REPORTS

THE AMERICAN ACADEMY OF TROPICAL MEDICINE¹

In view of the importance of tropical medicine in our present activities in tropical war theaters and in view of the world-wide significance of the problems involved now and in the immediate future, it has seemed desirable that the program and recommendations of the American Academy of Tropical Medicine, which have been prepared on request and have been unanimously endorsed by the academy and approved by the American Foundation for Tropical Medicine, be placed on record for the scientific public. Since no scientific organ has as wide-reading public as does SCIENCE, it is appropriate that this report should appear in full in this journal.—EENEST CARROLL FAUST, Secretary, American Academy of Tropical Medicine.

Ι

INTRODUCTION

At the tenth annual business session of the American Academy of Tropical Medicine, held in Cincinnati on November 17, 1943, the following resolutions were adopted:

1. That the president be authorized, with the advice and consent of the council, to appoint a committee to elarify the relations of the academy to the foundation's program, and to make specific recommendations in order to activate the provisions of the constitution of the academy with respect to education and research in tropical medicine in the United States and in the international field.

2. That the council be authorized to take action on behalf of the academy on the report of this committee and to implement such of the recommendations as may seem advisable.

3. That the council be instructed to recommend to the foundation support of the program to be developed.

Following the adoption of the resolution by unanimous vote, President L. W. Hackett announced the appointment of the following persons as members of the committee: Dr. N. Paul Hudson; Dr. Alfred C. Reed; Dr. Wilbur A. Sawyer, *Chairman*; Brigadier General James S. Simmons; Dr. R. E. Dyer; Dr. George C. Shattuck; Dr. E. C. Faust, *Secretary*.

At noon on the following day a brief meeting of the committee was held between sessions of the American Society of Tropical Medicine. By invitation Dr. T. T. Mackie, president of the American Foundation for Tropical Medicine, met with the committee. It was agreed that the several members would send in suggestions and that the chairman thereafter would prepare a tentative draft of a report and submit it for amendment and correction and finally for adoption by mail vote. Dr. Mackie emphasized the need of the foundation for the academy's recommendations as to program and urged that they be made available by the middle of January.

A few days later, on November 20, 1943, Dr. E. C. Faust, secretary of the academy and member of the committee, wrote to the members asking them to send their views on the questions before the committee to the chairman without delay. All members had been heard from by December 20, 1943.

The questions before the committee are two: (1) What is, or should be, the relation of the academy to the foundation's program? (2) What program of education and research will the committee submit to the council of the academy for recommendation to the foundation?

II

THE RELATION OF THE ACADEMY TO THE PROGRAM OF THE FOUNDATION

The constitution of the American Academy of Tropical Medicine contains the following statement of purposes as formulated when the academy was organized in 1934:

Purpose: The purposes and aims of The American Academy of Tropical Medicine, Incorporated, shall be:

1. To further the extension of knowledge for the prevention of human and animal diseases of warm climates by stimulating interest, inquiry and research into their distribution, causes, nature, treatment and methods of control.

2. Through designated committees in the several fields of knowledge contributing to tropical medicine, to provide a current survey of work in progress in tropical medicine and sanitary and hygienic work related thereto.

3. To coordinate American work in tropical medicine to the end that unnecessary duplication and overlapping shall be avoided as far as possible, and that valid lines of study shall not be neglected.

4. To function as a central source of information for the advantage of investigators in this field of knowledge.

5. To cooperate with other agencies interested in maintaining and obtaining support for tropical medicine, both in a financial way and to the end that the medical professions, the general body of scientific workers and the general public may be better informed regarding the values and needs of tropical medicine in national and international programs.

6. To receive funds and administer them through grantsin-aid and in support of definite projects related to the purposes and aims of the academy as set forth in paragraph 1.

Although paragraph 6 of the "Purposes" suggested that the academy would receive funds and administer them in support of projects, etc., it appears that from the beginning it was recognized that the academy as a scientific body would not interest itself in soliciting funds from the public for tropical medicine, and there-

¹ Report of the committee on the relations of the academy to the program of the American Foundation for Tropical Medicine and on recommendations to the foundation for a program of education and research.

fore the formation of a foundation was suggested.² The suggested foundation was to be made up essentially of an executive group as contrasted to the scientific group in the academy. Dr. McKinley, in a letter which he quotes in the above-mentioned brochure, states that "Once the directorate of the Foundation of Tropical Medicine is created this new organization will proceed to raise funds to support work in this field of medicine." At that time it was plainly the purpose to have the academy and the foundation in close relationship, one preparing the program for developing the field of tropical medicine and the other, composed largely of executives of interested institutions, soliciting, holding and distributing the funds. Nevertheless, there was no mention of the Academy of Tropical Medicine in the certificate of incorporation or the by-laws of the foundation and the latter provided for a medical committee to make recommendations as to the medical value of projects. The general purposes of the foundation were similar to those of the academy, but more emphasis was placed on financial powers. The first directors were predominantly university presidents and other laymen.

With the passage of time the composition of the membership of the foundation changed and more medical men were included. The relationship to the academy, which had never been formally recognized, became less intimate and certainly more obscure. The following extract from a letter of the secretary of the foundation, Alfred R. Crawford, dated December 23, sums up the situation:

It seems clear, especially from the brochure, that it was originally intended that the foundation should be the fiscal and fund-raising body of the academy. The fact that Dr. McKinley was named the first executive director of the foundation when it was originally organized testifies to this intention. It appears that there would be interlocking boards of directors and a close identity of operations. These conditions may have obtained in the original foundation. As you know, the death of Dr. McKinley cut short the realization of the ambitious plans he had and since the reorganization of the foundation there has been no formal and little informal contact between the foundation and the academy and society.

The move to have the society and the academy name representatives on the board of directors of the foundation was taken on the initiative of the foundation during the past year. This was stressed at the meeting of the council of the academy in Cincinnati. The informal affiliation would, it was felt, be a means of identifying the foundation more closely with the work of the two related organizations and make it more truly the instrument which its originators had in mind.

I would judge the feeling of the group of council mem-

² Brochure on "The Development of Tropical Medicine in the United States," by Dr. E. B. McKinley, 1930, pp. 24-26. bers who discussed this matter in Cincinnati to be somewhat along these lines:

1. That the foundation should maintain an independent status though be guided by the academy and society.

2. That this be accomplished by representation of the society and academy on the foundation's board of directors. Dr. Faust was named the society's representative and will be elected at the meeting in February. Dr. Shattuck, who is already a director, has been, we understand, recommended as the academy's appointee.

3. That the foundation shape its program around recommendations formulated by a joint committee of the academy and society which would define the general type of teaching, research or allied work which the foundation should undertake to finance.

4. That the liaison be further strengthened by active assistance in such matters as selections for fellowships and through constant reference and interchange of information.

Following Dr. McKinley's death, Dr. T. T. Mackie was designated the official representative of the academy in the Foundation for Tropical Medicine. After Dr. Mackie was elected president of the foundation, Dr. G. C. Shattuck was nominated as representative of the academy on the foundation's board of directors (letter of Mr. A. R. Crawford of December 30, 1943).

The division of function between the academy and the foundation at the present time seems clear. The foundation's board of directors, on which the academy and the Society of Tropical Medicine will be represented, has full responsibility for negotiating and approving projects and appropriating available funds for their support. The academy, through its committees and council, is expected to express its opinions as to desirable developments in the field of tropical medicine and give the foundation the benefit of its judgment, when requested, as to the wisdom of going into specific projects. The foundation, unlike the academy, could maintain and finance the staff necessary to negotiate and investigate proposed projects and to determine the amounts and conditions of appropriations. It would seem unwise for the academy to operate even an information bureau, since the most reliable advice in response to miscellaneous questions could be made available by reference to the institutions and individuals most qualified to reply. In brief, the academy can accelerate progress in the field of tropical medicine by making authoritative pronouncements as to the needs in that field, by recommending general programs to the foundation when requested. by answering inquiries as to the advisability of specific projects of the foundation in their general features, and by giving moral support to the movement to improve teaching and research in tropical medicine, both curative and preventive.

In the present instance it is evident that the advice

of the academy with regard to program is invited by the foundation as its president, Dr. T. T. Mackie, has stressed to the committee the desire for early submission of suggestions for consideration by the foundation.

(1) It is recommended that the academy, while recognizing the independent status of the American Foundation for Tropical Medicine, respond to any invitation from the foundation for suggestions regarding its program by the submission of reports of appropriate committees through the council; and that, in case the invitation should be directed to the American Society of Tropical Medicine as well as the academy, the suggestions be prepared by a joint committee and submitted through the councils of the society and academy.

\mathbf{III}

SUGGESTIONS FOR THE PROGRAM OF THE FOUNDATION

The mandate to the committee, as expressed in the resolution authorizing its appointment, was in part "to make specific recommendations in order to activate the provisions of the constitution of the academy with respect to education and research in tropical medicine in the United States and in the international field." The academy's principal opportunity to advance education and research at this time would seem to be through suggestions to the foundation with regard to its program.

The committee bases its recommendations on its firm belief that tropical medicine will increase in importance to the United States after the war. The military necessities have revealed the inadequacy of the previous training of medical men in tropical medicine in this country. Emergency courses and field experience for military medical men and teachers in medical schools have been sponsored by the Army Medical School and private agencies but are not expected to continue after the urgent military need has passed. There is now great wartime activity and expenditure of funds in foreign countries in health and other fields by our government and institutions. The effect has been to bind these countries more closely to the United States and to lead the other American countries to look in this direction for postgraduate instruction in medicine and tropical diseases, as they once looked to Europe.

The committee is of the opinion that the main emphasis of the foundation in its program should be on the stimulation, expansion and improvement of facilities for graduate and undergraduate instruction in tropical medicine in the United States.

In the graduate field there should be strong schools or departments of tropical medicine for postgraduate instruction of medical men who are intending to teach tropical medicine or to practice it in this country or abroad. Such schools or departments should be in university centers containing schools of medicine and public health with teaching hospitals and practice fields and should have close relationship to departments of engineering and nursing. Ties to schools in the nearer tropics would be an additional advantage. The schools or departments of tropical medicine would be closely linked to the medical schools in the teaching of clinical tropical medicine and to the schools of public health in the even more important subject of disease prevention. The organized teaching in tropical medicine would need to go far beyond existing instruction in medical schools and in most schools of public health with respect to certain biological branches of learning related to the epidemiology of tropical diseases, such as protozoology, entomology and helminthology. Attention should also be given to the scientific consideration of the effects of geography. climate, racial composition, nutrition and social conditions on the epidemiology of disease in the tropics. Most certainly the prevention of disease, the suppression of disease-carrying insects and the prevention of the transportation of insect vectors between countries should be given careful consideration. Rapid transit is one of the factors which has brought this country closer to the tropics and made it more vulnerable to tropical diseases. The adequate teaching of epidemiology and biostatistics is fundamental.

(2) It is recommended that the foundation assist or bring into being a strong school or department of tropical diseases in each of the following regions of this country—the South, the Atlantic Seaboard and the Pacific Coast.

Comment: For the South the present support to postgraduate instruction at the department of tropical medicine of Tulane University should be continued and increased sufficiently to permit the sending of students to tropical Mexico for field experience and to justify the granting of a diploma in tropical medicine and public health. For the Atlantic Seaboard and the Pacific Coast the committee is not ready to make a statement of preferred institutions or cities, but the selection should depend to a considerable extent on the actualities or early prospects of adequate provisions for teaching medicine and public health in the centers under consideration. Consideration should be given to the strengthening of the School of Tropical Medicine in Puerto Rico now affiliated with Columbia University.

The schools or departments of tropical medicine would be expected to draw students from tropical America as well as from the United States. Taking special interest in foreign students from the tropics they would see that these students obtained the required medical and public health training under favorable conditions. Such students may need special language instruction and supervision during the early months of their studies, and racial factors may determine in part which school and community would be most favorable.

The subsidies to these schools should contain sums for research by faculty and advanced students, both at their institutions and in the tropics. The cost of travel makes foreign investigations and research expensive, but there is no question that productive field research adds to the prestige and value of the schools. If faculty members can cooperate with the health authorities of tropical countries in important investigations, without causing additional expenses to the foreign governments, they are usually welcome.

(3) It is recommended that the foundation make available grants-in-aid to competent investigators in important problems of tropical medicine, the research to be carried on within or without the schools and departments otherwise assisted, and inside or outside the United States.

Comment: The offering of grants-in-aid is an established technic of philanthrophic foundations. In this case it would imply that the Foundation for Tropical Medicine, through its own staff and its advisers, would be in a position to make competent decisions, in each field in which grants are given. The object of the grants-in-aid would be to produce needed knowledge through research while that of fellowships would be training for future service.

(4) It is recommended that the foundation establish a moderate but flexible number of fellowships and travel grants for graduate students from the United States or foreign countries and for teachers or prospective teachers of tropical medicine in the United States or abroad, and that the study be either in the United States or abroad, but that the fellowships be granted only under conditions as to future service by the individual, and that prospective students be interviewed by or for the officers before the fellowships are granted.

Comment: The study and observations under such fellowships or travel grants could be in the United States or in a foreign country, and should be wherever the opportunities are best. In some cases travel grants without stipend would be the most appropriate form of assistance, as the employing institution may be able to continue salary, but not to provide travel.

(5) It is recommended that undergraduate instruction in tropical medicine in medical schools be assisted by the foundation through fellowships to the teaching staff and through making available teaching materials, and in some special cases by grants-in-aid; and that opportunity be given key technicians of diagnostic laboratories of public health departments or hospitals to receive instruction in the diagnosis of tropical diseases under a special type of travel grant or fellowship.

It is recommended that assistance be given by the foundation to the American Journal of Tropical Medicine and the American Journal of Parasitology. The committee understands that the former is now on a self-supporting basis as a bimonthly journal, but it believes it would facilitate the spread of knowledge regarding tropical medicine here and abroad if the American Journal of Tropical Medicine could be issued monthly and could contain new departments for editorials, reviews, communications, etc., after the restrictions on paper have been removed. These journals are regarded as educational mediums and are therefore considered here.

(6) It is recommended that the exchange of professors between foreign teaching institutions of tropical medicine and those in the United States be arranged and subsidized at least to the extent of furnishing travel costs when not otherwise provided.

· Comment: It should be kept in mind that some of the best places for study, experience and research are outside this hemisphere, e.g., in Singapore or Calcutta, and should be considered as possible places of study along with the American tropical countries. To help foreign tropical countries to educate their own nationals in tropical medicine, while sending the most promising graduates abroad for supplementing training and experience, should be the ultimate educational objective, but in the meanwhile a considerable number of graduate students should be brought here from the tropics for more basic postgraduate training. Any idea that many United States physicians could find opportunities in practice in tropical medicine in foreign countries, is probably mistaken and should be corrected. Training in tropical medicine will be mostly for service in public health and governmental medical care. Nevertheless, our own government will doubtless share in an international responsibility to maintain and improve health in certain tropical and subtropical areas after the war and will need medical personnel trained in tropical medicine and its many specialties ranging from parasitology to nutrition. In any event a greater knowledge of tropical medicine by the medical profession of the United States is an urgent need.

This report has been reviewed, corrected and adopted by the committee, and is respectfully submitted to the council of the academy.

WILBUR A. SAWYER, Chairman

ERNEST CARROLL FAUST, Secretary Approved by the council of the academy and submitted to the American Foundation for Tropical Medicine, February 4, 1944.