiche or in the form of unmounted slides (35 mm filmstrip) together with a text booklet and, in the case of the microfiche set, a handviewer. The series on leprosy is one of ten such sets, covering ten common tropical diseases, each with a separate text, and each available either in the microfiche format with handviewer or in the unmounted 35 mm filmstrip format. In the very near future, editions will be available in French and Spanish in addition to English. The series can be ordered from MEDDIA, Royal Tropical Institute, Department of Tropical Hygiene, Section M. O. N., Mauritskade 63a, 1092 AD Amsterdam, The Netherlands.—RCH

**Turkey.** *State of leprosy work in Turkey evaluated.* The Association for Leprosy Work was founded in 1976 by seven persons in various fields. Its aim is to overcome fear and ignorance about leprosy, provide humane treatment for patients, and aid in early diagnosis. A second association concerned with leprosy had been founded in Ankara in 1957.

There are approximately 4000 cases in Turkey according to official data, but the actual number of cases is thought to be five to eight times greater. Almost all known patients are either lepromatous or borderline, and the rate of diagnosis of other types in the spectrum is very low.

The Association is manned by volunteers. Collective protocols have been signed with the Ministry of Health and Social Assistance and the Istanbul Faculty of Medicine. As a result a dispensary for leprosy was established in the center of Istanbul and an Institute of Leprosy founded with the reorganization of leprosy pavilions at the Bakirköy Mental Health Hospital. This institute of 50 beds has recently started to undertake rehabilitative and physiotherapeutic activities, which are being regularly maintained. During 1980, a new pavillion was annexed to this Institute, and a well equipped surgery was created through the contributions of Emmaüs Suisse. At present, attempts to form a surgical team are underway.

Patient care at the Institute is provided by physicians from the Department of Dermatology of the Istanbul Faculty of Medicine.

In March 1980 a 3 day seminar was held through the cooperation of the Damien Foundation of Belgium, and world renowned leprologists lectured to over 400 personnel. The British Association of Leprosy (LEPRA) has provided numerous educational materials. Additionally, Emmaüs Suisse has granted two scholarships and LEPRA one scholarship to Turkish physicians for study.

These efforts during the past 4 years have combined to create a new generation of Turkish physicians who are aware of and competent to handle the problem of leprosy as well as creating a more enlightened spirit of awareness in the general public.

Contributions and donations from abroad in the form of surgical equipment, training facilities, brochures, books, rehabilitative appliances, drugs (namely rifampin), and scholarships will be warmly welcomed.

Persons wishing to communicate should write to: Prof. Dr. Türkân Saylan, General Secretary for Leprosy Work, Association for Leprosy Relief Work, Unkapani Fil Yokuşu Cüzzam Dispanseri Fatih, İstan-

\* See book review of this material on p. 116.

bul, Turkey.—(*Adapted from materials provided by Dr. Saylan*)

**United Kingdom.** *Manson Medal awarded to leprologist.* Dr. R. J. W. Rees has been awarded the Manson Medal for 1980 by the Royal Society of Tropical Medicine and Hygiene in recognition of his outstanding contributions to the fields of tropical medicine and hygiene.

The award is named after Sir Patrick Manson, GCMG, FRS, the most eminent figure in the field of tropical medicine at the beginning of the twentieth century. The Medal, which is in bronze, bears the likeness of Sir Patrick in profile on the obverse, and on the reverse a garland of oak leaves surrounds the words "Tropical Medicine A.D. 1922," the year in which Sir Patrick died.

The Manson Medal is awarded triennially and is the Society's highest mark of distinction.—(*Adapted from Lepr. Rev.* 51 [1980] 255)

*History of LEPRO outlined.* LEPRO was founded in 1924 following discussions between Sir Leonard Rogers, who had been Medical Advisor in India, and Frank Oldgrieve, Secretary to the Leprosy Mission in India, with the object of coordinating leprosy work throughout the British Empire, stressing the need for a medical approach to the problem, and to foster research. With the evolution of the Empire into Commonwealth and now self-governing states, LEPRO has become an international organization with the objective of "the eradication of leprosy."

LEPRO is a member of the International Federation of Anti-Leprosy Associations (ILEP) and under ILEP coordinates the work throughout the whole of Malawi. It is also the coordinator on behalf of ILEP for medical research at the Indian Council for Medical Research, Jalma; the All India Institute of Medical Sciences, New Delhi; the Foundation for Medical Research, Bombay; and the joint research carried out at Sungei Buloh, Malaysia. The association's current income amounts to just under £1 million. LEPRO receives its funds mainly from the British public.

The Executive Committee of LEPRO, which is responsible for all its activities, is

advised by a Medical Advisory Board under the chairmanship of Dr. R. J. W. Rees.

Additionally, LEPRO publishes *Leprosy Review*, which is available to all persons engaged in leprosy work worldwide.

Persons wishing to communicate with LEPRO should write to Mr. G. F. Harris, Director, LEPRO, Fairfax House, Causton Road, Colchester CO1 1PU, Essex, United Kingdom.—(*Adapted from materials provided by Mr. Harris*)

**U.S.A.** *Third Five-Year Report issued.* The United States-Japan Cooperative Medical Science Program: Third Five-Year Report, 1975-1980 describes the research progress conducted during its third 5 years (1975-1980). During this period, seven Program panels conducted research according to specifically defined investigative guidelines. Each panel has been subjected to regular in-depth reviews and analyses according to the specific criteria used to evaluate relevance of research and productivity. The scope of the Program has expanded gradually when clearly indicated and feasible. A panel on hepatitis is a recent new initiative.

The Joint Program continues to emphasize research of importance to Asia although most of the scientific contributions are applicable to all developing nations. A remarkable contribution has been the collaborative investigation between Japanese and U.S. scientists which resulted in development of new knowledge in each country not otherwise possible. The spirit of teamwork and intimate collaborative relationships between scientists of each country is a model of its type. To this end, the Joint Program directed its interests and goals toward improvement of the quality of life for the people of Asia and elsewhere.

Review of the last five years' overall program of each panel is included. The current review of the Leprosy Panel by Dr. William R. Barclay and Dr. Manabu Sasa is as follows:

"1. Leprosy is still a disease of major consequence in Asia, and it produces profound disability in spite of the therapeutic advances that have been made in recent years. Interruption of transmission of the disease can be effected by chemotherapy and chemoprophylaxis, but cure of the dis-

ease is still not possible for all persons infected. A reliable vaccine has not yet been developed, and highly reliable and simple diagnostic tests to identify those afflicted are not available. Therefore, leprosy is still highly relevant to the U.S.-Japan Cooperative Medical Science Program.

"2. The panel has established and supported reasonable programs within its guidelines to achieve the objectives they have set. They have placed a high priority on studies on chemotherapy and chemoprophylaxis. Since this approach has worked well in bringing about control of the other major mycobacterial disease, tuberculosis, it should accomplish a great deal in the control of leprosy. Reports presented at the joint meetings of the panels reveal a full appreciation of what remains to be done in refining drug regimens to accomplish permanent suppression of the disease, prevention of mycobacterial drug resistance, economy and ease of drug administration, and development of useful chemoprophylaxis.

"The second major area of work has been in development of methods to grow large quantities of *M. leprae* for vaccine production and biochemical studies. Even though the armadillo has provided a rich source of bacilli, the panel is still giving attention to developing synthetic media that might support growth.

"Finally, the panel is giving, justifiably, a large amount of attention to the role of the immune response both in disease prevention and as a factor in etiology of tuberculoïd versus lepromatous manifestation of the disease.

"The programs being supported certainly fulfill the guidelines and do so with appropriate ordering of priorities.

"3. The objectives as outlined in 1965 were appropriate for their time. As new anti-mycobacterial drugs have been developed and as a source of large numbers of bacilli has become available for vaccine experiments, the panel's objectives have been modified to accommodate these new developments. As information has unfolded on the role played by T-cells and B-cells, on blocking antibodies on lymphokines, and on the activity of macrophages, the panel has focused attention on how immunity can be

manipulated to increase resistance to leprosy and to how the hosts' reaction to the presence of *M. leprae* can be modified.

"By pursuing studies in basic cellular immunology and by studying the mode of action of drugs active against *M. leprae*, effective control over disease transmission and cure of those currently infected is finally within reach. Although research into vaccines against tuberculosis has yielded disappointing results, there is a basis for a modest degree of optimism in leprosy since the panel reports that killed *M. leprae* are more effective in increasing immunity than are living *M. leprae*. If this is true, then many technological problems involved in vaccine development disappear, and there may be grounds for work in rising combinations of vaccination and chemoprophylaxis in disease prevention. However, it is unlikely that a vaccine can be developed that will lead to elimination of leprosy, and this makes it important that this aspect of the program be evaluated frequently.

"4. The panel is employing methods that have proven successful in other areas of microbiology. They are examining chemotherapy in animal models, investigating the immune response in animals experimentally compromised, investigating the characteristic of humans infected, and complementing the findings of laboratory data with field trials and should be able to research their objectives through the approaches they are using.

"5. Because leprosy is still a major cause of morbidity in southeast Asia and because technological breakthroughs are relatively recent in this disease, a great deal must still be done to bring the disease under control. Work on leprosy should continue to be supported for the foreseeable future, but the accomplishments of the panel should be submitted to frequent review. It is probable that support for work in leprosy will be required for another 5 to 10 years before the panel can approach the goals set for itself.

"6. The Leprosy Panels have made impressive progress in understanding the pathogenesis and treatment of this disease. Studies of the immunological phenomena in leprosy have led to a better understanding of cellular immunity in general.

"The Joint Subcommittee on Program Re-

view and Planning has given serious consideration to combining the Tuberculosis and Leprosy Panels, both of which have clearly defined specific objectives of eradicating, by immunologic or chemotherapeutic means, specific entities caused by mycobacteria. The Joint Subcommittee decided after due deliberation that the Leprosy Panel should remain a distinct entity and should not be combined with the Tuberculosis Panel."

The report includes a 26 page summary of the broad goals of research in the U.S. and Japanese Leprosy Panels, progress made during the last five years in priority

areas, and future goals for each panel.—  
(Adapted from the report)

**Vietnam.** *Message of greetings received.* The following communication was received recently by Dr. W. F. Ross: "On the occasion of the 50th anniversary of the founding of the International Leprosy Association, I am very happy to send best wishes to Prof. M. F. Lechat, President, Dr. S. G. Browne, Secretary, and Dr. W. F. Ross, Treasurer, and to all members of your association./Yours sincerely./Dr. Tran Huu Ngoan, Director, Quyñh Láp Leprosy Centre, Nghê Tinh, Viet Nam.