



NEWS FROM SEAMEO REGIONAL TROPICAL MEDICINE AND PUBLIC HEALTH PROJECT

by

CHAMLONG HARINASUTA

Coordinator, SEAMEO-TROPMED Project

TROPMED GOVERNING BOARD MEETING

The TROPMED Governing Board (The Central Coordinating Board of TROPMED) called for its 19th Meeting at the Institute of Public Health (the TROPMED National Centre of the Philippines), Manila on 23rd-26th September 1980. The Board discussed and approved the following matters:-

(1) The activities of SEAMEO-TROPMED from October 1979 through September 1980 including 10 regional teaching Courses (133 scholars in D.T.M. & H. Course, Bangkok; D.A.P. & E. Course, Kuala Lumpur; M.P.H. Rural Health Course, Manila; D.A. Nutr. Course, Jakarta; M. Occ. Hlth. Course, Manila; M.S. Public Health Course, Manila; D.Med. Microb. Course, Kuala Lumpur; M.P.H. Urban Health Course, Bangkok; M.Sc. Tropical Medicine Course, Bangkok; M. Sc. A. Nutr. Course, Jakarta), one workshop (Second Workshop on Development of Educational Science in Tropical Medicine and Public Health in Southeast Asia, Bangkok, 30th June-4th July 1980), personnel exchanges programme (38 awardees), consultant services (9 experts), research activities on various tropical diseases in the TROPMED National Centres and the SEAMEO Centres Staff Development Programme.

(2) The assistance to TROPMED in 1979-1980 in the form of fellowships for staff development programme, experts and

consultants from the SEAMEO Associate Members (Australia, New Zealand and France), Japan and the WHO TDR Programme were noted with much appreciation.

(3) The Board noted with appreciation about the financial assistance of the WHO TDR Programme for Institutional Strengthening of the research and training capabilities of the TROPMED National Centres of Indonesia, Malaysia, Philippines and Thailand in malaria, filariasis and schistosomiasis. This assistance will last about 5 years in each TROPMED National Centre. Moreover, the TROPMED National Centres can apply to the Scientific Working Groups (SWG) of the WHO TDR Programme on Malaria, Filariasis, Schistosomiasis for research grants on respective special subjects. Some proposals have been approved and funded from the respective SWGs.

(4) The Board noted and discussed about the First Regional Training Course on Vector Genetics, Bangkok, 1st-30th September 1980, supported by WHO/WPRO WHO/SEARO and the Japanese Government (organized by the Faculty of Tropical Medicine, Mahidol University).

(5) The Board noted and discussed on other activities in the Region in connection with TROPMED including (a) the 6th APCO Conference in Kuala Lumpur, 2nd-6th October 1979, (b) the 3rd Regional Training Course on Integrated Family Planning and

Parasite Control in Bangkok, 12th—24th November 1979, (c) 2 meetings of the Joint WPRO/SEARO Working Group on Brugian Filariasis, Kuala Lumpur, 18th-21st June 1979 and the Bi-Regional Research Study Group on Culex-borne Bancroftian Filariasis, New Delhi, 19th-23rd November 1979, (d) the Asian Meeting on Parasitic Infections and Workshop on "Maklua", Bangkok, 26th-28th February 1980, (e) the 16th Annual Scientific Seminar of the Malaysian Society of Parasitology and Tropical Medicine, Kuala Lumpur, 1st-2nd March 1980 and (f) the 2nd APCO Parasitologists' Meeting, Tokyo, 15th-18th July 1980.

(6) The Board approved the TROPMED financial matters, i.e. Financial Audit Report for F.Y. 1979/1980; Fiscal Report of TROPMED for F.Y. 1979/1980; TROPMED Budgets for F.Y. 1981/1982-1983/1984 (3 years); Management Audit Report covering period F.Y. 1977/1978-1978/1979; and Review of TROPMED Scholarship Values.

(7) The Board approved the plan to organize:

(a) 23rd SEAMEO-TROPMED Seminar: Seminar on Important Tropical Diseases in Southeast Asia, Bangkok, 3rd-9th November 1980 (financially supported by the French Government).

(b) 4th Regional Training Course on Integrated Family Planning and Parasite Control, Bangkok, 17th-29th November 1980 (organized by the Faculty of Tropical Medicine, Mahidol University, and financially supported by the private Japanese Organizations).

(8) The Board approved the plan to send many participants from the TROPMED National Centres to attend and present papers at the 10th International Congress on Tropical Medicine and Malaria, Manila, 9th-15th November 1980. Various sources

of donors should be approached in order to obtain funds to support our participants as many as possible.

(9) Distribution of TROPMED scholarships in F. Y. 1980/1981 for the TROPMED member countries in the region (total of 110 scholarships for 131 trainees).

TROPMED Workshop on Educational Science in Tropical Medicine and Public Health in Southeast Asia

This Workshop was convened at the TROPMED Central Office in Bangkok during 30th June -4th July 1980.

The aims and strategies of this workshop were similar to the first workshop conducted in 1977 but with more emphasis on interaction within the group. The participants were TROPMED Courses' directors and key persons responsible for the operation and management of TROPMED Training Courses in their respective countries. The specific aim was to evaluate and improve the management of the courses through discussions, contributions from experiences and exchange of ideas. The 16 participants discussed and reviewed in-depth on (1) the first workshop resolutions, (2) the programmes and activities related to the courses: problems, financial constraints and difficulties encountered in management of the training courses, (3) formulation of the guidelines in management, recruitment of visiting lecturers, selection of students, prerequisites for programmes offered, students activities, (4) identification of the requirements for effective coordination and collaboration with TROPMED Central Office, (5) development of the guidelines to be used as basis for evaluation procedures of the courses in all TROPMED National Centres, (6) proposals and recommendations on the changes and revisions to improve the effectiveness of TROPMED Training Programmes which included to consider thrust

of TROPMED Programmes for 1980-1984 in line with TROPMED's objectives; rigid screening of students, physical and psychological aspects; foster closer student-staff relationship; development of staff regarding management and teaching capabilities; update TROPMED Courses' syllabus; use of modified TROPMED questionnaire as National evaluation tools; consortium from TROPMED National Centres for recognition of degrees; external evaluation for TROPMED training programmes; follow-up of SEAMEO awardees to National Centres.

23rd SEAMEO-TROPMED Seminar

The Seminar on Important Tropical Diseases in Southeast Asia was held at the Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand from 3rd through 6th November 1980, in commemoration of the 20th Anniversary of the establishment of the Faculty of Tropical Medicine. It was jointly organized by the Faculty of Tropical Medicine and the SEAMEO-TROPMED Project with the financial support from the French Government.

There were 319 participants including many foreign leading doctors, scientists and research workers from U.S.A., U.K., France, Australia, WHO, West Germany, Switzerland, Indonesia, Malaysia, Philippines and Singapore. Dr. A. O. Lucas, Director of the WHO Special Programme for Research and Training in Tropical Diseases also delivered remarks at the Opening Ceremony of the Seminar.

The Seminar consisted of 5 plenary sessions and presentation of original free scientific papers. These sessions were on (1) Post-graduate training in tropical medicine and public health in the 4 TROPMED National Centres of Indonesia, Malaysia, Philippines and Thailand, (2) Malaria: epidemiology, pathophysiology, immunology and chemotherapy, (3) Diseases of gastro-intestinal

tract: bacterial and viral, intestinal parasitic infections, treatment of parasitic infections, (4) Extra-intestinal parasitic infections: Mekong schistosomiasis, paragonimiasis, gnathostomiasis, (5) Health and socio-economic development: health and water resource development, tropical diseases occurring following construction of multi-purpose dams, health and nutritional problems in the Nam Pong water resource development scheme, food and nutrition monitoring system - an integration for health and socio-economic development.

The free paper sessions covered various aspects of many important tropical diseases including clinical, pathophysiological, diagnostic, epidemiological and management of the following tropical diseases:- (a) virus infections: dengue haemorrhagic fever, rabies, Japanese B encephalitis, poliomyelitis, (b) bacterial infections: cholera, typhoid fever, *Escherichia coli* infection, leptospirosis, tropical pyomyositis, (c) protozoal infections: malaria, amoebiasis, giardiasis, trichomoniasis, isosporosis, (d) helminthic infections: soil-transmitted and snail-transmitted helminthiasis, filariasis, intestinal helminthic infections, taeniasis, echinococcus infection, paragonimiasis, schistosomiasis, gnathostomiasis, angiostrongyliasis, (e) miscellaneous: snake bites, mosquitoes, flies, fungus infections of skin, melioidosis.

The Proceedings of the Seminar will be published in the Southeast Asian Journal of Tropical Medicine and Public Health in 1981.

The papers presented at the Seminar were as follows:

1. "Kinetic of antibodies during post exposure rabies vaccination with tissue culture vaccines", by P. SUREAU and P.E. ROLLIN (France).
2. "Experiences with human diploid cell rabies vaccine: Pre-and post-exposure

- treatments of rabies in Thailand," by P. THONGCHAROEN *et al.*, (Thailand).
3. "Antigenic differences among various rabies virus isolates as shown by monoclonal antibodies", by P. SUREAU and P.E. ROLLIN, (France).
 4. "Serological studies on possible causes of intrauterine infections in Thai infants", by S. TANTIVANICH, (Thailand).
 5. "Surveillance of human mosquitoes-borne viral diseases in Thailand, 1974-1976, Japanese encephalitis infection in encephalitis patients admitted in Provincial Hospital," by P. GUNAKASEM *et al.*, (Thailand).
 6. "Fluctuations in the relative proportion of dengue virus serotypes isolated from patients with DHF in Bangkok, 1962-1980", by A. NISALAK and D. S. BURKE, (Thailand).
 7. "Studies on dengue vector control in Yogyakarta, Indonesia", by S.Y. MARDIHUSODO *et al.*, (Indonesia).
 8. "Effect of the antiviral drug ribavirin on dengue virus replication in LIC-MK2 cells", by M.A. USSURY (France).
 9. "Passively acquired antibody to flavivirus in Thai infants", by S. NIMMANITYA and D. S. BURKE (Thailand).
 10. "Polioantibody survey in Thailand and polioantibody response after oral OPV administration Thailand, 1979," by C. JAYAVASU, (Thailand).
 11. "Specificity of urine tests for antimalarials", by A. SABCHAROEN *et al.*, (Thailand).
 12. "Incidence of malaria in the Khmer refugees at Prachinburi", by C. SANTADVOOT, *et al.*, (Thailand).
 13. "Seroepidemiology of *P. falciparum* malaria", by V. THOMAS (Malaysia).
 14. "Malaria endemicity in the various phytogeographic and climatic areas of Africa, South of Sahara," by J. MOUCHET and P. CARNEVALE, (France).
 15. "Malaria and migration in sugar-cane plantation: A study of seasonal moves in Kanchanaburi Province, Thailand", by W. KANCHANAPAN *et al.*, (Thailand).
 16. "Studies on the epidemiology of malaria in sugar-cane plantations at Kanchanaburi Province of West Thailand: A preliminary. report", by C. VASUVAT *et al.*, (Thailand).
 17. "An integrated view of entomological and parasitological observations on falciparum malaria in Djoumouna, People's Republic of the Congo", by P. CARNEVALE, (France).
 18. "Initial response to single-dose of chloroquine, sulfadoxine-pyrimethamine and primaquine in children with vivax malaria by A. SABCHAREON and T. CHONGSUPHAJASIDDHI, (Thailand).
 19. "Accidental human infections by *Plasmodium cynomolgi bastianelli*, A serological and clinical study of 2 recent cases", by P. DRUILHE *et al.*, (France).
 20. "Mefloquine in the treatment of chloroquine resistant falciparum malaria in Malaysia", by J. T. PONNAMPALAM, (Malaysia).
 21. "Sulfadoxine - pyrimethamine resistant falciparum malaria in Thai children" by T. CHONGSUPHAJASIDDHI and A. SABCHAREON, (Thailand).
 22. The effect of primaquine on the gametocytes and sporogony of *Plasmodium falciparum* in Thailand", by Y. CHOMCHARN *et al.*, (Thailand).
 23. "Species - specificity of *Plasmodium falciparum* thermolabile antigens", by P. DRUILHE *et al.*, (France).
 24. "Cultivation of *Plasmodium falciparum* in normal and hemoglobin E containing red blood cells," by R. SANTIYANONT and P. WILAIRAT, (Thailand).

25. "Synchronization and partial purification of mature forms of *Plasmodium falciparum* in culture by sorbitol lysis", by P. TAPCHAI SRI, *et al.*, (Thailand).
26. "Distribution of chloroquine in *P. berghei*-infected mouse erythrocytes, by W. SIRAWARAPORN and Y. YUTHAVONG, (Thailand).
27. "The induction of immunity by a symptomatic malaria infections in mice", by ZAINALABIDIN ABU HASSAN, (Malaysia).
28. "Comparison of counterimmunoelectrophoresis with immunodiffusion test in the diagnosis of amoebiasis," by KIAP SAHAB, (Indonesia).
29. "Leucocyte migration Agarose test for cell - mediated immunity in amoebiasis," by T. SAOVANA *et al.*, (Thailand).
30. "A cellulose acetate membrane precipitin (CAP) test in amoebiasis using antigens from four different strains of *Entamoeba histolytica*," by N. THAMMAPALERD *et al.*, (Thailand).
31. "Serious isosporosis by *Isospora belli*, A case report treated by Fansidar", by M. MOJON *et al.*, (France).
32. "Effect of mass treatment and improvement of environmental sanitation on the endemicity of hookworm infection", by C. VASUVAT and S. KONGROD (Thailand).
33. "Prevalence and treatment of intestinal helminthic infection among children in orphanages in Jakarta, Indonesia", by IA SUHARIYAH ISMID *et al.*, (Indonesia).
34. "Ancylostomiasis and its problem, by AG. SOEMANTRI and N. HARSOYO, (Indonesia).
35. "Treatment of taeniasis with Puang-Haad powder from *Artocarpus lakoocha* wood" by P. SETASUBAN, (Thailand).
36. "The effect of light and temperature on the release of *Schistosoma japonicum cercariae* by *Oncomelania hupensis lindensis*" by M. SUDOMO, (Indonesia).
37. "The susceptibility of *Tricula aperta* on various dosages of *Schistosoma mekongi* miracidia," by C. LOHACHIT *et al.*, (Thailand).
38. "Comparison of circumoval precipitin test (COPT) filter paper method and formalin-ether concentration technique in schistosomiasis field survey", by M.G. CABRERA *et al.*, (Philippines).
39. "Humoral immune response of cats to *Paragonimus* infection", by L.P. QUICHO UICHO *et al.*, (Thailand).
40. "Spontaneous escape of a gnathostome through a surgical wound : Ultrastructural study", by S. RATANARAPEE *et al.*, (Thailand).
41. "Preliminary report of the effects of praziquantel, levamisole and Fansidar against ganthostomiasis in hamsters", by P. SETASUBAN, (Thailand).
42. "Preliminary study on the diagnosis of *Gnathostoma* infection, by radioimmunoassay", by R. KASEMSUTH, (Thailand).
43. "*Angiostrongylus cantonensis*: Biogenic amines in the lungs of infected rats," by C.R. BROCKELMAN, (Thailand).
44. "Serum proteinase inhibitors in opisthorchiasis", by S. CHANGBUMRUNG *et al.*, (Thailand).
45. "Altered collagen metabolism in liver fluke diseases," by N. HUTHADILOK *et al.*, (Thailand).
46. "Variations of serum proteinase inhibitors in clinical malnutrition", by F.P. SCHELP (Thailand).
47. "Echinococcal cyst of lung : The first indigenous case in Thailand", by SUTHEP NA SONGKLHA, (Thailand).
48. "Snake bite in Jakarta", by N.E. PANJAITAN, (Indonesia).

49. "How do the flies distribute into Thailand" by W. TUMRASVIN, (Thailand).
50. "The survey of parasitoids of medically important flies in Thailand," by C. APIWATHNASORN *et al.*, (Thailand).
51. "Studies on the epidemiology of subperiodic *Brugia malayi* in Malaysia; Problems in its control", by J.W. MAK *et al.*, (Malaysia).
52. "Epidemiology of sub-periodic *Brugia malayi*," by MAK JOON WAH, (Malaysia).
53. "The current status of Malayan filariasis in Thailand," by C. HARINASUTA and A. SAMARAN, (Thailand).
54. "Filariasis in different ecotypes in West Flores, Indonesia," by SRI OEMIJATI *et al.*, (Indonesia).
55. "Determination of the susceptibilities of laboratory bred *Aedes togoi* and *Anopheles* mosquitoes to *Brugia pahangi*," by S. SUCHARIT, (Thailand).
56. "Studies on aquatic plants and grasses as breeding hosts for *Mansonia* mosquitoes" by S. SUCHARIT *et al.*, (Thailand).
57. "Studies on oviposition characteristics of *Mansonia* mosquitoes with the object of finding a new method for their chemical control", by R. F. GASS, (Thailand).
58. "Studies on the colonization of *Mansonia* mosquitoes in Thailand," by S. SUCHARIT *et al.*, (Thailand).
59. "Study on cell-mediated immune response in patients with typhoid fever," by V. SANGPETCHSONG and S. THARAVANIJ, (Thailand).
60. "Observations on typhoid encephalopathy in children", by MUSLIM A. NATHIN (Indonesia).
61. "Meliodosis at Siriraj Hospital", by V. THAMLIKITKUL *et al.*, (Thailand).
62. "Changes of leucocytes in falciparum malaria", by P. SUNTHARASAMAI *et al.*, (Thailand).
63. "Tropical pyomyositis", by V. CHOO-SAMER and K. BARLEE (Thailand).
64. "Prevalence of methicillin-resistant staphylococci in a University Hospital," by N. ASWAPOKEE *et al.*, (Thailand).
65. "Nonfermentative bacilli associated with man: Detection and identification", by P. LEANGPHIBUL *et al.*, (Thailand).
66. "Mycetoma; A review of 17 cases seen at the Institute of Dermatology, Bangkok, Thailand", by R. KOTRAJORAS, (Thailand).
67. "The effect of metronidazole on *Trichomonas vaginalis* by using *in-vivo* and *in vitro* methods", P. PRASOMSITTI *et al.*, (Thailand).

Fourth Regional Training Course on Integrated Family Planning and Parasite Control

The 4th Regional Training Course on the control of the Intestinal Helminthic Infections with Special Emphasis on the Soil-transmitted Helminthiasis, Family Planning Practice and their Integrated Programme was held at the Faculty of Tropical Medicine, Mahidol university, Bangkok from 17th through 29th November 1980. It was organized by the joint operation of the Faculty of Tropical Medicine and Faculty of Public Health of Mahidol University, the Steering Committee for Integrated Family Planning and Parasite Control Programme and the Population and Community Development Association (the Community-Based Family Planning Services of Thailand), with the financial support and cooperation of the Japanese Organization for International Cooperation in Family Planning (JOICFP), the Asian Parasite Control Organization (APCO), the Japan Association of Parasite Control (JAPC) and the Sasakawa Health Memorial Foundation.

The objectives of this training course for the trainees were:-

1. To have a general knowledge on common intestinal helminthic infections of man particularly those caused by hookworms, *Ascaris*, *Trichuris*, *Strongyloides* and *Enterobius*.
2. To be able to identify the eggs and larvae of the soil-transmitted helminths in human faeces, and differentiate them from other intestinal helminths.
3. To know the proper methodology in collection and preparation of the stool specimens for diagnosis of intestinal helminths, and also for determination of the degree or severity of the infections of the soil-transmitted helminths.
4. To know how to record and analyse the field data of helminthic infections.
5. To know the methods and procedures and the problems in the presentation and control of intestinal helminthic infections, and how to solve those problems.
6. To know the principle and practice in family planning in the communities especially those in the rural as well as in the urban areas.
7. To know the concepts and practice of the Integrated Family Planning and Parasite Control Programme and its application to the communities, and also to know the plan to develop the subject on nutrition and include it into the Integrated Programme in the field operation at an appropriate time.

The course work is summarized as follows:

Training sites:

- a. Faculty of Tropical Medicine, Mahidol University, 420/6 Rajvithi Road, Bangkok 4.
- b. Faculty of Public Health, Mahidol University, 420/1 Rajvithi Road, Bangkok 4.
- c. The Community-Based Family Planning Services, Population and Community Development Association, 8 Sukhumwit Road, Soi 12, Bangkok 11.

Training Course

The course consisted of lectures, demonstrations, laboratory practice, group discussions, and quiz (55 hours) and field study visits (2 Saturdays). The teaching in the classes consisted of (a) Parasitology and parasitic control with emphasis on soil-transmitted helminthiasis and others; 15 hours of lectures with demonstrations, 16 hours of laboratory practice, 6 hours of parasitic control, and 2 hours of quiz, (b) Family Planning-9 hours, (c) Integrated Programme-7 hours.

Parasite Control

The teaching was on the general knowledge on common intestinal helminthic infections with emphasis on the soil-transmitted helminthiasis (*Ascaris*, hookworms, *Trichuris*, *Strongyloides*, *Trichostrongylus*, *Enterobius*, *Fasciolopsis*, *Echinostoma*, *Paragonimus*, *Opisthorchis*, etc. Their characteristics and laboratory diagnosis by stool examinations were emphasized. The real specimens for individual practice and demonstration were given to the trainees. The group discussions on the problems that arise in the control of the intestinal parasitic infections were encouraged.

Family Planning and Integrated Programme

The teaching on family planning consisted of the following subjects:-

- (a) Causes of rapid population growth and population control approaches with case studies in Asian countries, (b) Family planning programme and its important components, i.e. birth control services, motivation services, training and administrative services, (c) Knowledge of reproductive physiology focusing on male and female sexual developments, sexual organ, and their functions, pregnancy and deliveries (d) Birth control methods including their

advantages and disadvantages, (e) Knowledge on motivation techniques in family planning, (f) Reasons for integrating family planning services with parasite control services at village level.

Discussions and exchange of information among participants from various countries were encouraged and carried out.

Field Study Visit

There were 2 field visits in this course. The first trip was on Saturday 22nd November 1980 to a Cambodian Refugee Camp called "Khao-I-Dang Holding Centre" in Prachinburi province, about 220 km. east of Bangkok. At present this Centre is accommodating about 67,000 Kampuchean refugees. The Community Based Emergency Relief Services of the Population and Community Development Association and the Faculty of Public Health have been operating parasite control and family planning in this community (hookworm infection 85 %, ascariasis 26 %, trichuriasis 11 %). The on-going parasite control programme has integrated 3 components of health in order to obtain satisfactory results, i.e. environmental sanitation improvement; health education and mass treatment with a broad-spectrum anthelmintic (pyrantel pamoate). The trainees returned to Bangkok in late evening on the same day.

The second trip was on Saturday 29th November 1980 at the end of the course to Banglamoon district of Choburi Province (130 kilometers south-east of Bangkok). Observations on the work of the integrated family planning and parasite control were made in 2 villages, operated by the Community-Based Family Planning Services (a private sector) and the Communicable Disease Control Department of the Ministry of Public Health of Thailand (a governmental sector). This work has been done with satisfactory results by the assistance of the village volunteers

and good cooperation of the local villagers. The trainees returned to Bangkok in late afternoon on the same day.

A farewell dinner party was given to the participants on 29th November 1980.

There were 24 trainees from 7 countries including 3 each from Bangladesh, Indonesia, Malaysia, Nepal, Philippines, Sri Lanka, and 6 from Thailand. Most of the candidates were scientists and technicians, while some were medical doctors, who were responsible for either family planning services or intestinal parasite control programmes in their respective countries. The training ended on Saturday 29th November 1980. It is hoped that after this training course and on returning to their home countries, these doctors, scientists and technicians will take responsibility in working, supervising and training the local medical technicians and health workers or village volunteers to work in the field on the integrated programme for family planning and parasite control in the rural as well as urban communities with fruitful results.

The Certificates of Attendance were conferred to all trainees at the end of the training course by the Dean of the Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand.

Evaluation

The evaluation of this training course was made by (1) A quiz to test technically individual trainees at the end of the course in order to know his/her efficacy in examination and diagnosis of soil-transmitted helminthic infections (from faecal examinations), and in choosing and performing the suitable methods of examination necessary for the work on the control of soil-transmitted helminthiasis, (2) The attitude of the trainees while participating in the group discussions on the parasite control and the integration of family planning and parasite control, and (3) Questionnaire

and answer forms filled by all trainees on the last day of the course in order to obtain their general opinion and suggestion for the improvement of the operation of future courses especially that to be conducted next year.

REGIONAL TRAINING COURSE ON VECTOR GENETICS

The First Regional Training Course on Vector Genetics was organized to be conducted at the Faculty of Tropical Medicine, Mahidol University, Bangkok (the TROPED National Centre of Thailand) during 1st-30th September 1980. This is a special regional training course of TROPED in 1980 in cooperation with St. Marianna University in Japan (Professor Tozo Kanda, Head Department of Medical Zoology, St. Marianna University School of Medicine, Kawasaki, Japan). The objectives of the course were to train medical scientists in Southeast Asian countries and other countries (1) To gain general knowledge on mosquito genetics in order that when they return to their own countries after the training course, they will take responsibility in working and supervising local medical technicians to work in the field as well as in the laboratories on mosquito genetics especially those in connection with malaria, filariasis, dengue haemorrhagic fever, Japanese B encephalitis, etc. and (2) To know more on specific subjects on mosquito genetics in order that they can follow up the recent development in genetic studies of mosquitoes in the Southeast Asian Region and in other parts of the world. It is hoped that on finishing the course and returning to their home countries, those scientists and entomologists will be able to apply their newly gained knowledge and experience to the work in their own countries for further advance research on mosquito genetics and if possible in the trials to control the mosquito borne diseases by genetics.

The work on mosquito genetics is rather new for the medical entomologists in Southeast Asia, and thus it is expected that this training course will be conducted once a year for 3 successive years with the same group of trainees. The instruction in the course has been and will be made mainly by Professor Tozo Kanda and Dr. T. Tanado of the St. Marianna University under the sponsorship of the Japanese Government and also Dr. Richard K. Sakai from the Pakistan Medical Research Centre, University of Maryland International Centre for Medical Research, Lahore, Pakistan.

The lectures were conducted in a lecture room of the Faculty of Tropical Medicine and laboratory practice and demonstrations in the laboratories and insectaries of the Department of Medical Entomology of the Faculty. The subjects taught included formal genetics of *Aedes togoi* and *Culex tritaeniorhynchus*, cytogenetics of *Anopheles culicifacies*, cytogenetics and evolutionary genetics of *An. hyrcanus* complex, *An. leucosphyrus* group and *Pyrethophorus* group.

The field practice and training was conducted at 2 breeding places of *Culex* and *Anopheles* mosquitoes, i.e. in Pattaya of Chonburi province, about 140 km. southeast of Bangkok and in Kanchanaburi province, 180 km. west of Bangkok. The specimens of Anopheline and Culicine mosquitoes as collected from the fields were brought back to the laboratories in Bangkok, identified and studied on their genetics. The assessment of the teaching was made on the last 2 days of the course.

There were 10 trainees including one each from China, Papua New Guinea, Philippines, Singapore and Nepal, 2 from Malaysia and 3 from Thailand. One observer from Papua New Guinea also attended the course. Of these participants, WHO/WPRO provided scholarships for 5 persons, while one scholarship for

a Nepalese trainee was from WHO/SEARO. Roche Far East Research Foundation provided stipend for a candidate from Malaysia, while 2 insecticide companies in Japan contributed funds to cover some expenses of the course.

TROPMED participated in the 10th International Congress on Tropical Medicine and Malaria

The 10th International Congress on Tropical Medicine and Malaria held at the Philippine International Convention Centre, Manila during 9th–15th November 1980, was convened under the auspices of the Ministry of Health in cooperation with the Institute of Public Health, Health Sciences Centre, University of the Philippines System. The Opening Ceremony was addressed by Dr. B.D. Cabrera, President of the Congress and Honorable Dr. Enrique M. Garcia, Minister of Health of the Philippines. The welcome address was delivered by Madame Imelda Romualdez-Marcos, First Lady of the Philippines, Minister of Human Settlements and Governor of Metropolitan Manila. The Congress was declared open by H.E. Ferdinand E. Marcos, President/Prime Minister of Republic of the Philippines.

The theme of the Congress was "Health for all in the Tropics by the year 2000". This 10th International Congress on Tropical Medicine and Malaria became significant in this year as the first forum of research findings that are truly the fruits of international and regional collaboration among the tropical countries.

There were over 1,500 doctors, scientists and medical workers from 50 nations attending the Congress. TROPMED sent about 100 representatives (from Indonesia, Malaysia Philippines and Thailand) to participate and present papers in the Congress. Most of the papers were on chemotherapy and epidemio-

logy of malaria, various aspects of filariasis, schistosomiasis, soil-transmitted helminthiasis, paragonimiasis, liver fluke infections, angiostrongyliasis, capillariasis, dengue haemorrhagic fever, amoebiasis, medical entomology, etc.

SEAMEO THIRD HIGH OFFICIALS MEETING

The Third Meeting of the High Officials of the SEAMEO member countries was held in Bangkok during 17th–21st November 1980. It was an annual meeting convened by SEAMES as the fore-runner of the annual Conference of the Council (SEAMEC) to be convened in Singapore in late January 1981. The Meeting was declared open by Dr. Sippanondha Ketudat, H.E. Minister of Education of Thailand. The subject discussed were:-

1. Report by the Director of SEAMES.
2. Follow-up action on the resolutions of the 15th SEAMEC Conference.
3. Reports by the Directors/Coordinators of the SEAMEO Regional Centres/Projects.
4. Contacts with the Non-Active Member Countries of SEAMEO.
5. SEAMEO Centre Staff Development Programme.
6. SEAMES Director Report on fund-raising efforts 1980.
7. Status of the SEDF.
8. Utilization of Associate Members' contributions to SEAMES.
9. SEAMES Financial Audit Report for F.Y. 1979/1980.
10. SEAMEO Headquarters Financial Audit Report for F.Y. 1979/1980.
11. Consolidated SEAMEO Financial Audit Report for F.Y. 1979/1980.

12. Proposed Revisions of SEAMES Operational Budgets for F.Y. 1981/1982. and F.Y. 1982/1983.
13. Proposed SEAMES Operational Budget for F.Y. 1983/1984.
14. Consolidated SEAMEO Budgets and Consolidated Centre Budgets for F.Y. 1981/1982, 1982/1983, and 1983/1984, with the Consolidated SEAMEO Personnel Strength Budget for F.Y. ending June 30th, 1982.
15. Member Countries' contributions to the SEAMES Budgets Support Fund (SBSF) for F. Y. 1980/1981.
16. Follow-up action on recommendations of SEAMES Management Audit Report for F.Y. 1977/1978 and 1978/1979.
17. Follow-up action on recommendations of SEAMEO Headquarters Management Audit Report for F.Y. 1977/1978 and 1978-1979.
18. Follow-up action on recommendations of Consolidated SEAMEO Management Audit Report for F.Y. 1977/1978 and 1978/1979.
19. Cost-Benefit Analysis of the SEAMEO Management Audits for F.Y. 1977/1978 and 1978/1979.
20. Proposed amendments of 1979 FOM Guidelines.
21. Proposed Revised SEAMEO Scholarship Values.
22. Proposed Third Five-Year Development Plan of RELC (1st January 1982-31 st December 1986).
23. Proposed Second SPAFA Development Plan (1st July 1981-30th June 1986).
24. Amendment of the sections of the Enabling Instrument of BIOTROP pertaining to the Deputy Directorship.
25. Mechanism for acquiring follow-up action on recommendations of BIOTROP symposia.
26. Proposed memorandum of agreement concerning the operation and funding of INNOTECH, F.Y. July 1981- June 1986.
27. Proposed revision of the Enabling Instrument of INNOTECH.
28. Proposed revision of the Enabling Instrument of SPAFA.
29. Formulation of Agenda Items for the 16th SEAMEC Conference, Singapore.