

IV CONGRESSO DA SOCIEDADE BRASILEIRA DE MEDICINA TROPICAL

Por ocasião do IV Congresso da Sociedade Brasileira de Medicina Tropical foi encaminhada ao Presidente da S.B.M.T. e ao Presidente do IV Congresso a seguinte moção:

“Considerando a indiscutível gravidade da esquistossomose mansônica em nosso país;

Considerando que fatores de ordem econômica e social já em atuação possam vir a tornar ainda mais grave o problema;

Considerando a inexistência da necessária correlação entre os diversos ramos do conhecimento médico dedicados ao seu estudo;

Considerando que a falta desta correlação impede ou dificulta a formulação de uma linha prioritária mínima de pesquisas;

Considerando ainda que tal situação torna impossível ou muito difícil o estudo comparativo entre os resultados obtidos por diversas especialidades e mesmo de uma especialidade;

Considerando finalmente que por todos estes motivos, apesar dos enormes esforços individuais, de grupos de pesquisadores ou das próprias instituições governamentais não se tem conseguido formar um corpo de doutrina uniforme a respeito da doença nem combatê-la de modo eficaz;

Propõem, que, ouvido o plenário, a Sociedade Brasileira de Medicina Tropical:

Desenvolva um trabalho urgente no sentido da criação de um comitê nacional plurirepresentado com poderes normativos para: Planejamento nacional dos estudos julgados prioritários à compreensão e combate desta endemia compreendendo padronização de técnicas e métodos; divulgação periódica da bibliografia nacional; difusão de boletins informativos à classe médica em geral e com especialidade aos médicos rurais sobre conhecimentos e práticas relativas à doença; promover o entendimento deste órgão com a Organização Mundial de Saúde no sentido da obtenção de recursos; atrair a atenção e participação dos governos (municipal, estadual, federal), das universidades e instituições afins, para que uma visão globalista da doença fôsse possível estabelecer e o seu combate efetivo se tornasse eficiente.

Esta moção foi assinada por nomes representativos da Medicina Tropical brasileira, como Aggeu Magalhães Filho, Vital Lira, Donald Huggins, Virgílio Carneiro Leão, Naftale Katz e outros.

THE TEACHING OF TROPICAL MEDICINE *

William W. Frye, Ph. D., M. D. **

First of all, I want to express my thanks and sincere appreciation for the privilege of participating in this Congress. We are here to share our experiences and our ideas in a continuing international effort to improve the health and medical care services to our people. Medicine must always be held as an international discipline or combination of disciplines since the problems involving both health and disease do not recognize political or geographic boundaries. We who are constantly striving, through education, research and service, to prevent illness, control and/or eradicate disease and help to develop a health environment, must always maintain open lines of communication. More important than all else is our ability to work together as individuals, nationally and internationally. We at the University of Louisiana State School of Medicine are proud of our close relationships, maintained over the past decade with the Instituto de Medicina Tropical here in Recife and other areas throughout South and Central America.

The teaching of Tropical Medicine and Parasitology in the United States Medical Schools has been going through an evolution, and at times a revolution, as a result of our country becoming involved in wars and also expansion of our international trade and economic relationship throughout the world. Also with the development of the jet-age, world travel has brought us all much closer together.

A brief review of the development of

the Teaching of Tropical Medicine in the United States seems proper in view of present developments in world affairs. It is interesting to note that a small group of physicians who met in March 9, 1903, for the formation of an organization in Philadelphia for the Study of Tropical Diseases, were all members of the College of Physicians of Philadelphia and the majority held academic positions on the faculties of the University of Pennsylvania, Jefferson Medical College and the Medico-Chirurgical College, which later became the postgraduate school of The University of Pennsylvania. These men were not only interested in learning more about Tropical Medicine, but were also interested in being able to teach their students about diseases found in the tropics and subtropical regions of the world.

Why this development of interest by physicians in Tropical Diseases? There is little doubt but that a war, as has been true since, was directly responsible. The Spanish-American War of 1898, short as it was, lifted the United States to a new international responsibility in Tropical Health problems. Our country suddenly became involved in world medicine with major responsibilities in the Caribbean area and in the Pacific. Thus, the medical and allied health professions became involved in the health and medical problems of other parts of the world. It is also true that science and medicine were making great strides at that time as a result of progress in clarification of the etiology

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of certain of the infectious diseases endemic in the United States. The germ theory of disease had been proven beyond a doubt, and methods of prevention of certain diseases through a new field, immunology, was developing. Thus within a short period of time, our Medical Schools and our physicians became actively engaged in the teaching and practice of Tropical or World Medicine.

The early years of the twentieth century brought new developments in scientific methods and great advances in the science of immunology and in bacteriology. World War I brought another burst of interest in Tropical Medicine.

The development of Tropical Medicine teaching in our United States Medical Schools is of interest, since research and teaching are equally important functions of a University. The influence of the universities that have included teaching and research in tropical medicine cannot be over-emphasized as important contributors to maintaining an interest in the problems of international health and medical care.

In 1911, the Tulane University of Louisiana established the first Department of Tropical Medicine in the School of Medicine. It is of interest to note that the last Department of Tropical Medicine and Medical Parasitology to be established as a separate department was at the Louisiana State University in 1960. Teaching of Tropical Medicine had been in the Department of Microbiology up until that time.

From 1915 to 1940, a period of 25 years, teaching and research programs developed in a number of areas such as, Harvard Medical School, the School of Tropical Medicine in San Juan, which was part of the University of Puerto Rico, under the direction of Columbia University. In the University of California, the Pacific Institute of Tropical Medicine began as a division of the Hooper Foundation in 1929. Here special instructions were given in the laboratory diagnosis of tropical diseases, and a course in Tropical Medicine was given in the School of Medicine.

Although mention has been made of these few universities having special Departments of Tropical Medicine, it must be recognized that many others were active

in either research, in teaching or both. Many contributions bearing on Tropical Medicine emanated from other departments such as the Department of Parasitology at Johns Hopkins and the Departments of Preventive Medicine, Medicine, Microbiology and Clinical Pathology. There has also been a creditable amount of teaching and research in Parasitology and related fields in many of our graduate schools throughout the United States.

The interest in International Medicine by physicians, health workers, our Government, and philanthropic organizations in the United States is not of recent origin. *International Medicine and cooperation* in studies of World Health problems has grown out of a broadening realization of needs in a world which for many years has been gradually contracting; this as a result of technical evolution and other developments, such as the jet-age previously mentioned. With this closer relationship there developed an increasingly complex international economic and political interdependence, and the presence of disease in one region constituted a health hazard in other areas of the world.

Several organizations deserve mention as primary contributors to the development of research and teaching in Tropical Medicine. One of the first of these was the Pan American Sanitary Bureau which was created in 1902. The PASB, now the PAHO (Pan American Health Organization), was formed to deal with health problems of the Americas.

The contributions made by the International Health Division of the Rockefeller Foundation, in International Medicine, can never be equaled by any single organization. This great Foundation has demonstrated without question that of all fields of endeavor, international health is best suited to provide a mechanism for working together, without competition, in a cause which is of benefit to all peoples of the world.

Following World War I came the development of the League of Nations and the Health Organization of the League. The major objective of the Health Organization was to develop a world-wide medical intelligence service and to organize an effective mechanism for a continued global attack on major disease and health

problems of the world. This led to the formation of the World Health Organization and its international programs.

Regardless of our relationship to these international organizations interested in tropical medicine and the health problems of the world, teaching and research in the field of Tropical Medicine in the United States Medical Schools did not keep pace with the needs. Teaching of Tropical Medicine diminished as control of the so-called tropical and parasitic diseases diminished in the United States. Attention in our medical schools shifted from the major infectious diseases, such as malaria, hookworm disease, typhoid fever and others, which had been partially controlled, to the non-infectious or degenerative diseases. This became evident at the beginning of World War II. The inadequate teaching programs in the majority of our medical and graduate schools made it necessary to set up special courses in Tropical Medicine and Medical Parasitology for our medical officers and for our civilian teachers. Field experience was also provided in the Caribbean area for a few, in order to enhance their clinical epidemiological and overall knowledge for both service and teaching.

World War II, without question, did more than any other event in our history to stimulate interest in Tropical Medicine on the part of our teaching and research institutions, our medical scientists and our government. The advances made during and since the war in the treatment, control and eradication of certain major diseases of the world have made medical history. At the beginning of the war, we found ourselves with an inadequate supply of the drugs which are used in the treatment of one of the major parasitic diseases of the world, namely Malaria.

By the end of the war, the United States Public Health Service had developed, through the National Institutes of Health, a broad program of research in medicine and allied sciences. The Tropical Medicine and Malaria Study Sections were among the first to be formed to assist the Research Grants Division in selecting worthy research projects. These two study sections were extremely active for a few years after the war, but then the number of requests for support of research in these

fields gradually declined and the two study sections were combined.

During the fall of 1951, members of the Tropical Medicine Study Section and the Research Grants Division of the National Institutes of Health sponsored a two-day conference on Research Needs in Tropical Medicine. The objectives of the conference were to determine the needs for research and training in Tropical Medicine and to make recommendations.

One of the major recommendations presented at this conference was that a survey of the medical schools should be made "to determine the nature and extent of teaching and research in Tropical Medicine and Tropical Public Health". Two previous surveys of the Teaching of Parasitology and Tropical Medicine in the United States medical schools had been made, the first in December 1941, (2) at the request of the Association of American Medical Colleges. In that survey, 80 per cent of the medical schools reported no instruction at all in that discipline. The teaching of Tropical Medicine was even more deficient.

A large number of the medical schools assigned additional time for instruction in Parasitology and Tropical Medicine after the survey was made. They were aided by a program for providing intramural and field training to teachers of these subjects. In this program, financed by the John and Mary Markle Foundation, 130 instructors from 53 U.S. schools were awarded fellowships to take short courses at the Army Medical School or Tulane University, or to spend four weeks in Central America or both. The establishment of a distribution center for teaching materials at the Army Medical School also facilitated teaching.

In August 1945, the second survey of the teaching of Parasitology and Tropical Medicine was conducted (3). At that time, only one school reported no instruction and all others had added instruction and increased the teaching time for these subjects in the curriculum. Eighty-three per cent of the schools stated that they expected to continue the teaching program in Parasitology and Tropical Medicine in the post-war period as it was being conducted in 1945.

Following the 1951 Conference, Meleney and Frye, in 1955 (4), resurveyed the U.S. Medical Schools. This was completed in 1954. The resurvey showed that the number of hours devoted to the teaching of parasitology had declined slightly and was taught as a separate course in only 48 per cent of the schools. It was also found that the teaching of Tropical Medicine, as a recognized course in the curriculum, had decreased markedly since 1943. In 1945, ninety-five per cent of the schools reported specific hours of instruction in Tropical Medicine, whereas in 1954 only 30 per cent so reported.

The 1954 survey also disclosed that little or no funds were available for fellowships in Parasitology and Tropical Medicine. Over 50 per cent of the schools expressed a need for fellowships to obtain training and field experience for faculty members responsible for this area of teaching. At that time, it was recommended that strong action be taken by the Societies of Tropical Medicine and Parasitology to encourage support for increased facilities for teaching experience and opportunities for research in Tropical Medicine.

After the results of the 1954 survey were reported, Meleney and Frye presented a plan to establish a national Tropical Medicine fellowship program to be administered by the Louisiana State University, School of Medicine. A detailed program and a budget were prepared and presented, through the Tropical Medicine Study Section, to the National Advisory Health Council in early 1955. The Council recommended the program, but no funds for such a training program were available. The same response was received from other governmental agencies. Meanwhile, the China Medical Board of New York expressed an interest in this program because of its objectives, which were to promote research and teaching of the exotic diseases. Our proposal for the support of a Tropical Medicine fellowship program was presented to their board. This board, at its meeting on April 5, 1955, approved the request and an appropriation of \$80,000 was made to the Louisiana State Univers-

ity to support the program for a period of two years. During the initial stages of the Tropical Medicine fellowship program, a number of areas for field training had been visited in the Caribbean and in Central America. In the various countries visited, we received a cordial reception and assurance of support and cooperation in the development of the program, including facilities for clinical, laboratory and field experience.

The first fellowship group was organized for July and August 1955. Four yearly fellowship periods, each of two months duration, were planned with intervals of one month between each period. Due to the interest and success of the first year's program, the China Medical Board approved an additional year of support at \$40,000, making a total grant of \$120,000 for the three year period. At the end of this three-year period of support in 1958, the National Institute of Allergy and Infectious Diseases approved a request for funds to continue this fellowship program. Since that time, the program has been in continuous operation. To date, over 500 individuals, scientists, teachers and students, have participated in this program.

This fellowship program in Tropical Medicine has helped to stimulate a much broader interest in research, training and teaching in this field of medicine. We have made attempts to increase the scope of our interests in Tropical Medicine to include more than the narrow approach to only the infectious or communicable diseases of the tropics.

In 1959, a supplemental request was made to the Allergy and Infectious Diseases Institute, Training Grants Committee, for funds to establish a period of training for a carefully selected group of senior medical students from the United States Medical Schools. Many of our teachers who had been fellows in the program had suggested that truly dedicated students would profit by an opportunity to work in overseas areas. This type of experience, with competent local supervision, had been tried with a few senior medical students who were able to finance their

own program. A supplemental grant was approved for the senior medical student program which has been one of the most profitable and exciting experiences in the fellowship program. Students from our program have been regularly assigned to Professor Ruy João Marques, who is our coordinator here in Recife, at the Institute of Tropical Medicine. In each country where our fellows are assigned, we have a local coordinator or preceptor who arranges and supervises the local program. They are the individuals who make our fellowship program successful.

This overall fellowship program in Tropical Medicine has been in operation now since 1955. The program has been financed entirely by grant funds. Those who have participated in the LSU Tropical Medicine Fellowship program are now largely responsible for the teaching and research in this area in our medical and graduate schools. The pattern of teaching in both medical and graduate schools has been reorganized and adjusted to the needs. The interest and participation in International Medicine and in teaching and research continues to be a major interest to our faculties in the Schools of Medicine. As was mentioned previously, the curriculum content and number of hours devoted to the teaching of Parasitology and Tropical Medicine varies considerably in the various schools of medicine throughout the United States. There are few separate departments and one of the most recently created Departments of Tropical Medicine and Medical Parasitology is at the Louisiana State University School of Medicine. Our teaching staff in this department consists of two full-time Professors, four Associate Professors and one Clinical Professor. In addition, we have three Clinical Professors and two Clinical Associate Professors located in Mexico, Central America, Panama and Washington, D.C., who visit New Orleans once or twice each year to deliver special lectures, conduct seminars and consult regarding patients. Staff from other departments, pharmacology, microbiology, internal medicine and pathology also participate in the teaching program. This staff has had

many years of experience in overseas areas, particularly in Central and South America, and are well qualified in both teaching and research on the tropical diseases. We also have guidance from 35 teachers who are consultants for our fellowship programs, coming from many of the tropical areas, especially throughout Latin America. Four of our collaborators and consultants are located here in Recife, Dr. Ruy João Marques, Dr. Frederico Simões Barbosa, Dr. Eridan C. Abath and Dr. Guilherme M. Abath. These 35 teachers and research workers provide us with the knowledge and experience needed to conduct our training programs. Our teaching and research programs would be impossible without their cooperation.

In our department, teaching is provided for our third-year students, with two lectures and two laboratories of two-hours each per week, a total of six hours per week for a twelve week period. This course is required for graduation.

In addition, we have elective courses, extending from six to eight weeks. We also confer Masters and Ph.D. degrees in the department. In the training of graduates on our service at the Charity Hospital in New Orleans, the interns may elect a two-months program in Tropical Medicine. The residents may elect a longer period, including a two-month Tropical Medicine fellowship for overseas experience.

The stage is now set for a continuing development of cooperative programs in both teaching and research in Central and South America. This type of cooperation and exchange of ideas is essential for the progress of medicine throughout the world. Some of our programs, and there are not enough, make it possible for universities and scientists working in numerous institutions to undertake investigations of health problems in the environments where they are still uncontrolled. Meetings such as your Congress here brings us closer together and gives encouragement for us to continue to improve the health and medical care needs of the people of the world, regardless of where they live.

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