

## NEWS AND NOTES

*Information concerning institutions, organizations, and individuals connected with leprosy work, scientific or other meetings, legislative enactments and other matters of interest.*

### NATURE AND VALUE OF INTERNATIONAL CONGRESSES

Certain comments which appeared in the JOURNAL after the Madrid Congress [22 (1954) 86-90], and the editorials by Chaussinand and by Muir in the last issue and the present one, show that there is a strong feeling that the plan of operation of the international leprosy congresses should be materially changed. There is abundant evidence that this feeling is not confined to the leprosy group, as shown by the following items collected in the past year or so.

#### INTERNATIONAL MEETINGS

The Council for International Organizations of Medical Sciences has studied the matter broadly and published the following statement. This is reproduced, with only a few changes in punctuation and paragraphing, from the July-December 1955 issue of the *Bulletin* of that organization.

The increasing fragmentation of medicine has brought about an increase in the number of congresses, and at the same time ease of travel has increased the number of those attending them. Congresses have become too big, and the proliferation of meetings has often resulted in wasteful duplication of effort. This present day confusion is also reflected in the imposing array of words used to label meetings and the word "international" is bandied about far too freely. Without entering the realm of semantics one should restrict the use of the word "international" to those meetings whose membership is not restricted by geographical, linguistic or cultural considerations, that is, for meetings of a world-wide character.

It is our belief that clearer distinctions should be made between the various types of international meetings, each having a precise function; but for all practical purposes it is sufficient to distinguish three main categories: international congresses, international conferences, and international symposia to which must be added seminars.

#### INTERNATIONAL CONGRESSES

International congresses are characterized, in our view, by the great number of their participants from many countries—membership being open—and by the important part played by the social programme.

Such mass meetings have their drawbacks, as everyone who has attended one will admit; but they have certain advantages also, as they bring together the leaders in a given field. In any event, the medical world has become so accustomed to them that little can be done to counteract the present tendency to organize bigger and better ones.

We believe that the larger international congresses should have one simple purpose, and that purpose should be educational. They should bring the latest advances in the medical field to the knowledge of as numerous, as young, and as international an audience as possible. As a corollary, far less importance should be given to "discussion," which is indeed difficult in a vast auditorium or even in

smaller lecture rooms as documents have not always been circulated in time; and as the general atmosphere of agitation and excitement adds to the difficulty.

Set papers, demonstrations, scientific exhibitions, films, and in certain cases television sessions, are appropriate media for imparting knowledge, and the greatest emphasis should be laid on a simple social programme to enable contacts to be made and friendships strengthened.

It is therefore essential to restrict these big congresses to large towns, and it is absurd to hold them in a centre which cannot provide the necessary facilities, under the pretext that it is the turn of such a place to be the host of the congress.

Finally, with regard to the published accounts of the proceedings of such congresses, these should be strongly edited and appear in a form similar to "Recent Advances."

#### INTERNATIONAL CONFERENCES

Whereas the aim of the large congress is teaching, the purpose of conferences should be the exchange of information and ideas between leading authorities. It follows that these meetings should be smaller and closed, not exceeding two or three hundred, members being admitted by special invitation only. They may take place, whenever necessary, between congresses, and may be organized on a regional basis. Their organization must be simple, and entail a minimum of expense.

There appears to be little need to publish the proceedings of such conferences, as the ideas which are exchanged become part of the background of knowledge of all those taking part, and thus will be made known eventually.

It is obvious that in those branches of medicine which are undergoing rapid development, such conferences, rather than big congresses, are indicated.

#### SYMPOSIA AND SEMINARS

Symposia will continue to be held in increasing numbers, for they enable recently acquired knowledge to be discussed and integrated.

They may easily be organized quite apart from any congresses, if necessary, but they are especially suitable for holding in connection with a big congress, as a "satellite" activity. A symposium is understood as a carefully prepared meeting of a small number (15 or 20 at most) of leading specialists who live together for several days, exchanging ideas and discussing work they have themselves carried out on well-defined subjects on the fringe of several disciplines. In the interest of a fruitful discussion it is preferable that there be no audience, and thus the publication of proceedings is of the greatest value.

Slightly different from the symposium is the seminar. The seminar is prepared in a similar manner to the symposium, and like the latter is devoted to the study of a single well-defined subject; but in addition to the fifteen or so active participants, several dozen listeners are admitted, who in the intervals between sessions can ask questions and mingle with the authorities present.

We offer these suggestions to our member organizations in the hope of clarifying the patterns of international meetings which today appears bewildering.

#### VALUE OF INTERNATIONAL CONGRESSES

Two pertinent comments appeared last year in *Science* [121 (1955) 352], in separate reports on the 8th International Congress for Cell Biology, which was held in Leiden, Holland, in September 1954. It seems that the program of this congress comprised three or four symposia each day, arranged in a somewhat unique way. In the mornings there were plenary sessions at which the chairmen of the symposia of

the day delivered papers (discussion not allowed), and in the afternoons the congress was divided into the several symposia (i. e., separate sessions), at which individual papers were read.

The last paragraph of one of these reports, by Hans Ris of the Department of Zoology of the University of Wisconsin, contains the following comments:

The major purpose of such a meeting should be the critical discussion of controversial subjects and of work in progress, and the exchange of technical information and ideas. There was a general feeling that not enough time was allowed for organized discussion. Unfortunately it is the tendency of such meetings, especially if they get large, to spend more and more time listening to short papers on rapidly changing subjects, and less time on exchange of opinion. When three to four sessions on related topics have to be scheduled concurrently, it is an indication that the organization of the meeting needs to be changed. A few plenary sessions with reviews of the most active fields of research are useful to take stock. *But the oral presentation of all the papers sent in is no longer desirable* [italics ours]. A program committee should select papers that can serve as bases for good discussions and leave those that present straightforward data to be read by title. Some topics might profitably be organized as panel discussions. Many papers are best given in the form of demonstrations if enough space and time are set aside.

The second of these reports, by G. Pontecorvo, of the Genetics Department of the University of Glasgow (Scotland), contains the following:

This congress poses very clearly again the question of whether such gatherings will serve a useful purpose. Perhaps at no other congress was the answer as clear as here. They serve very little purpose of the kind that meetings of scientific societies, or small working conferences, try to fulfill. Most of the innumerable rushed and short papers would have been much better published in the usual way and read at leisure. On the other hand, in these times of increasing specialization, these meetings serve an extremely useful purpose in permitting contacts among people living far apart and engaged in diverse but related fields. Members who attended the Leiden congress have profited from it in inverse proportion to the number of afternoon meetings that they attended. The morning joint sessions were usually valuable for everybody. In the afternoon meetings there were few who could profit by listening to more than perhaps two papers. The value of future congresses of this kind will be judged exclusively on the basis of how much informal contact they have promoted.

#### REFORM OF INTERNATIONAL MEDICAL CONGRESSES

Under this heading there appeared in the Foreign Letters department of the *Journal of the American Medical Association* [156 (1954) 734] a comment on the 24th Northern Congress of Internal Medicine held in Stockholm in September 1954, the gist of which follows.

Prof. Einar Meulengracht, of the Bispebjerg Hospital in Copenhagen, who is to be president of the next congress, to be held in Copenhagen in 1956, had expressed the opinion that the organization of the 1954 meeting did not reflect the profound changes that have taken place in the dissemination of recent knowledge. At one time, important discoveries were deferred until they were announced at some international meeting after being kept in "cold storage" for a year or two. Now such discoveries are reported at the meetings of local medical societies or in the medical press. In these and other ways they become general knowledge, and attendants at international congresses know to a large extent what is the content of the formal papers to be presented.

[This is the part of that note which is pertinent to the problems which concern the leprologists. It goes on to say that Meulengracht's remedy would be to promote round-table conferences attended by small groups interested in some special subject. The correspondent commented that Meulengracht's scheme of reform would prove particularly acceptable in the comparatively small Scandinavian medical world, whose members know each other better than do the members of large communities.]

#### COUNCIL FOR INTERNATIONAL ORGANIZATIONS OF MEDICAL SCIENCES

The foregoing item contains a statement by the CIOMS. To some extent the following material is a continuation, or reiteration, of what appears there, but it also deals with the Council itself and its continued functioning. There are ominous undertones.

##### CIOMS GENERAL ASSEMBLY, 1955

A report on the last meeting of the CIOMS, which appeared in the Foreign Letters department of the *Journal of the American Medical Association* [159 (1955) 1398], contained the following statements.

The Council for International Organizations of Medical Sciences held its third general assembly in Paris on Sept. 30 and Oct. 1. The Council, which was founded in Brussels, Belgium, in 1949, under the joint auspices of UNESCO and WHO, brings together most of the nongovernmental international organizations in the field of medicine.

The assembly was concerned with the present trend of international congresses, and it reexamined the real functions of these meetings in the light of the changed situation brought about by specialization and the increased output of scientific research in various fields. On the one hand, the more general congresses were becoming too large, the numbers of papers read too great, and the opportunities for real discussion too rare. On the other hand, specialization tended to increase the number of meetings, and these specialized meetings often lost contact with their parent disciplines.

As international congresses *are not the best mediums for reporting scientific discoveries* [italics ours], it was agreed that much could be done to improve the opportunities they offered for personal contacts, for disseminating information to a wide international audience, and for arranging international symposiums and other related activities.

The assembly decided to promote a shift from individual participation to group participation through pre-congress working parties and symposiums, or by the appointment of experts to make digests of related communications, through a greater participation of young research workers, and through the holding after a congress of special international courses for the host country, in particular cases.

##### FUNCTIONS AND NEEDS OF THE CIOMS

Following the assembly, two communications have been seen from Dr. Maurice B. Visscher, general secretary of the International Union of Physiological Sciences, University of Minnesota, Minneapolis, on the functions and needs of the CIOMS. The following consists of excerpts from one in *Science* [123 (1956) 337].

The CIOMS is now six years old and has demonstrated its usefulness in a difficult area of essential activity. Scientific organizations are obviously useful to scientists or they would not continue to exist and flourish. However, there are more obvious, more direct, and more personal services performed by societies covering



a single discipline in a single country or region than is the case with interdisciplinary and international organizations. Nevertheless, there are strong reasons for maintaining and promoting nongovernmental activities in science at interdisciplinary and international levels.

Many serious students of science believe that the fragmentation owing to specialization and the increments in volume of publication threaten to throttle advancement of basic knowledge . . . [It is obvious that] the age of the nonspecialist is past. Every scientist must limit his systematic reading of original literature to subspecialties. It is primarily for reasons related to these facts that abstracting and indexing journals, annual reviews, summarizing literature, and the like are indispensable to science and scientists. Likewise, the special services of seminars, symposia, summarizing lectures, and discussions become more pertinent to the ongoing of science.

CIOMS, at its third assembly . . . had the task of formulating a program for international, interdisciplinary work for the next period and preparing a budget to present to WHO and UNESCO, its major financial supporting agencies, to aid scientists in medicine to improve communications. Obviously we must do what we can with existing tools, but we should also attempt to improve our tools . . . CIOMS is in a strategic position to promote integration of effort. The only force it has is persuasion, because it is made up of private nongovernmental organizations. It has no vested interests and no national pride. It is interested in getting jobs done effectively for medical science and its application to the welfare of man. It can be altruistic because it has no other justification for existence.

CIOMS is in some danger of losing the support of its sponsors because it does not have as wide organizational support in various countries as it should if it is to function effectively. Most scientists are greatly preoccupied with their immediate research problems and service functions. They rarely take the time or trouble to concern themselves with thought and action about the mechanisms that are essential to the long-time promotion of science. They take journals of primary and of secondary publication for granted. They appear to assume that seminars, symposia, and general lectures "just happen," and that their thought and effort are not needed for improvement or even for continuance.

It is undoubtedly true that voluntary international cooperation is difficult, and that it has frequently been frustrating. But as our world shrinks in effective time and space, and as we approach greater interdependence, and particularly as science becomes a world enterprise, such cooperation becomes imperative. We must be willing to devote some of our time and energies to planning and executing cooperative ventures. The world interest in the development and extension of medical knowledge and its utilization should encourage us in our efforts in this organization. CIOMS is the first world-wide interdisciplinary organization in the medical sciences ever to be established. It was born out of the optimism of the late 1940's, but if it should collapse it will take even more optimism to begin another such unusual venture.

From the other communication by Dr. Visscher, which appeared in the *Journal of the American Medical Association* [160 (1956) 135], the following is taken.

The main interests of CIOMS have been in assisting in the planning for international congresses, in organizing scientific symposiums, in arranging conferences to assist international collaboration in making medical literature more accessible, and in working on similar projects. In general, the council is operating to improve and facilitate "communication," both oral and printed, among students of all branches in medicine, in all parts of the world. Its uniqueness lies in the fact that it is the only organization that embraces the entire field of medicine and clinical and fundamental sciences, through the membership in it of the major international organizations

in each field. The council is supported in part by WHO and by UNESCO, because it can perform important functions that those intergovernmental agencies cannot do directly. At the present time the council is expanding its program and is looking for private support from persons or foundations having an interest in the promotion of human welfare by assisting in international cooperation in promoting medical science and its applications. This private support will be in addition to WHO and UNESCO subsidy. Mr. Paul van Zeeland of Belgium is the chairman of an international committee seeking such support . . . and assistance . . . will be much appreciated and, in fact, is needed.

As leprologists who attended the Madrid congress are aware, CIOMS not only assists in planning such gatherings but also in setting them up. Thus, in 1953 it made a grant of money to the International Leprosy Association to help defray preliminary organizing expenses, and also supplied the simultaneous interpretation system at the meeting itself. From a private source we have learned that WHO and UNESCO intend to reduce their subsidy of CIOMS in the future, with expectation that ultimately its financial support will come mainly from the member organizations. If that is the case, the private support of which Dr. Visscher writes will be all the more needed.

#### FIRST CONFERENCE AT CARVILLE, PROGRESS AND POTENTIALS IN LEPROSY INVESTIGATIONS

This conference, held under the sponsorship of the Interbureau Advisory Committee on Leprosy of the U. S. Public Health Service, was held at the National Leprosarium at Carville, Louisiana, on January 10 and 11, 1956. The program provided for four sessions, on (1) bacteriology and animal inoculation; (2) immunology, biochemistry and pathology; (3) metabolism and nutrition, chemotherapy, and epidemiology; and (4) clinical and clinico-pathological studies at Carville, this last presented by the Carville staff. On the evening of the 11th there was a meeting of the Public Health Service Subcommittee on Leprosy Research, and on the 12th one of the Public Health Service Interbureau Advisory Committee on Leprosy, both meetings closed.

The following report has been supplied by Dr. James A. Doull, one of the 25 scientists who attended the conference in addition to the staff of the hospital. (A full list of participants is to be found in the January issue of the *Carville Star*, pp. 5 and 7.) Welcoming addresses were made by Dr. Eddie M. Gordon, Medical Officer in Charge, and by Dr. G. Halsey Hunt, Assistant Surgeon General and Associate Chief, Bureau of Medical Services.

Mycobacteria in intracellular environment, by Dr. John H. Hanks. In this paper the speaker, of the Leonard Wood Memorial Bacteriology Laboratory at the Harvard Medical School in Boston, discussed his attempts to cultivate both the human leprosy bacillus, *Mycobacterium leprae*, and a mycobacterium which causes a somewhat similar disease in rodents, *M. leprae murium*. One reason for failure is the difficulty of eliminating inhibitory substances present in serum used in culture media. He urged closer study of atypical forms of the tubercle bacillus and other mycobacteria which can be cultivated only under very limited conditions.

Some experiences with growth in HeLa cells of cultivable mycobacteria, by Dr. Charles C. Shepard, of the P. H. S. Virus and Rickettsial Disease Laboratory, Montgomery, Alabama. In the presence of certain lots of horse serum tubercle bacilli enter HeLa cells and multiply, but this does not happen with human serum. Horse serum, however, can be used to get the bacilli into the cells and then human serum is more favorable to growth than that of the horse. When the peculiarities of cultivable species are more fully known these methods will be applied to *M. leprae*.

Analysis of properties of mycobacteria by metabolic study, by Dr. Clarke T. Gray. The author having been prevented from attending by weather conditions, this paper was read by Dr. Hanks. The author and Dr. Arnold F. Brodie, also of the Leonard Wood Memorial Bacteriology Laboratory, are engaged in studies of the oxidative capacity of various mycobacteria and their extracts, in the hope that some clue may be obtained to the method by which the leprosy bacillus and other noncultivated species obtain energy for growth and multiplication.

Special procedures for inducing pathogenesis of *M. leprae* in animals, by Dr. William H. Feldman of the Mayo Foundation. This paper will appear in *Leprosy Briefs*, Jan.-Feb., 1956. The speaker reviewed the many attempts to transmit leprosy, urged adoption of newer methods for reducing host resistance and also the use of four animal species with which insufficient work has been done: anthropoid apes, especially chimpanzees; Syrian hamsters; young calves; and young swine. He suggested close cooperation with zoological gardens as a source of possibly susceptible wild animals.

A comprehensive program for the inoculation of human leprosy into laboratory animals, by Dr. Chapman H. Binford of the Public Health Service. Dr. Binford described plans for new experiments in transmission which he is undertaking at the Communicable Disease Center, Atlanta, Georgia. He also told of a procedure for preserving vitality of *M. leprae*, which has been perfected with assistance from the Philippine Department of Health, the Leonard Wood Memorial, the U. S. Air Force, and the U. S. Army, which will keep him and other investigators supplied with small amounts of leprosy tissue kept continuously frozen with dry ice from its removal from a patient in the Philippines until used for experimental purposes in the United States.

Some feasible approaches to a study of antibody response in leprosy, by Dr. Donald S. Martin, of the Communicable Disease Center. The session of immunology was opened with a discussion of the capacity of sera of leprosy patients to agglutinate tuberculin-coated red blood cells of the sheep (Middlebrook-Dubos test). This is a measure of anticarbohydrate titer. Results have not been entirely consistent but, in general, high titers are found in active lepromatous leprosy—higher than in active tuberculosis. In chronic infectious diseases consideration must be given to multiple antigens. It may be that in leprosy, as in blastomycosis, high titers against protein antibodies indicate a poor prognosis, especially if associated with a low anticarbohydrate titer. The speaker recommended that a few cases should be studied intensively with all available tests.

Progress studies; separation of leprosy organisms from tissues, by Mr. H. J. Henderson, of the Henry Phipps Institute, University of Pennsylvania. Discussion of a renewal of efforts, discontinued 15 years ago, to separate leprosy bacilli in undamaged condition from tissues, as a preliminary to chemical fractioning and immunologic studies.

Studies in serology, by Sister Hilary Ross, biochemist, Public Health Service Hospital, Carville. In this review it was stated that one of the promising antigens which she had used had been furnished by Dr. Olmos Castro, of Argentina. It is made from human lepromatous tissue, and contains neutral fats, fatty acids, cholesterol and lecithin. It contains no protein or glucosides. She found, in agreement with Olmos Castro and his colleagues, that lepromatous cases are usually

positive, tuberculoid cases infrequently positive, and normal individuals rarely so. In collaboration with Dr. Kluth of the Leonard Wood Memorial it was found, in a limited experience, that household contacts of leprosy patients are sometimes positive.

The properdin system and its possible uses in studying immunity and bacteriology of leprosy, by Dr. Jack W. Millar, Lt. Comdr., U. S. Navy Medical Corps. Dr. Millar discussed the possible applications of the newly discovered properdin system in the study of leprosy. It has been found that properdin, a normal serum protein, may destroy or inactivate certain bacteria, neutralize some viruses, and cause lysis of red blood cells. The properdin level of the serum may be associated with resistance. Conceivably an animal might be made susceptible to leprosy by blocking properdin with certain chemical substances.

Induction of reactivity to lepromin by BCG, by Dr. James A. Doull of the Leonard Wood Memorial. Reactivity in the lepromin test is interpreted by many leprologists as evidence of some degree of resistance. It has been claimed that vaccination with BCG will cause children to become reactive to lepromin. In an experiment on Mactan Island, Cebu, Philippines, supported by a grant from the National Institutes of Health, it was found by Drs. R. S. Guinto, M. Mabalay, and Doull that BCG does cause such conversion but that unknown natural causes and the stimulation of the lepromin test itself act in the same direction, although much less rapidly.

BCG vaccine in experimental murine leprosy, by Dr. Charles M. Carpenter. (The author was unable to attend the conference.)

Protein patterns in leprosy, by Dr. R. J. Muelling, Jr., Louisiana State School of Medicine. In lepromatous leprosy it has been known for some time that the blood serum proteins may be increased chiefly because of a rise in the globulin fraction. Dr. Muelling has been applying the methods of paper electrophoresis in a preliminary attempt to define more closely the protein patterns at different stages of the disease.

What histopathology studies offer to the future of the problem of leprosy, by Dr. George L. Fite of the National Institutes of Health. After discussing the historical evolution of the classification of the disease, the speaker pointed out the need for closer and long continued observation. A substantial proportion of children of leprosy parents at Culion, Philippines, he said, have been found to have hazy macules at a very early age. Some of these children develop full blown leprosy. The majority apparently do not, for reasons which are unknown. We are busy studying "late" lepromatous disease, when it might be much more rewarding to investigate thoroughly these early and often transient lesions.

Some relationships between nutrition and infection, by Dr. Floyd S. Daft. (The author was unable to attend.)

Amyloidosis in leprosy; observations in pathology, by Dr. Lawrence L. Swan, Lafayette Medical Laboratory, Lafayette, Louisiana. This condition was discussed as possibly related to diet or metabolism. Amyloidosis and its complications are the causes of death in the majority of cases of leprosy in the United States, but, for reasons which are unknown, it is infrequent in other countries. It is associated with abnormalities of the serum globulin, and Dr. Swan emphasized that there is a good opportunity at Carville to study its pathogenesis and perhaps discover a method of prevention.

Chemotherapy of murine leprosy, by Dr. Y. T. Chang, Leonard Wood Memorial Fellow in Pharmacology at the National Institutes of Health. Dr. Chang reviewed five years of experimental chemotherapy of murine leprosy (caused by *M. leprae murium*). The most effective drugs thus far discovered are isoniazid and certain of its derivatives, but no drug has been found which does more than temporarily arrest the progress of the disease in rats and mice.

Clinical evaluation studies of the Leonard Wood Memorial, by Dr. J. A. Doull



Leonard Wood Memorial. This was a discussion of four years of work in the evaluation of various drugs in human leprosy. As far as can be judged after one year's treatment, streptomycin and the sulfones have about equal value. Combination of these drugs with one another, or of either with isoniazid, offers no advantage. There is urgent need for a really effective, curative and bactericidal drug.

The epidemiology of leprosy in Louisiana, by Dr. L. F. Badger, of the Communicable Disease Center. Dr. Badger produced statistics to support his opinion that leprosy is more contagious than is usually thought. He pointed out also that "subclinical" or "missed" cases were responsible for most leprosy in Louisiana, because the majority of cases cannot be traced to previous contact. The average age at onset appears to be getting higher in Louisiana, as the disease diminishes in frequency.

Leprosy control in Louisiana, by Dr. William H. Meyer, of the Communicable Disease Center P. H. S., and the Louisiana State Department of Health. Dr. Meyer mentioned the long history of the disease in this state. It was probably introduced by early Spanish settlers, but slaves from Africa are another probable source. There is no historical support for the assertion that the Acadians brought leprosy to Louisiana. In 1766 the Spanish governor made the first attempt at controls by isolation of patients at Balize, near the mouth of the Mississippi. In recent years it has become progressively less frequent. An outpatient clinic is conducted by Dr. Meyer at the Public Health Service Hospital, New Orleans.

Leprosy in Texas; the risk of contracting the disease in the household, by Dr. Fred C. Kluth, of the Leonard Wood Memorial and the Texas State Department of Health. Leprosy incidence remains more or less the same in Texas; there were 24 new cases in 1955, from the usual foci, chiefly in the southeastern section of the state. An interesting point is that families in which cases have occurred seem to have had a higher risk than other households *prior* to the supposed onset of the disease in the discovered patient. A number of explanations were suggested, the most probable being that the patient may have been in an unnoticed infectious condition long before signs which could be related to leprosy appeared.

Limitations of sulfone therapy, by Dr. Rolla R. Wolcott, clinical director of the Carville Hospital. More extensive data are necessary to establish the true frequency of relapse following sulfone therapy. Clinical cases were presented.

Seromycin trials in leprosy, by Dr. Frank E. Lundin, Jr. The speaker presented a few patients being treated with seromycin (cycloserine) as a supplement to sulfones. The time of the experiment had been too short for conclusions as to value, but the antibiotic had shown no evidence of toxicity in the dosage used.

Hemoglobin types in leprosy, by Dr. Horatio C. Wood IV.

Electrolyte studies in leprosy, by Dr. Frank E. Lundin.

The treatment of ocular complications, by Dr. Stephen J. Herbert. Lepromatous invasion of the eye, if unchecked, leads to destruction and blindness. During acute episodes there is pain and photophobia. Since 1950, it has been possible to check the inflammatory process and prevent pain by local application of cortisone. (Clinical cases.)

The marianum antigen in leprosy, by Dr. Rolla R. Wolcott. Dr. Wolcott presented a number of patients, in all of whom sulfone treatment had failed, whom he is treating with monthly intradermal injections of a killed culture of *M. marianum*, a mycobacterium isolated from a leprosy nodule by Sister Marie-Suzanne, of France. Some local reactions have been severe, but none serious. It is too early to say whether this vaccine is beneficial. It is being used as a supplement to sulfone or other therapy.

Special features of the conference were the exhibits of the Armed Forces Institute of Pathology (Dr. Chapman H. Binford) and of the Public Health Service Hospital, Carville (photographs by Sister Hilary Ross).

The U. S. Public Health Service Subcommittee on Leprosy Research, of which Dr. Chapman H. Binford is chairman, is under the jurisdiction of the Public Health Service Interbureau Advisory Committee on Leprosy, headed by Dr. Halsey Hunt, assistant surgeon general. On the research committee, besides Dr. Binford, are Drs. Bädger, Wolcott, Shepard, Fite, and Dr. Doull of the Leonard Wood Memorial. It succeeded in crystalizing Public Health Service policy in the field of leprosy research, which activity was assigned to the Bureau of State Services which operates the Communicable Disease Center Laboratory near Atlanta, Georgia. It was because of recommendations of this committee that the conference reported above was held.

The first result of the efforts of the committee was the establishment of a laboratory for tissue culture work with the leprosy bacillus at the P. H. S. Virus and Rickettsia Laboratory at Montgomery, Alabama, under Dr. Charles C. Shepard. This work was begun in July 1954.

Dr. Morris Shaffer, chief of the Department of Microbiology, Tulane University, and his wife, Dr. Leah Shaffer, have a grant from the National Institutes of Health for the purpose of making bacteriological and serological studies in leprosy.

Dr. Binford himself, a member of the Public Health Service who is on a full-time leprosy assignment with the Armed Forces Institute of Pathology, has gone into the animal inoculation field, and has been assigned some 1,300 sq. ft. of laboratory and animal-house space at the Communicable Disease Center. The first inoculations were made in January 1956. Fresh lepromatous tissues are being obtained frozen with solid carbon dioxide. Some of the material comes from as far away as the Philippines, through a line of cooperative military communications through Tokyo and Washington.

#### FOURTH MEETING OF BRAZILIAN LEPROLOGISTS

The IV Reunião de Leprólogos, held in Belo Horizonte on January 25-28, 1956, under the auspices of the Sociedade Mineira de Leprologia, adopted and caused to be distributed the following:

#### DECLARATION OF PRINCIPLES

The leprologists of the nation, meeting under the auspices of the Minas Society of Leprology, after a careful study of the situation of the leprosy endemy in Brazil, believe it their inescapable duty to express, with loyalty and idealism, before the responsible agencies of the country their opinion of the problem and at the same time to plead for the cooperation necessary for the full accomplishment of the tasks which they face for the protection of the public.

They are induced to take this stand in consequence of the conclusions which have been arrived at from the epidemiological studies carried out in various regions of the country in the last ten years, in which has been found evidence of worsening of the endemy, as attested by the constant increase of the prevalence rate, according to which there now are two leprosy cases per thousand inhabitants.

This indicates that the method of prophylaxis needs to be readjusted to the

new scientific advances in this field of medicine, consisting of a better concept of the pathology of the disease, of new knowledge of its epidemiology, of the availability of more effective therapeutic agents, of the probability of increasing the resistance of the people against the infection by immunological means, and of improvement of health methods.

In view of these facts, we set forth the following principles and claims for the prophylaxis of leprosy.

1. Improvement of the method of prophylactic action with a view to rationalizing the work in order to give greater emphasis on early diagnosis, extensive treatment, protection of susceptible contacts, and health education.

2. Proper employment of segregation, limiting its practice to socio-medical requirements and the observation of prophylaxis.

3. Stimulation and promotion of education in leprology in all aspects and wherever its need is felt, as well as scientific research concerning the specialty.

4. Incentive to procurement of experts, considering their present numerical scarcity, by means of recompenses corresponding to the nature of the work.

5. Institution of a campaign administration modeled on and adapted from the National Tuberculosis Service and others, which would give greater flexibility in the application of its resources.

6. Bringing up to date the pertinent laws and regulations.

This document, addressed without distinction to all agencies capable of contributing to the solution of the problem of such great medical, social and economic importance, constitutes not only a warning but also a safeguard of future responsibilities. Really, it should be undertaken now to put into effect fully the measures indicated or the situation will certainly be aggravated from year to year, presenting a sad and depressing panorama for our country.

Those who solemnly sanction this declaration of principles have full authority to do so since they will know how to fulfill their duties with exemplary devotion, acting in accordance with the rules in effect.

The broken hopes and the deceptions experienced in the past many years of endeavor and sacrifices have caused us to make this declaration, calmly and without pessimism, in fidelity to the principles set forth by the VI International Congress of Leprology, the dictates of pure Christian sentiment, and the inspiration of the most fervent love of country.

The subject of the meeting, according to a report from Dr. Orestes Diniz, were: (1) Ten years of experience with sulfone therapy. (2) Epidemiology of leprosy, modern trends in prophylaxis, and organization of the antileprosy service. (3) BCG in protection against leprosy. (4) Place of leprology in the university curriculum and specialized courses. (5) The leprologists and his situation. (reivindicações)

### III CONGRESO IBERO LATINO AMERICANO DE DERMATOLOGIA

The following announcement and invitation, signed by Dr. Fernando Latapí, president, and Dr. Manuel Malarca, secretary, has been distributed for publication.

The Colegio Ibero Latino Americano de Dermatología, founded in Havana, Cuba, in 1948, has the honor to inform the members of this organization, as well as all dermatologists, that in accordance with the resolution adopted at Madrid in 1953, the third congress will be held in Mexico City, October 21-27, 1956.

In extending this invitation to this event, the program of which will be announced shortly, the Colegio hopes that through the presence and efforts of as many as possible of its members the Congress will be as successful as were the previous meetings.

## NEWS ITEMS

**Nigeria:** *Queen Elizabeth visits leprosaria.*—News reports of the visit of Queen Elizabeth and the Duke of Edinburgh to Nigeria in January-February gave some prominence to visits at certain leprosy institutions. One photograph seen shows her admiring a huge and intricate carving made by patients in one such place, and since she was accompanied by Dr. T. F. Davey, "research specialist at the colony," it is assumed that it was the famed Uzuakoli leprosarium, the center of research on the disease in the country. News stories (one of them headed, "Queen Walks Among Lepers"), tell of her going to the Oji River settlement, 30 miles west of the mining town of Enugu, where she went "to convince the world that the dread disease cannot be contracted by casual association with its victims." Dr. Arthur Garret, superintendent, showed her around. Inmate Boy Scouts and Girl Guides formed a guard of honor, and she chatted with many of the 630 patients—one of them a child "adopted" by Queen Mother Elizabeth, and another an "adoptee" of the Duke himself—and saw the training of students in handicrafts, carpentry, weaving, and as blacksmiths and tinsmiths.

**Turkey:** *Leprosy and leprosaria.*—In a news letter from Turkey in a somewhat old (1954) issue of the *Journal of the American Medical Association* there is information about 104 cases seen in 34 rural communities of Anatolia, and the treatment in the two leprosaria of the country. It is believed that the disease is rare below the age of 10, and rarer still below 5 (only 11% of the 104 were in the 5-14 years group), but it has occurred in a 1-year-old child. Most of those who seek advice (76%) are men, for women are reluctant to see a physician. At the 200-bed Elizag leprosarium in Eastern Anatolia, established in 1941, 720 patients (549 men, 165 women, and 6 children) have been admitted; 414 have been discharged as cured and 123 have died, mostly of tuberculosis, nephritis, pneumonia and cachexia. At the Istanbul-Bakiröy leprosarium there were 96 patients. Treatment is mostly with diasone; promin and promizole have also been used, but diasone is preferred. A cured patient who has had three negative nasal [*sic*] smears at 45-day intervals is discharged. He is given a certificate of health, put aboard a train, and returns to his family. The family, and also the health officer of the respective district—who is charged with the follow-up—are notified by telegram. Relapsed patients return willingly, but only a few readmissions had been recorded.

**India:** *All-India Leprosy Research and Training Institute.*—For some years it has been known that there was being established, at Chingleput, in Madras, a national institute for leprosy research and training, but specific information about its development and status has not been obtainable. It would appear that there has been some difficulty in the matter of a director for the initial period of operation. It has been learned that the position has been offered, in turn, to two American workers prominent in the leprosy field, neither of whom was able to accept. It now appears that arrangements have been made with Dr. Robert G. Cochrane, of England, to go to India for several months in an advisory capacity, and such further information as is available indicates that the job is the inauguration of the institute.

**Okinawa:** *The founding of Airaku-en.*—Last year the news magazine *Time* carried a lengthy story of one Yasujiro Aoki, a Japanese leprosy victim who started, after several frustrated beginnings, the place that is now the main leprosarium of Okinawa. Found to have leprosy at the age of 17, he made a pilgrimage of 88 holy places of Buddhism on his native island of Shikoku, but getting no relief went to an Anglican missionary hospital. After ten years, still not cured, he became a lay mis-



sionary; and in 1927, then 35, he went to Okinawa to help relieve the miseries of the leprosy sufferers there—people who were either kept hidden by their families or were left on the beaches to starve. Making his headquarters in a cave, he gathered together those he found, and helped them subsist with his own meagre funds; but at first they spurned Christianity because of the conviction that leprosy was an evidence of evil on the part of themselves or their ancestors. Quiet progress was being made when the Okinawans became aroused by a Japanese plan to build a leprosarium on the island. They burned the lumber intended for the buildings, destroyed Aoki's colony, and compelled the inmates to flee to an uninhabited island. Through intermediaries, however, Aoki acquired land on Yagaji island, and with the aid of two wealthy Japanese Christians the Airaku-en (Garden of the Haven of Love) colony was started. In the following year the Japanese government took it over and enlarged it, and its population increased from 42 to 242. With the coming of the war the Japanese turned on the Christians, and holding Aoki to be a spy drove him out, finally to live in an abandoned tomb. Before the war ended American bombers destroyed the place, believing it to be a submarine base, and the inmates had to take to caves. Later, Aoki started to rebuild, and then came the U. S. Army and restoration; the colony now has 924 residents. Aoki was made a lay reader for the Protestant Episcopal Church (U.S.), and for a time acted as minister until the first permanent one came from Japan in 1954. Aoki, a burned-out case with deformities, now aged 63, continues in active service.

**Korea: Leprologist on tour.**—Under the auspices of the Korean government and WHO, Dr. Shi-ryong Choi has been spending some months observing leprosy work in various centers in Southeast Asia. Dr. Choi, who served for five years at the Little Deer Island leprosarium, which now has almost 6,000 patients, has for the past two years been in charge of the Dai-Myong Won leprosarium (for veterans) near Seoul, where he is attached to the Chronic Diseases Control Section of the Ministry of Health and Welfare. During the tour he was to spend somewhat more than three months in or with various institutions and units of the leprosy service in the Philippines.

**Fiji: Priest with leprosy celebrates anniversary.**—A dispatch from the Makogai Settlement, in Fiji, reported that last year Fr. Eugene Choblet, aged 78, who had suffered from leprosy for 28 years, had celebrated the 50th anniversary of his ordination. On the day of his jubilee he received a letter and blessing from the Pope. For the first 22 years of his work he was in the Gilbert Islands, and before he was able to return to France he was found to have acquired leprosy. He then went to a colony on Tarawa Island, then a new one, said to have been laid out as much like a native village as possible. There he transformed the spirit of the place, and was made its district officer. When he was sent to Makogai does not appear, but he is said to hope that he may spend his last days in mission work among the Gilbert Islanders.

**United States: Fifteenth anniversary of sulfone introduction.**—Dr. F. A. Johansen, retired, replied to an inquiry that according to his personal records sulfone treatment (promin) was first used at the Carville National Leprosarium in February 1941, the work assigned to Dr. Frank McCreary at a time when Johansen himself was engaged in another study. That date is also given in a story entitled "The Turning Point" in the *Carville Star* for November-December 1954. There it is said that Dr. G. H. Faget, then medical officer in charge, having learned of a trial of promin in experimental tuberculosis at the Mayo Clinic, asked Parke, Davis and Co. for some of the drug for an experiment in treating leprosy, and they supplied it. Although other facets of the story of exactly how it all started have been heard, this one is said by Johansen to be substantially correct.

*New bacteriological method reported.*—A report published in February in the *N. Y. Times* tells of information originating from Dr. J. H. Hanks, of the bacteriology department of the Leonard Wood Memorial, of a new method of studying the metabolic activity of leprosy bacilli. The method permits the determination of the proportion of bacilli in a preparation that are alive, as well as their infectiousness. It can be applied when there are only a few bacilli present, as in early lesions and in treated patients. Results can be obtained within 24 hours, whereas by ordinary methods—if the leprosy bacilli were cultivable—the time involved would be much greater. In fact, the discovery came from the fact that these bacilli cannot be cultivated; measurements of metabolic activity made for that reason led to the development of the refined method, by means of which it is possible to measure the activity of a single leprosy bacillus by microscopic observation.

*Chaulmoogric acid synthesized.*—Chemists at New York University, Kurt Mislow and I. V. Steinberg, have synthesized chaulmoogric acid, according to a report in the *Journal of the American Chemical Society* [77 (1955) 3807] mentioned in *Science*. Because chaulmoogra has been largely replaced in leprosy treatment by synthetics, the chief importance of the work is the insight the synthesis gives into the molecular structure of certain fats. Of all the seed-fat acids, chaulmoogric is unique in being a cyclic, unsymmetrical structure. Its two stereoisomers are the same when they are represented in a projection formula but are different, structurally, in space. One form is the mirror image of the other, but the two are different when they are viewed in three dimensions, and only one of the forms, the dextrorotatory one, occurs in nature. Besides synthesizing the natural form, these workers have determined its spatial arrangement and thus, automatically, that of the unnatural or levorotatory form. Because it was understood that this synthesis had been made many years previously, this note was referred to Dr. H. I. Cole, for several years the chief chemist at the Culion colony and then chemist for the League of Nations in Rio de Janeiro. He pointed out that G. I. Perkins, in 1927 at Culion [*J. American Chem. Soc.* 49 (1927) 1070], made the first *total synthesis* of chaulmoogric acid, the optically inactive dl-chaulmoogric acid, from simpler organic compounds (aceto-acetic ester condensed with 2-cyano undecanoyl chloride and then with  $\Delta^2$ -chlorocyclopentene). The product was a mixture of dextro- and levo- forms, and not the naturally-occurring dextrochaulmoogric acid. He did not separate the two stereoisomers. Roger Adams, in 1929 [*J. A. C. S.* 51 (1929) 1515], made the dextrorotatory form of chaulmoogric acid by starting with the natural dextrorotatory hydnocarpic acid. This was a partial synthesis. Mislow and Steinberg have now made the first total synthesis of the naturally-occurring dextrorotatory chaulmoogric acid, by starting with the dextrorotatory form of 2-cyclopentene-1-acetic acid and ethyl hydrogen brassylate. They also proved the spatial arrangement of the dextro- and levo-rotatory forms by two independent paths of oxidation and reduction to compounds whose spatial arrangements had already been proven, establishing the configuration of chaulmoogric and the homologous acids of the series. The two paths were: (1) Oxidation of (+)-2-cyclopentene-1-acetic acid to (—)-3-carboxy adipic acid, whose configuration is known. (2) Reduction of (—)-2-cyclopentene-1-acetic acid to (—)-3-ethyl cyclopentene followed by oxidation to (+)  $\alpha$  ethyl, glutaric acid, whose configuration is also known.

*Peru: Changes at the San Pablo leprosarium.*—A recent report in the *New York Times* tells of marked changes, from the physical and medical points of view, in the San Pablo de Loreto leprosarium, Peru's largest with 600 patients. Located on the bank of the Amazon some 200 miles downriver from Iquitos, it was founded in 1924. In the earlier days the inmates were taken there on rafts and put ashore to fend for themselves, without medical treatment and with few other facilities. During the past few years the Peruvian government, with technical assistance of the Inter-American Public Health Service of the Institute of Inter-American Affairs, had

made material improvements at the cost of the equivalent of more than \$300,000. In 1951 the Inter-American Service took over the administration of the leprosarium and provided technical assistance; and a program of construction and renovation was undertaken by the government. The administration was turned back to the Ministry of Public Health in 1954; the improvement project ran out of funds and is stalled. The administration center of the institution is located a mile upstream from the colony itself, and visitors are required to change clothing there before proceeding downstream by boat. As described, the colony is still far from ideal, lacking even a portable water supply, but the medical situation has improved to a point that persons with leprosy are now presenting themselves voluntarily. With sulfone treatment there has been notable improvement in many of the patients, of whom 76% are of the malign form. In 1955, 15 were released as cured, and 87 others are expected to leave shortly. Released patients are required to report for a two-year period for clinical and laboratory check-up at some one of the six control stations in the Amazon region.

**Norway:** *Status of leprosy.*—Dr. Reidar Melsom reports that at the end of 1955 there were only 8 leprosy cases remaining in Norway, no new case having appeared during the year. Six (3 males and 3 females, only 1 of them lepromatous) remain in Pleiestiftelsen No. 1; 2 patients (1 male, 1 female) live outside the hospital. Two (1 male, 1 female) left the hospital in 1955 after promin treatment, both clinically arrested.

**France:** *World Leprosy Day.*—In February there was received, from Raoul Follereau, president of the Order of Charity, member of the Academy of Colonial Sciences, commander of the Pontifical Order of the Holy Sepulchre, chevalier of the Legion of Honor, "Vagabond of Charity," and reputed inspirer of the congress on rehabilitation of the Order of Malta in Rome, a circular letter announcing that January 29, 1956, would be the IIIème Journée Mondiale des Lèpreux. In 1955, it is stated, 62 countries took part in this day, and it was hoped to extend to the entire globe this effort to call attention to the "lamentable, and often very cruel, fate reserved for the 10 million human beings whose only crime is to be sick." On their behalf, it is stated in a sort of press release, he had recently sent to the "Great Ones of the Earth" a letter of appeal in which he recalled his 1952 appeal to the Assembly of the United Nations, endorsed by the French House of Representatives; and a letter sent in 1954 to the President of the United States and to the Council of Ministers of the Union of Soviet Socialist Republics, asking from each the donation of one bombing airplane, "because with the price of one of these engines of death we could give treatment to all the lepers in the world." He now calculates that that end could be attained if there were available one dollar for each \$20,000 of the 1954 armament budgets of the United States, Russia and Great Britain.

**England:** *Compulsory hospitalization for tuberculosis.*—The magistrates of Haverfordwest, Wales, according to a report in the *Journal of the American Medical Association*, have ordered the compulsory hospitalization of a laborer with four children who had not worked for some time and who had pulmonary tuberculosis. A few weeks after this laborer had been admitted to hospital, he had left against medical advice and returned home. Although he was a source of infection, he used public transportation. He refused to return to the hospital, and under the Public Health Act of 1936 the magistrates ordered his removal there for three months. Although this is the maximum period of detention allowed, renewal of this period can be ordered subsequently if necessary. Although the Public Health Act has been in effect for nearly 20 years, it is seldom invoked.

**WHO:** *Leprosy survey in Iraq.*—In September 1955 WHO appointed Dr. M. Dalgamouni, Egyptian leprologist, as consultant to the government of Iraq to survey

the leprosy situation and make appropriate recommendations for its control, according to the WHO *Chronicle*. .....

#### PERSONALS

MR. PERRY BURGESS, president of the Leonard Wood Memorial, has received the 1956 award of the Damien-Dutton Society, presented to him at a luncheon meeting held in Brunswick, N. J., the home of the society, in recognition of his work as the president of the Leonard Wood Memorial.

DR. ORESTES DINIZ, for many years head of the leprosy service of Minas Gerais, has been appointed director of the National Leprosy Service of Brazil, vice Dr. Ernani Agricola, retired.

DR. JOSÉ N. RODRIGUEZ, head of the leprosy division of the Bureau of Hospitals in the Philippines, attended the recent meeting of the WHO Executive Committee in Geneva, Switzerland.

FR. JOSEPH SWEENEY, a Maryknoll missionary who founded the Gate of Heaven Leper Colony in South China in 1931 (300 patients in 1953), and continued there during the Japanese occupation and the first years of the Communist regime, until he was expelled, is now working at the St. Lazarus Leprosy Colony at Anyang, Korea, one of the Maryknoll missions in that country.