Provisional Agenda Item 29

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REPORT OF THE PAHO ADVISORY COMMITTEE ON MEDICAL RESEARCH

The 22nd Meeting of the PAHO Advisory Committee on Medical Research (ACMR) was held in Mexico City on 7-9 July 1983. Dr. H. Groot was chairman of the meeting, which was opened with addresses by Dr. Carlyle Guerra de Macedo, Director of PASB, and Dr. Guillermo Soberon, Minister of Health of Mexico. The agenda included items on Health Services Research, Health Research Management, the WHO Collaborating Centers, Migration and Health with Special Reference to Malaria, Acute Respiratory Infections, Mental Health and Behavior and Environmental Health Research. The Committee also studied and commented on a proposed PAHO Research Policy.

In the area of health services research, the Committee recommended the systematic collection and analysis of the information available on the subject and also that PAHO support research in relation to drug use and distribution. The Committee supported the continued development of multidisciplinary research on migration and health. The WHO Collaborating Centers are a valuable instrument for promoting research and training and the Committee recommended further revision of the policies and practices for establishing these centers with a view to creating active networks. The Committee received favorably the publication "Acute Respiratory Diseases in Children" and the offer of the Mexican Government to translate it into Spanish. The Committee supported the research on mental health and behavior and made special reference to research on the problems of the adolescent mother. After considering the area of environmental health and the program of the Pan American Center for Human Ecology and Health, the Committee recommended a study of research in this field and the development of an operative strategy. PAHO research policies should be kept under constant review. The Committee expressed concern about the deterioration of the information sources in Latin America and consequent adverse effects on research and recommended that this grave situation and its implications be brought to the attention of the Member Governments.

Annex
REPORT OF THE PAHO ADVISORY COMMITTEE
ON MEDICAL RESEARCH

PAN AMERICAN HEALTH ORGANIZATION

Twenty-second Meeting of the
Advisory Committee on Medical Research

Mexico City
7-9 July 1983
AGENDA

INAUGURATION

Thursday, 7 July 1983

9:00   Opening - Dr. Hernando Groot (Chairman)

Address - Dr. Carlyle Guerra de Macedo (PAHO Director)

Address - Dr. Guillermo Soberón, (Minister of Health)

10:30  COFFEE

11:00  Health Services Research

- Dr. Jorge Osuna (PAHO)
- Dr. Rodrigo Guerrero (Colombia)
- Dr. Manuel Ruiz de Chavez (Mexico)
- Dr. Gerald Rosenthal (PAHO)

12:30  LUNCH

14:00  Research Management

- Eng. Jorge Ortiz (PAHO)

14:45  WHO Collaborating Centers

- Dr. Gabriel Schmuffis (PAHO)

15:30  COFFEE

16:00  Migration and Health

- Dr. Patricia Rosenfield (TDR/OMS)
- Dr. Juan César García (PAHO)
- Dr. Francisco López-Antuñano (PAHO)

17:30  RECESS
Friday, 8 July 1983

9:00     Acute Respiratory Infections
         - The state of the art and prospects for control
           Dr. Floyd Denny (USA)
         - PAHO Program - Dr. Fabio Luelmo (PAHO)

10:30    COFFEE

11:00    Mental Health
         - Dr. David A. Hamburg (USA)
         - Dr. René González (PAHO)

11:45    Environmental Health
         - The Panamerican Center for Human Ecology and Health
           Program
         - Eng. Guillermo Dávila (PAHO)
         - Dr. Jacobo Finkelman (ECO/PAHO)

12:30    LUNCH

14:00    The PAHO Research Grants Program
         - Dr. George Alleyne (PAHO)

14:45    Report from the Global ACMR
         - Dr. V. Ramalingaswami (Chairman, Global ACMR)

15:30    COFFEE

16:00    Summary of recommendations of 21st meeting and actions taken

17:30    RECESS
Saturday, 9 July 1983

9:00  Executive Session
10:30 COFFEE
11:00 Executive Session (Cont.)
12:30 LUNCH
14:00 Preparation of final report
17:00 Presentation of final report
TWENTY-SECOND MEETING OF THE PAHO ADVISORY COMMITTEE ON MEDICAL RESEARCH

Report to the Director

INAUGURAL SESSION

Dr. Hernando Groot presided at the Twenty-Second Meeting of the PAHO Advisory Committee on Medical Research. In his opening remarks he paid special tribute to Dr. Soberón, Minister of Health and the Government of Mexico for being hosts to the meeting and pledged the support of the Committee to Dr. Macedo as the new Director of PAHO. He also welcomed the new members of the Committee and pointed out the responsibility which they and the other members had to help PAHO in promoting research as an instrument for improving the satisfactory development of the health systems of the Region.

Dr. Carlyle Guerra de Macedo, Director of PAHO addressed the meeting, first welcoming the new members of the Committee and then paying a special tribute to Dr. Soberon for his leadership in health, education and research in Mexico. It was the first time that the ACMR was meeting in Mexico and this was due primarily to the kind offices of Dr. Soberon who issued the invitation to the Director and the Committee.

Dr. Macedo then referred to the basic themes which he had proposed that the Organization should follow in accomplishing its mission of cooperating with the governments in solving the Region's health problems. The first theme was the management of knowledge, which embraced its generation, collection, analysis, evaluation and finally the transformation of that knowledge into concrete actions. These actions should be applied at the level of the countries and this process could be strengthened through observing the second theme or principle, i.e. the mobilization of national resources which might be used not only within the individual country but, in the spirit of international cooperation, also in other countries of the Region. This intercountry cooperation in health was one of the measures which could be employed to overcome the various philosophical, political and cultural differences which existed between countries and could be a true bridge of understanding between people, thus contributing to the establishment of solidarity and peace. Research, and science generally, were essential to this process of managing knowledge and mobilizing national financial and human resources.

Dr. Macedo reaffirmed the commitment of PAHO to promoting research and scientific activities in spite of the current limitations of resources, and the equally important limitation of the political and institutional capacities available. However, such limitations would cause a
more precise definition of the strategies to be followed in order to achieve an even greater degree of productivity. PAHO would be seeking to concentrate its efforts on selected areas and would be positive in promoting research activities at the level of the countries rather than being a passive recipient of individual research proposals. Institutional development and support would be a key feature of PAHO's research policy.

Dr. Macedo referred to the new structure of the PAHO secretariat and the fact that the responsibilities for promoting research would be at the level of the technical programs. With respect to the priority areas to be promoted, these would depend in part on the program of cooperation as defined by the countries. However, within these, there should be emphasis on epidemiology, molecular biology, immunology and research related to the policies of regional programs to supply essential drugs.

Finally, reference was made to the need for the ACMR to see itself as working continuously and not limiting its efforts to a single meeting and the production of a final report. The selection of the membership would facilitate this process: there would be wider geographical and functional representation.

Dr. Guillermo Soberón, Secretario de Salubridad y Asistencia, formally declared the meeting open. In his dual capacity as Minister and member of the Advisory Committee on Medical Research, he welcomed the members and made reference to some of the new initiatives which his Government had been taking. The various health agencies had all been brought together under the coordination of the Ministry of Health and the national development plan had placed health as a priority of the government. This was one method of striving to achieve a more egalitarian society. The efforts of the government in health were based on three main strategies - sectorization, decentralization and modernization.

The aim was to consolidate a national health system which would increase coverage, raise the quality of the health services, put in place a model of care arranged according to levels and at the same time regionalized, and impact on the demographic development of the country and the problems of the environment. Reference was made to studies done on research in Mexico which showed the emphasis on basic biomedical research with less attention to the development of socio-medical research.

The establishment of the Coordination of the National Institutes of Health was one of the measures of coordination and organization which was related to health research. This would bring together several of the specialized institutes and facilitate a sharing of resources and experiences in order to introduce some of the new fields of research needed in Mexico. The government was also seeking to strengthen the ties between the educational and health institutions in training researchers and carrying out research projects.
Dr. Soberón ended by referring to the stimulus and collaboration of PAHO and the deliberations of the ACMR which could contribute to the progress of health research in Mexico.

Plenary Sessions

1. Health Services Research

Dr. Jorge Osuna (PAHO) introduced the topic of Health Services Research (HSR) in the context of the requirements of primary health care and the techniques which would become necessary. Health Services Research was seen as the search for the integration between the needs and demands of health, the scientific and technological system and the basic infrastructure which would support the system.

The needs and demands for health could be obtained from several sources and could be determined as priorities in the epidemiological sense on the basis of such variables as prevalence, incidence, severity and treatability of the health problems which arise. The needs and demands should take account of the social and ecological characteristics of the populations. It was becoming evident that the services should be organized in program groups rather than as isolated activities.

Research on the technologies was critical in order to identify what was available, as well as to develop or adapt appropriate ones. The health services infrastructure with its institutional and community resources should respond to needs and demands and the services in this infrastructure must be organized according to levels of complexity. Research in this area must focus on a wide variety of issues ranging from administrative to educational and legal, but primarily must define the types of changes that will have to be made in the health services system to facilitate reaching the goal of Health for All.

Dr. Rodrigo Guerrero (Colombia) described the progress of HSR in Colombia, especially the activities which followed the "Study of Human Resources for Health and Medical Education" in 1964. This study identified the country's most pressing health problems and the resources available for tackling them. The establishment of the Department of Research in the Ministry of Health in 1974 was another landmark. The Experimental Study of Health Services in Colombia was another important study which further defined the kinds of training programs necessary to implement the health policies and plans decided upon as a result of prior research. PRIMOPS, which is a model for the delivery of maternal and child care, grew out of the experimental study of health services and has been successfully transferred to other parts of the country.
Another practical type of HSR is the Program of Research in Simplified Surgery which has sought to make surgical care more productive and cheaper. Other studies on the practical applications of HSR in Colombia were also described and the proof of the success in this field is the number of groups in universities, health services and government agencies which are conducting studies on HSR and using the results to address the problem of providing more and better health care to a greater number of persons.

Dr. Manuel Ruiz de Chávez (Mexico) outlined the growth of health services research activities in Mexico, showing that the thrust for development of activities in this field had arisen out of recommendations formulated in meetings held in 1978 and 1979 under the auspices of CONACYT, the Secretaría de Salubridad y Asistencia and the Universidad Autónoma de México. Two studies had been carried out in Mexico, which showed that only 3% of the research being done was in health services research and only 15% of publications dealt with the field. Another interesting aspect of those studies was the demonstration that only 11% of authors of scientific publications came from the interior of the country: this shows the degree of centralization of research on health services.

Special attention was being given to training of health services researchers through programs and courses of study and providing funds for this research.

The present health administration in Mexico saw health services research as one of the tools which would implement its three general strategies of sectorization, decentralization and modernization. Among the lines of actions which are being developed are efforts to identify precisely the health problems and areas of interest for the national health systems in order to stimulate development of specific programs which can promote institutional and professional research links and stimulate training.

Dr. Gerald Rosenthal (PAHO) amplified the former presentation by describing the growth of the concept that HSR was an important tool for planning and evaluation. The most recent significant events were the establishment by CONACYT of an advisory subcommittee on HSR as part of the Subcommittee on Health Research. A project Mexico-8900 had been created to permit PAHO cooperation with the national activities and several examples of PAHO cooperative activities were given.

The Committee noted the need to make use of results from existing research before commissioning yet further research on health services infrastructure.
The point was raised that in the delivery of maternal and child health care, inappropriate technology, including drug usage and complex procedures, was being introduced. This has resulted in increased cost of care and in some cases had lowered the quality of medical care. Countries are now finding it difficult to maintain some of their health institutions because of the high and increasing cost of supporting technology which has proven to be inappropriate.

Stress was laid on the desirability of linking health and education as has taken place in Colombia. This occurred through ensuring that both health and education participated from the beginning in project development and implementation.

2. Health Research Management

Eng. Jorge Ortiz (PAHO) introduced the topic and described the background against which PAHO has initiated a program in this area. The Pan American Conference on Health Research Policies which had been the culmination of a series of national and regional conferences had indicated the need for competence in the field of research management. The research management functions which are necessary include research promotion and development as well as research planning, control and evaluation. Based on these needs, the topics which should be covered in any training in this field include the relationship between research and national development, problems related to policy, information use and exchange, planning and evaluation, as well as basic management techniques such as network analysis and program planning. An exploratory diagnostic study was carried out in three countries and this confirmed both the interest in and the need for programmed activities in research management. A working group had defined the activities to be carried out and the activities which have begun include a Regional Seminar on Research Management and national activities which have begun in Brazil and are planned for Argentina and Peru. The first Regional Seminar was directed towards presidents of Research Councils whereas other seminars will be focusing on directors of research institutes and managers of control programs. The whole program in research management is being jointly sponsored by PAHO and the Tropical Diseases Research Program and the first Regional Seminar also had the cosponsorship of the Fogarty International Center of the National Institutes of Health of the United States.

The suggestion was made that countries should adopt the recommendations of the Pan American Conference on Health Research Policies, held in Caracas, Venezuela, April 1982, to establish national health research policies.
Dr. Patricia Rosenfield (WHO) expressed appreciation of the collaboration established between PAHO and the Special Programme for Research and Training in Tropical Diseases (TDR) on health research management and looked forward to an expansion of this collaboration and cooperation.

The Committee endorsed the activities which had been carried out in this Programme and noted with appreciation the published proceedings of the Caracas Conference.

3. WHO Collaborating Centers

Dr. Gabriel Schmuñis (PAHO) described the process of designation and the functioning of the WHO Collaborating Centers in the Region of the Americas. A collaborating center was usually an institution, a laboratory or department which was designated on the basis of scientific, technical, administrative and educational capability. Proposals for designation could arise at one of many levels, but ultimately the designation involved agreement by national and WHO personnel on a plan of work and formal acceptance by the government before the Director-General gave his approval.

There were 167 WHO Collaborating Centers in the Region with 113 in the USA and Canada and 54 in 11 Latin American countries. There were centers relating to every one of PAHO's technical program areas with the majority being related to the health of adults.

A survey had been carried out of the Centers in the Region and the results were presented in brief. There was considerable contact with WHO/PAHO and personnel from the centers had been involved in several WHO and PAHO meetings. The training courses had involved several hundred nationals and foreigners and the majority of the Centers provided research training in their special field of activity. The activities of the Centers were described by country.

The system of Collaborating Centers is a valuable tool for increasing the capacity of the Organization to carry out its activities at the level of the countries. Direct financial support is useful but not critical for establishing and maintaining an effective network of centers, but the responsibility lies with the technical programs for making maximum use of the potential in centers individually or as parts of a network.

The Committee discussed this item fully. The question was posed whether institutions had increased their scientific productivity following their designation as WHO Collaborating Centers, but there were insufficient data to supply an answer. The focus of discussion was the
usefulness of the program and whether it should be expanded or modified. Concern was expressed over repetitive redesignation of institutions as Collaborating Centers although such a policy provided a stable financial framework which was important to these institutions. New centers were needed (possibly with different criteria for selection) to conduct research in tropical diseases, molecular biology and immunology and environmental health. PAHO/WHO should consider the establishment of supra-national centers similar to those in Europe concerned with atomic energy and molecular biology and the networking of existing and new centers to maximize resources and avoid unnecessary duplication of effort. There was concern about the procedures followed, but the Committee was informed that institutions could be designated National Centers without having to go through the lengthy steps involved in designation of WHO Collaborating Centers.

It was noted that the original policy of the program was that institutions were designated as centers to collaborate with WHO, although latterly centers were being established primarily to meet the needs of the Region. Further, the distribution of centers, which now favored North America, was being adjusted so that more centers would be based in Latin America.

4. Migration and Health

Dr. Patricia Rosenfield (WHO) introduced the topic by giving an overview of the global research needs for health and population movements generally. The types of population movements were described in terms of space and time and a general account was given of several projects which were underway relating migration to the major tropical diseases. The main areas of inquiry which were being developed were in relation to social, economic, environmental, medical and operational issues. The majority of studies which had been carried out so far had not permitted any general conclusions to be drawn or firm recommendations to be made to ministries of health. The ultimate objective of all of these studies, however, was to assist in the design of more appropriate control methods.

Dr. Francisco López-Antuñano and Dr. Juan César García (PAHO) described what was occurring in Latin America with respect to research on the relation between migration and health with special reference to malaria. Some aspects of the migratory process itself have to be studied apart from those included in the traditional definition of migration in terms of space and time. Research on the transmission status of tropical diseases requires analysis of the biological as well as the natural and social factors. The biological factors must be recognized, but both these and the natural or ecological factors are a product of, or intimately dependent on the social factors. The description of diseases
in terms of niches or foci was being used in the "regional" epidemiological approach to research on migration and tropical diseases.

Agricultural production was used as one example of how tropical diseases were influenced by social production modes. Agricultural production was heterogeneous in Latin America, varying according to the type of product, the type of ownership and the nature of worker employment. The last, in terms of morbidity, was the most important point to be studied. When attention was focussed on malaria, it became clear that studies had to be place specific, in order to accommodate heterogeneity of situations which existed, but it was still important to retain enough commonality of design to facilitate the comparative aspect of the research which was being planned in this field.

PAHO had convened a working group which had designed a protocol for common use. Belize, Brazil, Colombia, Dominican Republic, Haiti and Nicaragua had been chosen for the studies, and the differences and similarities between these sites were described. It was also important to recognize that PAHO was ideally suited to promote these types of comparative studies.

Dr. José Najera (WHO) introduced some considerations on the effects of migration on epidemiology of disease. Some aspects of the discipline of epidemiology had indeed arisen because of the real or supposed effects of migration. Sanitary policy in the quarantine services and the health services for military personnel were given as examples of how migration had influenced or helped to create epidemiological awareness. Studies on the epidemiology of disease in general were taking more account of migration and the effect of the cohesive social forces on the drive to migrate. Essentially, however, all migratory processes affect possibilities of disease control primarily by influencing epidemiological risks both at the points of origin and settlement of the immigrants as well as during transit. A better understanding of the way these processes affect the epidemiology of tropical diseases would particularly reduce or eliminate the use of inadequate techniques for disease control. Perhaps more attention would be paid to the ecological conditions at the point of settlement and authorities would be less likely to focus exclusively on the immigrant only at the point of origin or during the migratory process.

The Committee received the reports on this topic and agreed again on the importance of this type of research, citing other geographical areas and other diseases apart from tropical diseases, which were being influenced by migration of people. However, while most studies looked only at the negative aspects of migration, note had to be taken of the positive aspects in social terms. The influence of migration on health
in general was a good example of multidisciplinary research and the heterogeneity of the studies described in terms of physical location and conceptualization could provide a useful model for studies on other diseases.

The Committee also noted that there were other dimensions to the social aspects of disease transmission, i.e. the psychosocial aspects and many of the phenomena described in relation to migration both in terms of cause and effect had their root in behavior and behavioral adaptation.

The studies being started could in time be extended profitably to other areas and perhaps focus less on a specific disease entity, but on the problems of groups of people as a whole—problems which had been conditioned by various aspects of the social process. The disciplines to be involved in studying these problems were all part of the sciences which were best described as behavioral. There was agreement in the Committee on the direction of these studies which had had their initiative in one of the ACMR Subcommittees established three years ago to look at the way in which PAHO could direct social science research towards helping to find solutions for disease control, especially in malaria.

5. **Acute Respiratory Infections (ARI)**

Dr. Floyd Denny (North Carolina) introduced the topic, pointing out that acute respiratory tract infections were the most common affliction of man. Children usually suffered 6-8 upper respiratory infections (URI) annually but it was the lower respiratory infections (LRI) which, although they occurred with less frequency than URI, were the major contributors to mortality especially in children of the developing world. Respiratory viruses and *M. pneumoniae* were the most frequent causes of LRI in the USA and longitudinal studies had defined the epidemiology of these illnesses fairly well. The focus of research in the developing countries had to be on similar or modified epidemiological studies, paying attention to the accurate diagnosis of the etiological agents.

Dr. Fabio Luelmo (PAHO) described the activities which had been taking place in the Region. The major strategy which had been adopted included provision of materials for the countries, preparations of norms and guidelines for management, strengthening laboratory diagnostic capabilities and promotion of research. PAHO had prepared a basic background document on the state of the problem and this would be distributed widely in the Region. The research activities which were being promoted had focused more on the clinical and etiological aspects of ARI and already studies were in progress or in the final planning stage in Barbados, Brazil, Costa Rica, Panama, Trinidad and Uruguay.
A regional course on ARI laboratory diagnostic methods had been held in the Dominican Republic. PAHO's main thrust is to define a strategy for a coordinated research and control effort and to promote the relevant research which would lead to the implementation and evaluation of strategies to be applied at the primary health care level. A bibliography on ARI is being developed. The results of the WHO/Technical Advisory Group meeting in Geneva were also reported. This group concluded that sufficient information exists to permit the implementation of national control programs.

Reference was also made to a workshop on acute respiratory diseases among the children of the world which had been jointly sponsored by the Edna McConnell Clark Foundation, the University of North Carolina, the U.S. Agency for International Development and PAHO. Participants were from 13 countries and after three days of discussion there was general agreement that research on ARI should be mainly epidemiological and evaluative at this stage with attention being given to the development of rapid diagnostic methods.

The Committee acknowledged the active and important role of PAHO in stimulating interest in and developing a research thrust in the subject of ARI with particular reference to the informative and up-to-date document entitled "Acute Respiratory Infections in Children" (PAHO, 1983). As a result, research activities in ARI and related areas have been undertaken by USAID and the National Research Council of the USA, and small research grants are available for regional cooperative projects in the field. It was recognized that the major health problems posed by ARI in children could not be solved overnight. Improvement of living conditions will reduce the morbidity and mortality from ARI in children, as has been demonstrated in Costa Rica. However, two areas deserving of intense research were noted. The development of a better vaccine for pertussis, free of the significant side effects of present vaccines which has led to a dramatic reduction in the use of the vaccine and the reappearance of whooping cough as a pediatric health problem as in the USA. Secondly, the severe effects of measles in certain areas where child malnutrition was common, continued despite the development of an efficacious measles vaccine. The well-known problem of maintaining a cold chain in territories where the vaccine is most useful was still not solved. However, the development of a nebuliser to administer vaccine is promising and preliminary results that show good antibody response even in infants with circulating maternal antibodies may signal a major advance in immunization.

In a discussion on the role of environmental and social factors, such as maternal smoking and breast-feeding and living conditions on the occurrence and severity of ARI in infants, it was noted that although there was evidence for such an association, more data were required to define what is a complex situation. Other areas that merit investigation
were the later effects of antecedent lung infection on lung function the association between allergy and respiratory infections and the factors predisposing to the development of complications such as otitis media following ARI.

The Committee concluded that:

(a) Further work was necessary to understand the complex relationship of biologic and social environmental factors in the occurrence and severity of ARI, and to determine the long-term effects, if any, on antecedent ARI in infancy and childhood.

(b) There was already a great deal of information on ARI and it was important to make this information widely available to providers of care, especially at the primary level.

(c) A strategic plan should be developed to determine what actions should be taken to reduce the high mortality associated with ARI in the Region and to identify what areas of specific research should be pursued to this end.

6. Mental Health

Dr. David Hamburg introduced the topic and reported on the work of the Scientific Planning Group on the Expanded Program of Research and Training on Biobehavioral Sciences and Mental Health. This Group had met twice, the last time in Geneva 28-30 June 1982. It had made reports to the Global ACMR which had accepted the need for research efforts in the field of health and behavior. The group had agreed that it was necessary to study in developing countries the extent to which illness was attributable to psychosocial factors and also that the priority should be given to epidemiological research in this field. Research was hampered by the lack of a research infrastructure including the kinds of institutions which could undertake the research.

The priority for action was strengthening research capacity and it was agreed that emphasis should be placed on research in three important areas, i.e. adaptation to rapid sociotechnical change, alcohol problems and research on preventive interventions in adolescence and the psychosocial aspects of primary health care with special reference to the technology of promotion of child and family health. The plan was to hold workshop on these three topics in the various regions and in the Region of the Americas a workshop will be held on the behavioral aspects of
maternal and child health. Among the other activities planned were the preparation of a monograph on health and behavior in developing countries and the promotion of a network of collaborating centers in this area.

Dr. René Gonzalez (PAHO) described the place of research in the Regional Mental Health Program. In the countries, the bulk of the resources were usually allocated to services and very little to research although there have been several resolutions of the Governing Bodies approving the promotion of epidemiological studies and research on the psychosocial factors which affect health.

There are three components of the Region's Medium Term Program in Mental Health (1984–1989). These are psychiatric assistance and promotion of mental health, alcohol and drug abuse, and psychosocial factors related to health. Research has been promoted by PAHO in all three of these areas, and examples were given of the fields in which research should be further developed. These included in addition to maternal and child health, such areas as the chronic diseases, environmental health, communicable diseases and fertility control.

There was general agreement that a body of research existed that showed the effectiveness of public health measures to modify health damaging behavior and to promote health supporting behavior. Though these studies were done in the developed world using sophisticated public health education techniques, it appeared feasible to apply these principles to a wide variety of situations in the developing world where modification of behavior patterns at the individual and community level would be expected to lead to beneficial effects. It was noted that there was relatively little research being done in this field in the developing world.

It is in this context that the Scientific Planning Group of the Expanded Program of Research and Training on Biobehavioral Sciences and Mental Health concluded at their second meeting (Geneva, June 1982) that action should be concentrated on developing countries and on investigation in the three priority areas mentioned above. Three workshops, in India (1983), Washington (August 1983) and Africa (1984), were scheduled to deliberate on these priority areas.

The Committee noted with appreciation the decision to hold a workshop in Washington in August 1983, which would focus on psycho-social interventions in the field of maternal and child health. It was observed that a better understanding of these problems could be obtained through a holistic approach. However, it may be necessary to carry out studies on certain aspects of the problems in the first instance and adopt a holistic approach when a creditable method of synthesis of all relevant factors was formulated. The Committee also noted the suggestion that the workshop
should not confine itself to proposing research for new information, but should consider methods whereby such information could be put to operational use in the field.

7. Environmental Health Research

Eng. Guillermo Dávila (PAHO) introduced the topic by giving an overview of the PAHO Program of Environmental Health Protection and the role of the two Centers CEPIS and ECO. The work program of CEPIS had been presented to the 21st meeting of the ACMR in 1982.

Dr. Jacobo Finkelman (PAHO) presented the program of the Pan American Center for Human Ecology and Health (ECO). The Center was created in 1975 and "cooperates with governments in the avoidance of adverse effects on health which may result from environmental modifications that accompany industrialization, urbanization and economic development." The work program of ECO is developed within the context of the Plan of Action and as part of the program of the Regional Environmental Health Program.

The presentation dealt mainly with the areas of research which are needed in the field of ecology and health, some of which are within the activities being carried out by the Center. The major programmatic area requiring research is the assessment of health effects of environmental intervention or modifications (environmental health assessment), and in this area the main lines of research should deal with the health effects of exposure to multiple contaminants, social effects of urbanization, and alternative strategies for the control of vector-borne diseases with reference to use of pesticides. Because of the lack of the necessary human and technology resources, impact assessment research has not been pursued vigorously in the developing countries and when such studies are done they are related to later resources utilization and little attention is paid to other development projects.

ECO has concentrated on the prevention and control of chemical pollution and the prevention and control of the possible harmful effects of development projects. These have to be studied in relation to the importance of agroindustry and mining in the development of the Latin American countries. The strategies for the programming of the Center's activities have given importance to the following: the monitoring of risks, epidemiological surveillance, application of anti-contaminating measures and appropriate medical treatment. ECO will promote research involving social, behavioral and economic issues as well as joint projects between health and agriculture. Research is also necessary on the development of integrated and biological methods of control.
The Committee received the report on the Center and the discussion was mainly concerned with the wide range of activities proposed in view of the limited resources apparently available. The presentation did not give detailed information on the staff and the specific projects in which they were involved. The problems of environmental health were severe everywhere and were often aggravated because there was not often a clear permanent location of institutional responsibility for the problem. Some specific examples were given of places with high prevalence of disease due to environmental factors. In general, there was agreement that the Center had embarked on a very ambitious work plan which had to be seen in relation to research in environmental health in general. This kind of research needed to be promoted actively and perhaps one step might be to have a group of experts assist the PAHO program in developing a research agenda which could be translated into specific programs and projects.

8. PAHO Research Policy

The document on PAHO Research Policy outlined the background of PAHO's involvement in research, the conceptual framework for the current policy and the mechanisms for implementing such a policy.

The Constitution of WHO as well as the components of the programs of work provide a basis for research action. The major emphasis is to be on the promotion of research and coordination of relevant scientific activities. WHO sees that the main approaches should be through building research capability, promoting national health research policies, stimulating specific research areas and disseminating information pertinent to research.

A formal research program in PAHO began in 1961 with the establishment of an Office of Research Coordination and the creation of the Advisory Committee on Medical Research, and there are several resolutions of the Governing Bodies related to research. The early policy statements stressed the role of PAHO in assisting countries to develop the necessary research resources.

The current policy proposed for PAHO is based on the concept that the basic constitutional mission of the Organization is to be served through the management of knowledge in its widest sense. The Final Declaration of the Pan American Conference on Health Research Policies also indicates some necessary policy directives for research.
The current PAHO research policy can be stated thus:

"The research policy of PAHO is to promote the identification of the gaps in knowledge which impede solution of national health problems and to cooperate with the countries of the Americas in carrying out in a coordinated manner the research necessary to fill those gaps."

Thus the three main activities will be in the areas of promotion, cooperation, and coordination.

The major responsibility for promoting research will lie in the technical programs which will work with nationals in developing research activities. The Office of Research Coordination will advise the Director on research policies and be responsible for the administrative aspects of the PAHO Research Grants Program. The main instruments of cooperation in research will be the Grants Program and the program for institutional development. The Advisory Committee is the body which will keep the policy under constant review. A description was given of the background to the ACMR and the criteria on which the members are selected.

The Committee noted that for the first time the research policy of PAHO, its historical background and evolution and how such policy was being implemented had been concisely documented in the paper entitled "PAHO Research Policy." The Committee expressed appreciation of the document and the Chairman went on to amplify the philosophy and goals of PAHO's research policy and traced the evolution of the application of the policy to meet the changing demands of the Region. It was generally felt that the document did not address what appeared to many speakers as a deterioration in the quantity and quality of medical research in Latin America in general. It was felt that many factors, including economic, social and political, contributed to this decline, but the true role of the contributing factors in each country was unknown. Discussion also centered on the relative emphasis to be placed on nondirected research and on research aimed on specific social and other goals. It was noted that PAHO's research policy was broad enough to include either type of research.

In conclusion, there was a general consensus that the current state of medical research in Latin America was of concern to the Committee and this should be brought to the urgent attention of the PAHO Governing Bodies; and that the document entitled "PAHO Research Policy" was timely and well-balanced and should receive wide circulation.
9. **Report to the Director-General from the Global Advisory Committee on Medical Research**

The Chairman conveyed the apologies from Dr. V. Ramalingaswami, Chairman of the Global Advisory Committee on Medical Research, for his absence and presented the report.

10. **Recommendations of the 21st Meeting**

The majority of the discussion related to BIREME. In the context of the concern expressed over the current state of medical research in Latin America, clarification was sought on the current status of BIREME. The Director of PAHO stated that a critical situation existed as regards BIREME. There were limited finances available to enable BIREME to carry out the greatly reduced functions it now performs. PAHO was discussing with UNDP and IDB ways and means to secure a better financial basis for BIREME; however, it may become necessary to find an alternative system to provide the regional services which BIREME was intended to perform.

The Committee suggested that the format for reporting on action taken with respect to recommendations from the ACMR should be revised to reflect more comprehensively the specific activities undertaken.
EXECUTIVE SESSION

RECOMMENDATIONS OF THE TWENTY-SECOND MEETING OF THE PAHO/ACMR

Based on the reports received and its review of these issues, the ACMR made the following recommendations:

1. Health Services Research

   The Committee recommended:

   (a) That PAHO collect and organize the available information on health services research so that a concise and comprehensive document may be written which introduces the concept of the discipline as such and produces general guidelines on how the research should be conducted and, where appropriate, defines and suggests uniform criteria for such matters as coverage, unit costs, the demarcation of levels of care, etc.

   (b) That PAHO support research on the role of drugs in health services, and particularly on their use, distribution and socioeconomic impact. A subcommittee should be created or a specialized interdisciplinary meeting held to indicate the best and most urgently needed policies for research in this field.

2. Research Management

   The Committee recommended:

   That the Organization sponsor the conduct, as needed, of courses specially designed for the training of professional staff employed in the management of health research programs and institutions. These courses must cover both the general aspects of administration and activities pertaining to science and technology in the health field. The Organization can join with a Latin American institution of established competence to offer these courses from time to time, and should allocate a few fellowships for the training of personnel with responsibilities in this area.
These courses must not replace short seminars which are held for various purposes including the search for a common language between administrators and scientists in order to establish points of common ground in the managerial and administrative functions of the two groups.

3. **WHO Collaborating Centers**

After discussing the document "WHO Collaborating Centers in the Americas", the Committee felt that it was important that the Organization not only continue its policy of designating WHO Collaborating Centers, but that this program be expanded or strengthened so that those Centers would, as one of their principal purposes, increasingly promote and strengthen research in the different countries.

The Committee recommended:

(a) That the policies and procedures for the establishment of Collaborating Centers be reviewed once again to see whether the number of these Centers in Latin America can be increased, particularly in the areas in which there are not enough of them or more are needed.

(b) That Centers which have not fully accomplished their purpose, be eliminated from the program and that the possibility be explored of designating further centers for shorter periods (2 years) at the end of which time their scientific record would be reviewed to determine whether they should be continued.

(c) That research groups interested in developing the Organization's research policies be identified.

(d) That an effort be made, in consultation with national bodies (science and technology councils, universities, institutes, etc.), to identify research groups and centers that could be selected in new areas related to health, such as biotechnology, molecular biology, immunology, the social sciences, etc.

(e) That an effort be made to set up truly operational networks for active collaboration among Collaborating Centers, whether existing or new, in related or complementary areas.

(f) That quality be encouraged rather than quantity.
(g) That there be flexibility in applying the requirements for the accreditation of Centers when they have interest in the priority research policies.

(h) That financial support be given to Centers whose activities further research policies of interest to the Organization.

4. Migration and Health

In certain areas, for example the refugee camp in Chiapas, México, there are important specific health problems produced by migration. The risk of sylvatic yellow fever in laborers migrating into enzootic foci should also be considered. Such risk exists for example in the Darien area y Colombia and Panamá where there is some evidence of recent viral activity. Even though the relation between migration and sylvatic yellow fever is known, it is necessary to continue ecological studies on yellow fever to obtain more complete information on its epidemiological behavior.

On this subject the Committee recommended:

(a) That PAHO continue its research along the line indicated in the presentations made to the Committee.

(b) That PAHO support multidisciplinary research on the problem of migration and health in the refugee camps of Chiapas, Mexico.

(c) That PAHO promote epidemiological studies on sylvatic yellow fever with special reference to the Darien Region.

(d) That the Pan American Region of WHO collaborate with other regions of WHO in research on the health problems of migrants. Such collaborative endeavor should make it possible to develop action-oriented programs of research which, if carefully planned, could attain the level of at least quasi-experiments.

5. Acute Respiratory Infections

The Committee recommended that:

(a) PAHO should continue its activities in promoting research and control measures for acute respiratory infections in children.
(b) PAHO should accept the generous offer of the Government of Mexico to translate into Spanish the document of "Acute Respiratory Infections in Children", RD-21/3.

6. Mental Health

The Committee recommended:

(a) That PAHO continue its efforts in this field and ensure that sufficient attention was paid to research on the behavior of the adolescent mother.

(b) That research on the behavior of the family group during the perinatal period be promoted in accordance with the topics to be discussed in the workshop to be held at PAHO from 29 August to 2 September 1983.

7. Environmental Health

The Committee is aware of the complexity of the tasks assigned to the Pan American Center for Human Ecology and Health (ECO) and of the importance of its work in the health field. The Committee also understands that ECO is in the formative stage and its resources are limited.

The Committee also considered, in connection with the safe application of pesticides and fertilizers, that ecologically-minded and properly trained people are scarce. There is also a need for research on the control of vector-borne diseases, and a lack of entomologists with a medical orientation.

The Committee recommended:

(a) That a study be made, through an appropriate mechanism, of the research problems in environmental health as the basis for a review of the present situation and for the determination of priority fields of action and an operating strategy.

(b) That PAHO give support to programs for the training of specialized manpower and research in environmental sanitation, particularly in pest and vector control (medical entomology) at the technical, and particularly at the professional level, with a medical orientation.
8. **PAHO Research Policy**

The Committee recommended:

That the item "PAHO Research Policies" be kept permanently on the agenda and that at its next meeting there should be a discussion on the document "Research Policies in Health" which represented the proceedings of the Pan American Conference on Health Research Policies.

9. **Health Research Information**

The medical research done in most Latin American countries and manpower training in the health sciences are forced to continue with increasingly unfavorable working conditions.

Unless this tendency is reversed, there is a serious risk of a decline in the quality and quantity of this research and in the training and competence of the personnel responsible for the health of the population.

The following are examples of some of the many adverse factors:

(a) The increasing difficulty of access to literature, since the medical libraries in most Latin American countries are receiving progressively fewer journals and books from the scientifically developed countries.

(b) The increasing difficulty of replacing the expendable materials needed for work and the near impossibility of acquiring new instruments and equipment.

(c) The steady loss of real value of remunerations resulting from failure to increase them sufficiently to offset erosion by inflation. The usual consequence is that researchers of proven value spend more and more time on other employment to make enough money to survive, to the detriment of their scientific work. Moreover, it becomes more difficult to recruit young people with a real vocation for and demonstrated ability in medical research.

(d) A lack of security in medical research posts.
The Committee recommended:

(a) That a study be made to determine the degree to which the foregoing adverse factors and others are impairing the course of medical research and manpower training in health sciences in most Latin American countries.

(b) That the Governments of the Member Countries be appraised of the Organization's concern and of the advisability that they take appropriate measures to prevent a continued worsening of conditions that are unfavorable to medical research and to the training of suitable professional staff in the health sciences.

The Meeting then ended.
LIST OF PARTICIPANTS

PAHO ADVISORY COMMITTEE ON MEDICAL RESEARCH

<table>
<thead>
<tr>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DR. ANTONIO SERGIO AROUCA</strong></td>
</tr>
<tr>
<td><strong>Profesor</strong></td>
</tr>
<tr>
<td><strong>Escuela de Saúde Pública</strong></td>
</tr>
<tr>
<td><strong>Rio de Janeiro, Brasil</strong></td>
</tr>
<tr>
<td><strong>DR. ROBIN BADGLEY</strong></td>
</tr>
<tr>
<td><strong>Professor</strong></td>
</tr>
<tr>
<td><strong>c/o Committee of Sexual Offences Against Children and Youths</strong></td>
</tr>
<tr>
<td><strong>Suite 1500</strong></td>
</tr>
<tr>
<td><strong>10 King Street East</strong></td>
</tr>
<tr>
<td><strong>Toronto, Ontario M5C 1C3, Canada</strong></td>
</tr>
<tr>
<td><strong>DR. PIERRE BOIS</strong></td>
</tr>
<tr>
<td><strong>President</strong></td>
</tr>
<tr>
<td><strong>Medical Research Council of Canada</strong></td>
</tr>
<tr>
<td><strong>20th floor</strong></td>
</tr>
<tr>
<td><strong>Jeanne Manceau Building</strong></td>
</tr>
<tr>
<td><strong>Tunney's Pasture</strong></td>
</tr>
<tr>
<td><strong>Ottawa, Ontario K1A, Canada</strong></td>
</tr>
<tr>
<td><strong>DR. CAROL BUCK</strong></td>
</tr>
<tr>
<td><strong>Professor of Epidemiology</strong></td>
</tr>
<tr>
<td><strong>Epidemiology Department</strong></td>
</tr>
<tr>
<td><strong>Faculty of Medicine</strong></td>
</tr>
<tr>
<td><strong>The University of Western Ontario</strong></td>
</tr>
<tr>
<td><strong>London, Ontario M6A 3K7, Canada</strong></td>
</tr>
<tr>
<td><strong>DR. ROBERTO CALDEYRO-BARCIA</strong></td>
</tr>
<tr>
<td><strong>Profesor, Director</strong></td>
</tr>
<tr>
<td><strong>Departamento de Perinatología</strong></td>
</tr>
<tr>
<td><strong>Hospital de Clínicas &quot;Dr. Manuel Quintela&quot;</strong></td>
</tr>
<tr>
<td><strong>Av. Italia s/n - Piso 16</strong></td>
</tr>
<tr>
<td><strong>Montevideo, Uruguay</strong></td>
</tr>
</tbody>
</table>

* Unable to attend
Members (cont.)

DR. JOSE RODRIGUEZ COURA  
Vice-Presidente de Pesquisa  
Fundação Oswaldo Cruz  
Caixa Postal 926, CEP 20000  
Rio de Janeiro, Brasil

DR. HERNANDO GROOT**  
Asesor  
Instituto Nacional de Salud  
Av. El Dorado con Carrera 50  
Bogotá, Colombia

DR. RODRIGO GUERRERO  
Rector  
Universidad del Valle  
Apartado 2188  
Calí, Colombia

DR. DAVID A. HAMBURG  
President  
Carnegie Corporation of New York  
437 Madison Avenue  
New York, N.Y. 10022

DRA. ALINA LLOP*  
Vice Directora  
Dirección de Docencia e Investigación  
Hospital Hermanos Ameijeira  
La Habana, Cuba

DR. DAVID PICOU  
Chairman and Project Manager  
Mount Hope Medical Complex  
Task Force  
63-65 Independence Square  
Port-of-Spain, Trinidad

DR. FREDERICK C. ROBBINS  
President  
Institute of Medicine  
National Academy of Sciences  
2101 Constitution Ave., NW  
Washington, D.C. 20418

** President
* Unable to attend
Members
(cont.)

DR. CEFERINO SANCHEZ
Rector
Universidad de Panamá
Panamá, Panamá

DR. GUILLERMO SOBERON ACEVEDO
Secretario de Salubridad y Asistencia
Secretaría de Salubridad y Asistencia
México, D.F., México

DR. ANDRES O. M. STOPPANI
Director, Centro de Investigaciones Bioenergéticas
Facultad de Medicina
Universidad de Buenos Aires
Paraguay 2155
Buenos Aires, Argentina

DR. RAIMUNDO VILLEGAS*
Ministro de Estado para la Ciencia y Tecnología
Caracas, Venezuela

DR. KERR L. WHITE*
Deputy Director
Division of Health Sciences
The Rockefeller Foundation
1133 Avenue of the Americas
New York, N.Y. 10036

DR. FABIAN YANEZ
Casilla 8707
Sucursal 7
Quito, Ecuador

DR. RODRIGO ZELEDON
Director
Consejo Nacional de Ciencias y Tecnología de Costa Rica
Apartado 10318
San José, Costa Rica

* Unable to attend
GLOBAL ADVISORY COMMITTEE ON MEDICAL RESEARCH

Chairman

DR. V. RAMALINGASWAMI*
Director General
Indian Council of Medical Research
New Delhi, India

ADVISERS

DR. FLOYD DENNY
Professor of Pediatrics
University of North Carolina
509 Clinical Sciences Building
229-H Chapel Hill, N.C. 27514
USA

DR. JOSE NARRO ROBLES
Director General de Salud Pública
en el Distrito Federal
Secretaría de Salubridad y Asistencia
México, D.F.

DR. MANUEL RUIZ DE CHAVEZ
Director General de Evaluación y Control
Secretaría de Salubridad y Asistencia
México, D.F.

* Unable to attend
## OBSERVERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DR. HUGO ARECHIGA</strong></td>
<td>Jefe, Departamento de Fisiología y Biofísica, Academia de Investigaciones Científicas, México, D.F., México</td>
</tr>
<tr>
<td><strong>DR. JESUS GUZMAN</strong></td>
<td>Director de Investigación Médica, Secretaría de Salubridad y Asistencia, México, D.F., México</td>
</tr>
<tr>
<td><strong>DR. FERNANDO HERRERA LASSO</strong></td>
<td>Director General de Investigación y Educación Médica, Secretaría de Salubridad y Asistencia, México, D.F., México</td>
</tr>
<tr>
<td><strong>DR. EDUARDO JURADO GARCIA</strong></td>
<td>Subdirector Científico, Instituto Nacional de Ciencia y Tecnología de la Salud del Niño, Sistema Nacional para el Desarrollo Integral de la Familia - DIF, México, D.F., México</td>
</tr>
<tr>
<td><strong>DR. JESUS KUMATE</strong></td>
<td>Coordinador de los Institutos Nacionales de Salud, Secretaría de Salubridad y Asistencia, México, D.F., México</td>
</tr>
<tr>
<td><strong>DR. ADOLFO MARTINEZ PALOMO</strong></td>
<td>Jefe, Departamento de Patología Experimental, Centro de Investigaciones Avanzadas, Instituto Politécnico Nacional, México, D.F., México</td>
</tr>
<tr>
<td><strong>DR. JESUS KUMATE</strong></td>
<td>Coordinador de los Institutos Nacionales de Salud, Secretaría de Salubridad y Asistencia, México, D.F., México</td>
</tr>
<tr>
<td><strong>DR. ADOLFO MARTINEZ PALOMO</strong></td>
<td>Jefe, Departamento de Patología Experimental, Centro de Investigaciones Avanzadas, Instituto Politécnico Nacional, México, D.F., México</td>
</tr>
</tbody>
</table>
OBSERVERS
(Cont.)

DR. JAIME MARTUSCELLI
Coordinador de las Carreras de Medicina
Universidad Nacional Autónoma de México
México, D.F., México

DR. RAUL ONDARZA
Director
Centro de Investigaciones Ecológicas del Sureste
San Cristóbal de las Casas, Chiapas México

DRA. DANUTA RAJS
Jefe del Área de Investigación
Centro Interamericano de Estudios de Seguridad Social
México, D.F., México

DR. GUSTAVO RINCON
Jefe, Departamento de Enseñanza e Investigación
Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado
México, D.F., México

DR. ANTONIO VELAZQUEZ
Director
Programa Universitario de Investigación Clínica
Universidad Nacional Autónoma de México
México, D.F., México

DR. ARTURO ZARATE
Titular de la Subjefatura de los Servicios de Investigación
Instituto Mexicano del Seguro Social
México, D.F., México
<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR. CARLYLE GUERRA DE MACEDO</td>
<td>Director&lt;br&gt;Organización Panamericana de la Salud&lt;br&gt;Washington, D.C., EUA</td>
</tr>
<tr>
<td>DR. GEORGE A.O. ALLEYNE</td>
<td>Coordinación de las Investigaciones&lt;br&gt;Organización Panamericana de la Salud&lt;br&gt;Washington, D.C., EUA</td>
</tr>
<tr>
<td>ING. GUILLERMO DAVILA</td>
<td>Coordinador de Programa&lt;br&gt;Salud Ambiental&lt;br&gt;Organización Panamericana de la Salud&lt;br&gt;Washington, D.C., EUA</td>
</tr>
<tr>
<td>DR. JACOBO FINKELMAN</td>
<td>Director&lt;br&gt;Centro Panamericano de Ecología Humana y Salud&lt;br&gt;Apartado postal 249&lt;br&gt;Toluca, México</td>
</tr>
<tr>
<td>DR. JUAN CESAR GARCIA</td>
<td>Coordinación de las Investigaciones&lt;br&gt;Organización Panamericana de la Salud&lt;br&gt;Washington, D.C., EUA</td>
</tr>
<tr>
<td>DR. RENE GONZALEZ</td>
<td>Programa Salud del Adulto&lt;br&gt;Organización Panamericana de la Salud&lt;br&gt;Washington, D.C., EUA</td>
</tr>
<tr>
<td>DR. FABIO LUELMO</td>
<td>Programa Salud Materno-infantil&lt;br&gt;Organización Panamericana de la Salud&lt;br&gt;Washington, D.C., EUA</td>
</tr>
<tr>
<td>DR. FRANCISCO LOPEZ ANTÚÑANO</td>
<td>Programa de Enfermedades Tropicales&lt;br&gt;Organización Panamericana de la Salud&lt;br&gt;Washington, D.C., EUA</td>
</tr>
<tr>
<td>DRA. ELSA MORENO</td>
<td>Representante Area II&lt;br&gt;Oficina Sanitaria Panamericana&lt;br&gt;México, D.F., México</td>
</tr>
<tr>
<td>DR. JOSE NAJERA</td>
<td>Malaria Action Program (MAP)&lt;br&gt;World Health Organization&lt;br&gt;Geneva, Switzerland</td>
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<td>Name</td>
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<tr>
<td>ENG. JORGE ORTIZ</td>
<td>Coordinación de las Investigaciones Organización Panamericana de la Salud</td>
</tr>
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<td></td>
<td>Washington, D.C., EUA</td>
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<tr>
<td>DR. JORGE OSUNA</td>
<td>Programa de Prestación de Servicios de Salud</td>
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<td>Organización Panamericana de la Salud</td>
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<td></td>
<td>Washington, D.C., EUA</td>
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<tr>
<td>DR. PATRICIA ROSENFIELD</td>
<td>Special Programme on Research and Training in Tropical Diseases (TDR)</td>
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<tr>
<td></td>
<td>World Health Organization</td>
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<td>Geneva, Switzerland</td>
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<tr>
<td>DR. GERALD ROSENTHAL</td>
<td>Oficial Técnico</td>
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<td>Oficina Sanitaria Panamericana</td>
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<td></td>
<td>México, D.F., México</td>
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<tr>
<td>DR. GABRIEL SCHMUNIS</td>
<td>Programa de Enfermedades Tropicales</td>
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