

5. COORDINATING COMMITTEE MEETING 會議錄

NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH

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9th November, 1990.

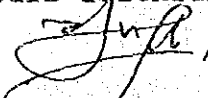
Dear Sir,

NOGUCHI MEMORIAL INSTITUTE
CO-ORDINATING COMMITTEE MEETING

Attached is a copy of the Minutes of the Second Meeting 1989/90 of the Co-ordinating Committee held on Thursday, 9th August, 1990 at 9.00 a.m. at the Institute.

Please let me have any suggestions for amendment as soon as possible.

Yours faithfully,


J.B. Nchor,
Secretary.

Distribution

Prof. F.K. Nkrumah
Prof. J.A.A. Mingle
Prof. E. Ayitey-Smith
Prof. M. Dakubu
Dr. E.A. Afari
Dr. E.E.K. Takyi
Dr. N.K. Ayisi
Mr. H. Eguchi
Dr. H. Sakatoku
Dr. T. Rikimaru
Dr. K. Mimura
Dr. Y. Kido
Dr. O. Nishiwaki
Dr. Yamazaki
Dr. Kamiya
Prof. Kishi
Mr. Kawakami
Prof. P. Twumasi
Dr. M. Adibo
Dr. A. Berkoh

cc: Vice-Chancellor
Pro-Vice-Chancellor
Registrar
Dean, U.G.M.S.
Librarian, Balme Library
Institute Librarian

MINUTES OF THE MEETING OF THE CO-ORDINATING
COMMITTEE HELD ON THURSDAY 9TH AUGUST 1990
AT 10.00 AM IN ROOM 102 OF THE INSTITUTE

PRESENT

Prof. F.K. Nkrumah - Director
Prof. J.A.A. Mingle
Prof. M. Dakubu
Dr. E.A. Afari
Dr. E.K.K. Takyi
Dr. N.K. Ayisi
Mr. H. Eguchi
Dr. H. Sakatoku
Dr. T. Rikimaru
Dr. K. Mimura
Dr. Y. Kido
Dr. O. Nishiwaki
Dr. Yamazaki)
Prof. Kamiya) JICA REVIEW TEAM
Prof. Kishi)
Mr. Kawakami)

IN ATTENDANCE

Mr. J.B. Nchor - Secretary

ABSENT

Prof E. Ayitey-Smith - Apologies
Prof. P. Twumasi
Dr. M. Adibo

OPENING

The Director welcomed the JICA Review Team and noted that it had been undertaking a general review of the progress of the current Ghana/Japan Medical Co-operation Project. The Terms of Co-operation required that the Co-ordinating Committee should undertake a general review of the Project in order to assess whether modifications should be made. It was noted that the Team had already had detailed discussions with the Unit Heads prior to the meeting.

ITEM 1: Confirmation of Minutes

The Committee agreed to defer the confirmation of the minutes of the meeting of 5th April 1990 as it was intended to complete proceedings early to enable the JICA Review Team meet the Pro-Vice-Chancellor.

The Committee therefore proceeded to item 2.

ITEM 2: Presentation of Reports by Virology, Epidemiology
and Nutrition Units and JICA Co-ordinator

The Heads of the Virology, Epidemiology, and Nutrition Unit

were called upon to speak to their reports in Papers CC2 (89/90)1, CC2 (89/90)2, CC2(89/90)3 which were attached to the Agenda.

A. VIROLOGY

The Head of the Virology Unit stated the objectives set out for the Unit in the tentative implementation plan and proceeded to outline the activities of the Unit relating to them. He noted that there were two Fellows (one of whom is Senior) three Research Assistants and three Technicians. There was one vacant position for a technician.

The Unit had in the last four years provided the following diagnostic and research related services for viral infections -

i. Serological diagnoses for HIV, yellow fever, measles and rubella. The Unit serves as the confirmatory centre for HIV infections in Ghana.

ii. Isolation of HIV-1 and 2 from suspected AIDS patients, herpes simplex viruses from genital and skin swabs cocksackie A24 from swabs of acute haemorrhagic conjunctivitis infections, and rotavirus. The poliovirus had also been isolated from clinical cases.

With regard to the objective of improving the efficiency and effectiveness of the national immunization programme the Unit had undertaken the following:

- i. potency tests on poliovirus, measles and yellow fever vaccines intended for use by the Epidemiology Division of the Ministry of Health, and UNICEF;
- ii. monitoring of the effectiveness of the "cold chain" vaccines imported into the country and doing potency tests on the vaccines both before and during the immunization campaigns;
- iii. serological tests for antibody rise after vaccination with poliovirus in the Greater Accra Region;
- iv. evaluation of a "new" WHO schedule for poliovirus vaccination starting the four dose schedule at birth;
- v. evaluation of a two dose schedule for poliovirus vaccination using double the normal dose;
- vi. assessment of the seroconversion rates of polio vaccination in developing countries in collaboration with WHO.

The Unit had collaborated with the Epidemiology Unit in:

- i. assessing the seroconversion rate of measles vaccination at three villages in Southern Ghana to determine the optimal age for measles immunization. The results indicated that measles immunization can be administered effectively at the age of seven months.
- ii. assessing the role of rotavirus in infantile diarrhoea at two Ghanaian villages. At Gomoa-Onyadze, the incidence was 6.9% but at Gomoa Fetteh, the incidence was more than 35%. Other research activities of the Virology Unit have included the following: i. surveillance of HTLV-I and III confirmation by the immunofluorescent and Western blot techniques;
- ii. evaluation of confirmatory centres for HIV infections using WHO panel of reference sera in collaboration with WHO;
- iii. sero-epidemiologic studies of rubella virus infection in Ghana;
- iv. evaluation of three "rapid" and simple methods for the detection of HIV antibodies in collaboration with Family Health International/USAID and the Ministry of Health, Ghana;
- v. work on coxsackie A24 isolates.
- vi. assessment of the Unit in 1988 by WHO as a Reference Centre for AIDS confirmation test and as a possible training centre for personnel involved in EPI programmes in Africa;
- vii. evaluation of the Unit in 1989 by WHO as a possible centre for poliovirus isolation and characterisation. WHO was also considering making the Unit a training centre for vaccine potency testing for personnel from other African countries;
- viii. antiviral chemotherapy - comparative studies of standard antiviral drugs with plants known to have antiviral activities were being undertaken. Some of the viruses being studied include herpes simplex, varicellazoster, cytomegalovirus, poliovirus, measles, yellow fever and Coxsackie A24;
- ix. work on the inhibitory effects of nucleoside analogs

on HIV replication in collaboration with the University of Saskatchewan;

- x. collaborative work with the University of Saskatchewan on "Structure Activity - Relationships of Phosphate and Phosphonate Derivatives of Nucleosides against HIV.

The Head of Unit also outlined the projects under investigation and those planned for the future. These included:

- i. investigation of two plants used by herbalists to treat shingles and AIDS. Extracts from these plants are being evaluated for their possible effects on HIV, varicellazoster, cytomegalorus, herpes simplex virus, yellow fever virus and poliovirus;
- ii. plans to investigate viruses like Lassa which possibly account for febrile cases that prove negative for malaria infection;
- iii. plans to investigate hepatitis B virus, cytomegalovirus and yellow fever virus as possible causes of intrahepatic jaundice;
- iv. plans to find out if the novel human B-lymphotropic herpes virus, HBLV (HHV-6) is present in Ghana through immunofluorescence assay seroepidemiology using a Pan-Data Systems Kit;
- v. randomised controlled clinical trial of the new WHO schedule of immunization with the trivalent oral poliomyelitis vaccine in Ghana;
- vi. isolation and identification of viral etiologies of ocular infections.

The Head of Unit indicated that between August 1989 and August 1990 two major projects had been undertaken. A WHO representative, Dr. Milstein, visited the Institute in 1989 and asked the Unit to isolate, identify and characterize poliovirus from the stool of vaccinated children and clinical patients with a view to determining whether the polio was due to the vaccine or wild strains. Out of 147 stool samples, 10 viral isolates were made. It was hoped that Dr. Sanekata who had been involved in this and who was due back from Japan shortly, would be in a position to advise the Unit on the outcome of the work. A report was due to be filed with WHO on this by the end of August 1990.

The other major project was undertaken in collaboration with the University of Saskatchewan on the differential inhibitory

effects of ddAzThd, ddCyd, ddIno, and PFA on HIV-I strains A87SF and A79SK-1. A new formula was derived from this study for calculating the percent cell protection by drug against viral infection.

Comments from the Review Team

Dr. Yamazaki, Virologist and leader of the Team, said that the diagnostic services being provided by the Virology Unit were commendable. He agreed, however with the Director that the Unit should generally delineate the diagnostic services that it was capable of offering to guide the public.

Dr. Yamazaki suggested that the Unit should undertake a study of the incidence of rubella in child-bearing women. It was noted that preliminary studies had been done in this area. The Director advised that the Unit should periodically look into the seroprevalence of rubella in the child-bearing women. The Head of Unit agreed to liaise with the Epidemiology Unit of the Institute and the Epidemiology Division of the Ministry of Health on this subject.

With regard to the herpes simplex viruses, Dr. Yamazaki suggested that the Unit should investigate the ratio between type I and type II. He also suggested that further studies be made of rotavirus infections among diarrhoeal infants in the light of the newer classification possibilities of the virus. He indicated that antigens could be obtained from Japan for this work. The Unit Head felt that the manpower resources of the Unit would need to be beefed up to facilitate such studies.

In reaction to a question on the evaluation of the Institute as a potential WHO sub regional confirmatory centre for HIV infections, the Unit Head said that the Institute examined 20 specimens and was to have received another set of sera from WHO which incidentally, did not arrive. He hoped however that the Institute could in future become a confirmatory centre for HIV infections in the anglophone zone of Africa.

Dr. Yamazaki wondered if the Unit had the resources to undertake studies as indicated into the "persistent febrile cases", which prove negative for malaria infection. The Head replied that the Project had been scheduled to take off in 2 years time. Dr. Yamazaki suggested that some antigen preparations could be obtained from Japan at the start of the Project.

For work on the isolation of the human B-lymphotropic herpes virus, HBLV (HHV-6), Dr. Yamazaki also assured the Unit Head of antigen preparations from Japan.

B. Epidemiology

The Head of the Epidemiology Unit stated the objectives of the Unit and went on to outline the activities of the Unit over the last four years. These included:

- i. the selection of a reference population. Gomoa Onyadze/Otsew Jukwa and Gomoa Mprumem (in the Central Region) were selected in 1986/87 and 1988 respectively. Gomoa Fetteh was the first community to be selected as early as 1983 for the Unit's project;
- ii. Collection of demographic data. Censuses are conducted every two years in the selected communities. All births and deaths, and possible causes of death are recorded continuously in the communities by trained community health workers. No maternal deaths have occurred since the beginning of the current Programme although about 95% of infants have been delivered by traditional birth attendants;
- iii. Under-five disease surveillance. Preschool children in the three communities are registered and followed up at a weekly clinic in the villages. The four most common causes of morbidity have been identified as acute respiratory illnesses/infections, malaria, diarrhoeal diseases and skin conditions. Seasonal variation in disease incidence with high incidence during the wet season (April/May - Oct/November) was characteristic of all major causes of morbidity but diarrhoeal diseases. Control programmes have been initiated for malaria and diarrhoeal diseases since 1988.
- iv. Primary health care activities such as
 1. health education - in the form of talks, discussions, film shows etc relating to sanitation, food habits and values, diarrhoeal disease control, malaria control and family planning;
 2. growth monitoring - measurements of body weights and heights of preschool children to monitor the growth of each child;
 3. treatment of Childhood diseases;
 4. vaccination sessions - vaccination of children against tuberculosis, diphtheria, tetanus, pertussis, poliomyelitis and measles was undertaken regularly;

5. antenatal and postnatal clinics - held once a month to improve the health of the mother and the baby to be born;
6. laboratory support from the Parasitology, Immunology, Bacteriology, Virology and Haematology Units in the areas of malaria, diarrhoeal diseases, some skin infections and seroepidemiological studies.

Research activities (survey/special studies) undertaken by the Unit centred on:

1. Some demographic characteristics in two of the communities: This study undertaken in 1987 showed a rate of natural population growth of 3.9 percent which was higher than the national rate of 2.6 per cent recorded during the 1984 census. Family Planning services were introduced as a result of the study.
2. Diarrhoeal morbidity and treatment.
A survey conducted in June 1987 in Gomoa Fetteh and in Gomoa Onyadze/Otsew Jukwa provided baseline data for a diarrhoeal disease control programme.
3. Parasitic, bacterial and viral isolates - diarrhoeal (acute) and non-diarrhoeal stools were collected from preschool children for a one-year period (1987/88) to determine an association between intestinal isolates and diarrhoeal diseases in preschool children at Gomoa Onyadze/Otsew Jukwa.
4. Nutritional status of preschool children - of the 512 preschool children at Gomoa Fetteh and Gomoa Onyadze/Otsew Jukwa who were studied, 2.9 percent were found to be wasted, 28.5 per cent stunted, 21.7 percent stunted or wasted while 0.8 per cent were stunted and wasted.
5. Seasonal characteristics of malaria infection in preschool children - a quarterly survey conducted showed that the crude parasite rates ranged from 19.6 to 33.5 percent in the dry season and 33.0 to 44.0 per cent in the wet season.
6. Antibody response to measles immunization - the results of this study showed that measles antigens can be administered effectively at the age of seven months as well as nine months.

The Head of Unit outlined the on-going projects as follows:

1. Sensitivity status of Plasmodium falciparum to chloroquine and other antimalarial drugs in Ghana. The first phase this study conducted in Gomoa Fetteh (Central Region) Nima and Madina (Greater Accra Region) was followed by a two day seminar on "Malaria in Ghana" in March 1989. The second phase conducted in the Ho District (Volta Region) and Frafra District (Upper East Region) was completed in March 1990. The third phase of the Project would cover Brong Ahafo Region beginning November 1990.
2. Malaria infection, morbidity and antibody levels in infants in a rural community in Ghana. Fifty infants at Gomoa Fetteh and Gomoa Onyadze/Otsew Jukwa are involved in this study. They are being followed up monthly.
3. (in collaboration with the Immunology and Virology Units) -
 - randomised controlled Clinical Trial of APDT vaccine in Ghana - pilot study is being done at Gomoa Fetteh
 - randomized controlled Clinical Trial of the New WHO Schedule of Immunization with the Trivalent Oral Poliomyelitis vaccine in Ghana. The study is being conducted at Ashiaman, a perurban community in the Greater Accra Region.

The Head of Unit said that although the Unit had been collaborating with the University of Ghana Medical School and the Ministry of Health in the area of research activities especially relating to malaria, it had not been possible to organise courses to train epidemiologists in the country. The Unit however had plans to organise short courses in Epidemiology for district health personnel of the Ministry of Health.

The areas that would require the attention of the Unit in future included:

- a. assessment of malaria diagnosis and treatment practices in Ghana;
- b. epidemiology of malaria in two different ecological zones in Ghana;
- c. teenage pregnancy in second cycle institutions and in the Gomoa District;
- d. strengthening Primary Health Care activities in the Gomoa District;
- e. tuberculosis control project in Ghana;

- f. epidemiology courses for health personnel.

Comments from the Review Team

Dr. Kamiya, Epidemiologist on the Review Team, observed that the Epidemiology Unit had developed under the current Head. He was satisfied with the Primary Health activities of the Unit and recommended that the results of those activities should be communicated to the Ministry of Health for the benefit of the public.

He advised the Institute to encourage the study on malaria to be undertaken in the Brong Ahafo Region in November 1990. He would urge that the results of the study should be disseminated. The Director disclosed that the Institute was drawing up a proposal on malarial research to be submitted to the WHO-TDR Programme for a grant. The Project would involve the Epidemiology, Immunology and Parasitology Units of the Institute.

The Review Team had in the course of the week visited Ashiaman, a perurban community in the Greater Accra Region where the Epidemiology Unit had been involved in the 'randomized controlled clinical trial of the new WHO Schedule of Immunization with the Trivalent Oral Poliomyelitis vaccine,' Dr. Kamiya found the work being done there encouraging.

He also commended the Unit's work on randomized controlled clinical trial of APDT vaccine and suggested that efforts be made to publish the results of the Project as soon as it was completed.

C. Nutrition

The Head of the Nutrition Unit stated the objectives of the Unit as provided for under the Tentative Implementation Programme for 1986-91 and then outlined the research activities of the Unit.

These included:

- i. Weaning Foods. The study started in 1986 found that prolonged breastfeeding (more than 12 months) could be one of the causes of malnutrition in children owing to partial refusal of supplementary diet. The Unit was investigating why some children reject supplementary feeds.
- ii. Alfalfa - the study was to determine the possibility of incorporating Alfalfa (as nutrient cake) into supplementary diets of children because of its relatively good properties with respect to protein

content, B-carotene and mineral levels. The first phase of the study, which concerned animal feeding had been 95 per cent completed. The conclusion so far had been that alfalfa supports growth (as measured by gain in body weight) in rats better than weanimix.

- iii. Vitamin A studies. One study was to determine the status of Vitamin A in the inhabitants of Gomoa Onyadze while the other was to analyse the B-carotene levels in local foodstuffs. The Unit found that there was no Vitamin A deficiency in Gomoa Onyadze. In the case of the second study, palm oil, coconut and palm kernel oils were analysed. Even though the work was still in progress, analysis so far done indicated that palm oil was the richest source of B Carotene.
- iv. Studies on Oral Rehydration Salts - these included quality assurance test of UNICEF ORS sachets, chemical evaluation of home-available fluids used in the management of diarrhoea, and KAPB analyses of ORS and their use.
- v. Nutritional status of children in rural (communities in the Upper East Region of Ghana. The results of the study showed that the energy, and intake of most of the nutrients were below RDA values.

The Head of Unit noted that a one-day seminar on "Weaning Practices in Ghana" had been scheduled for September 1990 to be sponsored by JICA.
Comments From Review Team

Professor Kishi, the Nutritionist on the Team, expressed general satisfaction with the work of the Nutrition Unit. He observed however that some of the Projects had not advanced as much as expected because of lack of staff. He also remarked that while some of the studies were well designed others were not, eg the alfalfa study. He suggested that more "controlled diets" should be included in that study.

Professor Kishi thought that the nutritional status of children could better be assessed using immunological parameters. He therefore suggested collaboration with the Immunology Unit. He also recommended that the Unit should consult the Director on the infant feeding studies. He urged that an Animal House should be put up to promote studies on nutrition.

In addition, he recommended that protocols should be discussed by the members of the Unit before they were submitted to the Scientific and Technical Committee (STC) for approval. The Unit had published few papers compared to the amount of research activities undertaken. He stressed the need for more publications and asked that seminars be held on a regular basis to enable staff know what was going on.

D. JICA Co-ordinator's Report

Before the Committee was a report by the JICA Co-ordinator. Speaking to the report, the Co-ordinator noted that JICA had been assisting the Institute by way of scientists, training and supply of equipment and materials.

In terms of scientists, 18 Japanese had been to the Institute since 1986. 11 Ghanaian counterparts had been trained in Japan since then. As at now 5 Japanese Scientists were on the ground while 3 Ghanaian staff were due to leave in August 1990 for a year's training in Japan.

As regards supplies 118 million Japanese yen (about 260m cedis) worth of equipment and materials had been received under the current Agreement.

The Co-ordinator expressed satisfaction with the collaborative work between the Japanese and Ghanaian Scientists, the details of which had been reported by the Unit Heads.

Talking about finance, the Co-ordinator noted that a substantial amount of the grant from the Ghana Government was used in paying the salaries of staff and for the running of the Institute. He was pleased that the Government had voted 60m cedis for equipment this year (1990) but urged the Institute to seek more funds from Government for the expansion of its research activities.

He noted that the Institute had 54 scientific staff (Fellows, Research Assistants and Technicians) and 72 supporting staff as at June 1990. He recommended the recruitment of more scientific staff in view of the equipment/materials and potentials available which needed to be utilised fully.

Touching on the public relations activities of the Institute, the Co-ordinator noted with satisfaction the screening of the documentary film on the Institute in July 1990 which sought to introduce the Institute to the Ghanaian community. He hoped that the recently published bulletin of the Institute - which carried the 10th Anniversary activities - would continue to be published on a regular basis.

He intimated that an up-to-date edition of the Institute's Handbook would be published this year(1990).

According to him, JICA had plans to sponsor the following in 1990:

- a seminar on Weaning Food, scheduled for September 1990
- link arrangements with KEMRI (Kenya)
- publication of the Institute's Handbook
- polio programme, which would involve the training of personnel from other parts of Africa.

The training needs of the Units were to be discussed later with the Review Team before its departure.

E. Suggestions for Continued JICA Support

The Director made a few suggestions for continued JICA support. He said that even though some progress had been made in the areas of communicable diseases and nutrition, there was still more work to be done. He therefore suggested that JICA should continue to support research in these areas. He also suggested that research into endemic tropical diseases should be included in future plans.

Hitherto JICA support had been Unit - oriented. The Director suggested that future JICA support should be tied to specific research projects rather than to individual Units. The Institute would continue to require the services of Japanese Scientists to augment the efforts of existing staff in specific Project areas and to promote the transfer of technology and skills to their Ghanaian counterparts.

The Director urged continued JICA support for the training of Ghanaian Scientists and Technicians in areas of need. Such training he suggested should be tenable in both Japan and elsewhere under the Third Country Programme. He proposed short training courses at the Institute for Ghanaians in such areas as Epidemiology and Virology, in support of the programmes of the Ministry of Health.

He added that the Institute, which had been earmarked as a training centre for EPI was currently drawing up a 5-year Development Plan for the consideration of the University and Government.

F. Conclusion

In his closing remarks, the leader of the Review Team, Dr. Yamazaki noted that the research activities of the Institute in the last four years had reached a high standard. He thanked the

Institute for co-operating with the Team in its evaluating efforts and assured it of a feedback in due course.

G. Summary Of Recommendations of JICA Review Team

Virology

- i. The Unit should delineate in general terms the diagnostic services to be offered to the public.
- ii. There should be a study of the incidence of rubella in child-bearing women.
- iii. With regard to the herpes simplex viruses, the Unit should investigate the ratio between types I and II.
- iv. Rotaviral infections among diarrhoeal infants should be investigated.

Epidemiology

- i. The results of the Primary Health Activities of the Unit should be disseminated.
- ii. The malarial studies of the Unit should be encouraged and expanded.
- iii. The findings of the work on randomised controlled clinical trial of APDT vaccine should be made known in due course.

Nutrition

- i. More controlled variables should be introduced into some of the studies eg. the alfalfa study.
- ii. The nutritional status of children should be assessed using immunological parameters.
- iii. The Project on infant feeding should receive the guidance of the Director.
- v. Protocols should be discussed by the staff before they are submitted to STC for approval.
- vi. The Unit should publish as much as possible the findings of its research activities.
- vii. There should be periodic seminars to discuss activities of the Unit.

H. Closing

The meeting came to a close at about 12.15 p.m.

6. PROGRESS REPORT

1st August, 1990

JICA has been assisting the Noguchi Memorial Institute for Medical Research in the form of technical cooperation which includes : "Dispatch of Experts" ; "Acceptance of Trainees" ; and "Supply of Equipment and Materials". JICA has been providing these simultaneously in order to facilitate the implementation of the project and the carrying out of research activities systematically and comprehensively at the Institute.

I. INPUT

Since 1986, 18 Japanese experts have been dispatched to the Institute and 11 Ghanaian counterparts have been accepted.

(1) The Japanese experts includes :

Virology	—	Dr. T. Yoshii	Feb. 1987 - Feb. 1988
		Prof. M. Hayami	Aug. 1989 (Short visit about 1 week)
		Dr. T. Sanekata	Feb. 1990 - May 1990
		Dr. O. Nishiwaki	May 1990 - (Aug. 1990)
Epidemiology	—	Dr. K. Nakano	Feb. 1987 - Feb. 1989
		Dr. H. Sakatoku	Jan. 1989 - (Jan. 1991)
		Dr. K. Nakano	Aug. 1989 (Short visit about 1 week)
		Dr. K. Mimura	Jan. 1990 - (Jan. 1991)
Nutrition	—	Dr. S. Yamamoto	Oct. 1986 - Oct. 1987
		Dr. T. Furusho	Sep. 1987 - Sep. 1988
		Prof. S. Masushige	Mar. 1988 - Apr. 1988
		Dr. F. Shizuka	Oct. 1988 - Oct. 1989
		Dr. T. Rikimaru	Oct. 1989 - (Oct. 1990)
		Dr. Y. Kido	Apr. 1990 - (Apr. 1991)
Medical Engineer	—	Mr. T. Maruyama	Sep. 1989 (Short visit about 1 week)
		Mr. S. Saito	May. 1990 (Short visit about 1 week)
Co-ordinator	—	Mr. S. Tateishi	Oct. 1986 - Mar. 1989
		Mr. H. Eguchi	Jun. 1989 - (Sep. 1991)

(2) The Ghanaians trained with JICA support and working with the Institute include:

Administration	—	Prof. S.N. Afoakwa	Feb. 1987 - Mar. 1987
		Mr. E.K.A. Odoom	May. 1989 - June 1989
Virology		Mr. T.B. Kwofie	May. 1987 - May. 1988
		Mr. J.A.M. Brandful	Feb. 1988 - Feb. 1989
		Mr. W.K. Ampofo	Feb. 1989 - Mar. 1990

Epidemiology	Mr. J. Fenteng	Jan. 1985 - Jan. 1990
	Dr. E.A. Afari	May. 1989 - June 1989
Nutrition	Mr. E.A. Addo	May. 1987 - May. 1988
	Ms. J. Yartey	Nov. 1988 - Jan. 1990
	Dr. E.E.K. Takyi	May. 1989 - June 1989
Maintenance	Mr. L.A. Acheampong	Mar. 1989 - Oct. 1989

The underlisted are to benefit from JICA's sponsorship tenable in Japan from August 1990 to August 1991.

Mr. J.S. Barnor	(Virology)
Mrs. A.S. Assoku	(Epidemiology)
Mr. E. Quansah	(Nutrition)

(3) Research equipments and materials amounting to 118 million Japanese yen were also supplied as part of this project.

		C.I.F. Accra
Dec. 1987	Clean Bench, Auto-Calculating Bomb Calorimeter, etc.	¥ 14,173,032
Feb. 1988	Ultra-Low Temperature Freezer, etc.	¥ 4,824,065
Aug. 1988	Refrigerator, Spare Parts for Vehicles, etc.	¥ 14,276,913
Sep. 1988	Vehicles(Suzuki) & Spare Parts	¥ 2,368,030
Sep. 1988	Reagents	¥ 1,581,605
Oct. 1988	Reagents	¥ 4,112,111
Aug. 1989	Toyota Coaster & Spare Parts, etc	¥ 8,342,399
Aug. 1989	Reagents	¥ 1,448,660
Sep. 1989	Refrigerated High Speed Centrifuge, etc.	¥ 20,862,946
Oct. 1989	Reagents	¥ 1,941,171
Apr. 1990	Spare Parts for Electron Microscopy	¥ 2,702,914
Apr. 1990	Vehicles (Nissan Patrol, Pick-up)	(\$ 94,844. ⁰⁰)
Apr. 1990	IBM Computer and accessories	(\$ 22,178. ⁰⁰)
May. 1990	Reagents	¥ 2,245,929
Jun. 1990	Reagents	¥ 1,349,749
Jun. 1990	Books, Medical Freezer, etc.	¥ 19,630,869

II. OUTPUT

Details of output or fruits of cooperation between Japanese experts and their Ghanaian counterparts will be reported by the heads of units concerned. But generally speaking, various kinds of research activities have been undertaken with good collaboration of both sides.

III. GENERAL PROBLEMS & RECOMMENDATIONS

(1) Budget

Table 1. shows a budget statement of the Institute since 1986. It appears that a substantial amount of the grant from the Ghanaian government is used in paying the salaries of the personnel and for the running of the Institute. Research materials and equipment are provided by the Japanese government through JICA. Recently JICA Experts Team has been contacted about the possibility of paying such allowances, as night allowance etc. to personnel of the Institute. It ought to be noted, however, that these expenses are ideally fully borne by the Institute as at now. It is recommended that the Institute should continue in its efforts to get money from the Ghanaian government to enable it expand its research activities. (see Table 2.)

(2) Staff

As of June 1990, the Institute had 54 members of scientific staff (comprising research fellows and technicians) and 72 supporting staff. (see Table 3) As far as the number of members of staff is concerned, the Institute has managed to employ Ghanaian experts to work with their Japanese counterparts and JICA appreciates this tremendous effort by the Institute.

The Institute is well-equipped and if we consider its potential capability, the number of the scientific staff is still not enough in view of the fact that as many as six out of thirty scientists are on study leave. In fact a close and systematic scrutiny of the situation points is the fact that the Institute needs to employ more scientific officers to enable it function effectively and efficiently.

(3) Public Relations

With JICA's assistance, a video programme on the Institute's activities was made and it was fortunately broadcast by the GBC Television in July, 1990. This TV programme was useful in the sense that the activities of NMIMR were introduced to the government and people of Ghana.

Noguchi Bulltein was also published in connection with the 10th Anniversary of the Institute. This bulltein is one of the media that introduces the results of our research activities to the public. It is hoped that this bulltein will be published regularly as a medical journal.

A brochure was published in 1985, but there are very few copies. Moreover, the contents needs vigorous modification. It has, therefore, been agreed upon that an up-to-date edition ought to be published this year - 1990.

IV. FUTURE PLANS

Details of Annual Work Plan will be discussed between the Review Team and the cooperation Units concerned.

JICA Experts Team of NMIMR is planning some activities for 1990 and these are mentioned below :

- (1) Weaning Food Seminar - September 1990 ;
- (2) Cooperation with KEMRI (Kenya) - September 1990 ;
- (3) Publication of brochure of NMIMR.

Assistance and cooperation are anticipated on these activities.

Hideo Eguchi
Co-ordinator

Table 1 BUDGET(1986-1988)

	1986	1987	1988	1989
	¢	¢	¢	
INCOME				
Grant from Council for Higher Education	17,248,079	25,423,878	46,935,334	(¢ 60,926,282)
Ministry of Finance Development Grant	128,838	—	—	
Japanese Government Grant-in-aid	23,384,601	21,940,763	48,162,364	(¥32,595,176)
UNICEF Research Grant	—	225,000	245,970	CIF ACCRA
WHO Research Grant	—	—	441,300	
Research Grant - Others	—	—	310,000	
Investment and Deposit Income	1,053,643	543,475	347,835	
Proceeds from sale of vehicles	—	—	1,150,000	
Miscellaneous income	132,940	130,086	417,860	
	<u>41,948,101</u>	<u>48,263,202</u>	<u>98,010,663</u>	
EXPENDITURE				
Research Developments salaries	8,091,583	11,420,230	19,330,538	
Central Administrative salaries	5,956,999	7,522,195	12,128,209	
Academic Service	66,000	94,987	553,899	
General Research expenditure	17,989,969	21,560,993	32,598,867	
Administrative & Service Units Equipments	—	—	8,424,718	
Maintenance of premises equipments	1,273,415	491,804	627,505	
Central and Administrative Services	4,422,995	7,751,001	12,087,110	
Capital expenditure met out of income	3,155,803	2,314,086	3,528,365	
Miscellaneous expenditure	1,103,250	975,627	2,358,913	
	<u>42,060,014</u>	<u>52,130,923</u>	<u>91,638,124</u>	

Table 2 BUDGET ESTIMATE FOR 1990

	Amount Presented by NMIMR	Amount Recommended by Min. of Educ.	Amount Accepted by Min. of Fin
Enrolment Estimates	55,950,515	55,950,615	} 59,600,000
Recurrent Estimates	58,862,041	44,049,385	
<u>Development Estimates</u>			
Renovation of Building	1,200,000	1,200,000	2,000,000
Roads	162,000,000	65,000,000	} NOT APPROVED
Security Lighting	43,000,000	43,000,000	
Animal House Project	30,000,000	30,000,000	
Staff Housing	40,000,000	20,000,000	
<u>Equipment Estimates</u>			
Equipment - Central			
Administration	17,787,534	17,787,534	} 60,000,000
Vehicles(4)	21,425,868	10,712,534	
Research Equipment	48,746,781	38,997,424	
Import Programme	11,672,007	—	
	<u>490,644,846</u>	<u>326,697,492</u>	

Table 3. STAFF

Unit	Staff Category										Total			
	Senior Research Fellow	Research Fellow	Junior Research Fellow	Principal Research Assistant	Senior Research Assistant	Senior Technologist	Principal Technologist	Senior Technician	Technician	Technical Assistant		Principal Nursing Officer	Senior Nursing Officer	Messenger/Cleaner
Bacteriology	2**				1			2				1	6	
Haematology					1			1				1	3	
Histopathology														
Parasitology	1		1	1*			3				1	7		
Nutrition	1		1	2			1	1			1	8		
Chemical Pathology	2*			2*			1	1	1		1	8		
Laboratory Animal			1				2		1		2	6		
Electron Microscopy	1	1*	1				1	1			1	6		
Immunology					2						1	6		
Epidemiology					1			1		1	1	6		
Virology	1	1	1	2			1	2			1	9		
Total	3	1	1	4	11	1	3	12	5	1	1	11	65	
	Researcher level (30)						Technician level (24)						Researcher+Technician=54	

* : study on leave

Administration	12
Library	2
Accountants	7
Transport	10
Store	2
Maintenance	7
Security	14
Gardens	7
Total	61

Total 126 (as of June 1990)

7. 野口記念医学研究所スタッフリスト

NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH
STAFF LIST AS AT 1ST JUNE, 1990

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<u>UNIT</u>	<u>NAME</u>	<u>POSITION</u>
ADMINISTRATION: (12)		
Senior Members:	Prof. F.K. Nkrumah	Director
	Mr. E.K.A. Odoem	Secretary
	Mr. J.B. Nchor	Snr. Asst. Registrar
Senior Staff:	Mr. S.K. Tachi	Prin. Admin. Asst.
	Mrs. Iris Oppong	Administrative Asst.
Junior Staff:	Miss Vivian Tamakloe	Senior Clerk
	Miss Grace Dzahinini	Clerk Grade I
	Miss Beatrice Krah	Clerk Grade II
	Miss Agnes Nkum	Snr Recept./Telephonist
	Miss Beatrice Acquah	" " "
	Mr. Victor Atibilia	Messenger/Cleaner
	Mr. E.A. Amartey	" "
LIBRARY: (2)		
Senior Member:	Mrs. M. Bulley	Sub-Librarian
Senior Staff:	Mr. V.T. Azu	Prin. Library Asst.
BACTERIOLOGY:		
Senior Members:	*Mr. D.A. Agbodazo	Research Fellow
	*Dr. P.P.A. Mensah	" "
Senior Staff:	Mr. H.F.K. Longmatey	Senior Technician
	Mr. S.B. Ousu	" "
	Mr. D. Lotsu	S " Research Asst.
Junior Staff:	Mr. Peter Ayisah	Messenger/Cleaner
HAEMATOLOGY: (3)		
Senior Staff:	Mr. M.M. Addae	Senior Technologist
	Mr. B.K. Asiedu	" Technician
Junior Staff:	Mr. Francis Attigah	Messenger/Cleaner
PARASITOLOGY: (7)		
Senior Member:	Dr. M.E. Aryeetey	Research Fellow (Acting Head)
Senior Staff:	Mr. M.A. Appawu	Prin. Research Asst.
	*Mr. K.M. Bosompem	Sur. " "
	Mr. J.R.K. Asigbee	" Technician
	Mr. K.H. Kpo	" "
	Mr. A. Haruna	" "
	Mr. D. Nyame	Messenger/Cleaner
Junior Staff:	Mr. D. Nyame	Messenger/Cleaner
LABORATORY ANIMALS: (6)		
Senior Member:	Dr. P.G. Addo	Jnr. Research Fellow
Senior Staff:	Mr. D. Osei-Boakye	Senior Technician
	Mr. S.Y. Amelar	" "
Junior Staff:	Mr. E. Attah Tioh	Tech. Asst. Grade II
	Mr. S. Mensah	Messenger/Cleaner
	Mr. D. Appiah	" "

<u>UNIT</u>	<u>NAME</u>	<u>POSITION</u>
NUTRITION (8)		
Senior Members:	Dr. E.F.K. Takyi	Senior Research Fellow (Head)
Senior Staff:	Dr. Margaret Armar	Research Fellow
	Mrs. L.A. Brakohiapa	Prin. Research Asst.
	Miss J. Juliana Yartey	Snr. Research Asst.
	Mr. E.K. Harrison	" " "
	Mr. E.A. Addo	" Technician
Junior Staff:	Mr. E. Quansah	Technician
	Mr. N.M.A. Mensah	Messenger/Cleaner
CHEMICAL PATHOLOGY: (8)		
Senior Members:	Dr. Nii-Ayi Ankrah	Research Fellow (Ag Head)
Senior Staff:	*Mr. A.K. Nyurko	" "
	Mr. Y.A. Akyeampon	Principal Technician
	*Miss F. Obiri	Snr. Research Asst.
	Mr. F. Ekuban	" " "
	Mr. B.R. Anku	Senior Technician
	Mr. W.J. Asaku	Technician
Junior Staff:	Mr. Enoch Quartey	Messenger/Cleaner
ELECTRON MICROSCOPY: (6)		
Senior Members:	Prof. J.A.A. Mingle	Associate Professor (Head)
Senior Staff:	*Mr. G.E. Armah	Research Fellow
	Mr. A.K. Dodoo	Principal Research Asst.
	Miss S. Damanka	Technician
	Mr. A.K. Ayim	Principal Technician
	Mr. I.H. Odoi	Messenger/Cleaner
IMMUNOLOGY: (6)		
Senior Members:	Dr. B.D. Akanmori	Research Fellow (Ag. Head)
Senior Staff:	Mr. I.K.E. Quaye	" "
	Mr. A.A. Adjei	Principal Technician
	Mr. B.A. Gyan	Senior Research Asst.
	Mr. D. Dodoo	" " "
Junior Staff:	Mr. F. Owusu	Messenger/Cleaner
EPIDEMIOLOGY: (6)		
Senior Member:	Dr. E.A. Afari	Research Fellow (Ag. Head)
Senior Staff:	Mrs. A.S. Assoku	Prin. Nursing Officer
	Mr. G. Mensah	Senior Research Asst.
	Mrs. E. K-Amaning	" Nursing Officer
	Mr. J. Fenteng	Senior Technician
Junior Staff:	Mr. G. Osei-Kwame	Messenger/Cleaner

<u>DEPT.</u>	<u>NAME</u>	<u>POSITION</u>
VIROLOGY: (10)		
Senior Members:	Dr. N.K. Ayisi	Senior Research Fellow (Head)
	Prof. J.A.A. Mingle	Associate Professor (Part-Time)
	Dr. M. Osei-Kwasi	Research Fellow
Senior Staff:	Mr. J.A.M. Brandful	Principal Research Asst.
	Mr. W.K. Ampofo	Senior Research Asst.
	Mr. M. Aidoo	" " "
	Mr. T.B. Kwofie	" Technician
	Mr. J.S. Barnor	Technician
	Mr. A.F.K. Magnusen	"
Junior Staff:	Mr. S.K. Dumedah	Messenger/Cleaner
ACCOUNTS: (7)		
Senior Staff:	Mr. E.A. Kwakye	Chief Accounting Asst.
	Mr. Appiah Aborah	" " "
	Mr. D.K. Ofosu	Senior A " "
	Mr. G.K. Attorkwe	" " "
	Mr. A.R.A. Pobee	" " "
	Mr. A.B. Agbodzi	" " "
	Mr. E.K. Kally	Accounting Assistant
TRANSPORT: (10)		
Senior Staff:	Mr. A.K. Addai	Prin. Asst. Transport Officer
Junior Staff:	Mr. C.K. Osei	Driver Grade I
	Mr. Benson Dowokpor	Artisan
	Mr. E.T. Aggoe	Driver Grade I
	Mr. J.A. Abrahams	" " II
	Mr. E. Danso	" " III
	Mr. A. Kyei	" " III
	Mr. J. Asare	" " III
	Mr. A.K. Ahunako- Acquah	" " III
	Mr. L. Wellington	" " III
STORES: (2)		
Senior Staff:	Mr. E.H. Attah	Snr. Stores Superinten- dent
Junior Staff:	Mr. Eric Ameyaw	Storekeeper Grade II
MAINTENANCE: (7)		
Senior Staff:	Mr. J.A. Kortei	Works Superintendent
	Mr. S.K.A. Jones	" "
	Mr. L. Asiedu- Acheampong	" "
	Mr. E.O. Lamptey	" " "
Junior Staff:	Mr. S. Neequaye	Foreman
	Mr. E. Nartey	Artisan

<u>Unit</u>	<u>Name</u>	<u>Position</u>
MAINTENANCE:		
Junior Staff:	Mr. S.M. Adjei	Apprentice Tradesman
SECURITY:		
Junior Staff: (14)	Mr. F.K. Matoy	Security Guard Grade I
	Mr. C.Y. Sakezugu	" " " I
	Mr. A.K. Appiah	" " " II
	Mr. J.Y. Lagbenaku	" " " II
	Mr. L.T.A. Acquah	" " " II
	Mr. I.K. Debrah	" " " II
	Mr. I.A. Nsiah	" " " III
	Mr. A. Dzokoto	" " " III
	Mr. Ali Kassogue	Watchman
	Mr. Akologo Prafra	"
	Mr. J.K. Afavi	"
	Mr. A. Awurigya	"
	Mr. A. Awuni	"
	Mr. Abu Pelingu	"
GROUNDS & GARDENS: (7)		
Junior Staff:	Mr. Inusa Ali	Labourer
	Mr. Abdulai Mohammed	"
	Mr. Baba Builsa	"
	Mr. John Apuing	"
	Mr. S.N. Tetteh	"
	Mr. F.A. Larbi	"
	Mr. Asoako Adowa	"

+ On Contract
 * On Study Leave.

平成2年度ガーナ 野口記念研究所 C/P 研修
ウイルス学

Mr. Jacob Samson Barnor

月日	研 修 内 容	研 修 先	宿 舎、備 考
90 8 28 火	来 日		8/28-11/9
29 水	ブリーフィング 17:00 プログラムオリエンテーション	T I C (H)	・水道橋グリーン ・295-4161
30 木	} オリエンテーション(21-B)	T I C (H)	11/10-'91 8/28
9 31 金			・ T I C (H)
1 土	外国人登録		9/8(土)オリエンテーション
3 月	} 日 本 語	T I C (H)	・(22-B)
11 2 金			
5 月	} 麻疹ウイルスに関する実習	国立予防衛生研究所 麻疹ウイルス部 杉浦部長 190-12 武蔵村山学園4- 7-1 (0425)61-0771	
91 2 1 金			
4 月	} ポリオウイルスに関する実習	国立予防衛生研究所 腸内ウイルス部 吉倉部長	
5 31 金			
91 6 3 月	} ウイルス病の実験室診断	国立予防衛生研究所 ウイルス中央検査部 山崎修道部長 (0425)61-0711	
8 24 土			
26 月	評 価 会	J I C A (三井ビル9F)	
28 水	帰 国		

担当：山崎修道部長

平成2年度ガーナ 野口記念研究所 C/P 研修
 栄 養 学

Mr. Emmanuel Quansah

月日	研 修 内 容	研 修 先	宿 舎、備 考
90			
8 28 火	来 日		8/28-11/2(3 out)
29 水	ブリーフリング プログラムオリエンテーション	T I C (H) J I C A (三井ビル9 F)	・水道橋グリーン 11/3-'91 8/24
30 木	} オリエンテーション(21-B)	T I C (H)	・蔵宿(クラジュ)
31 金			・(0886) 31-0050 ・¥ 4,500
9 1 土	外国人登録		8/25-28 T I C (H)
3 月	} 日 本 語		9/8 (土)オリエンテーション ・(22-B)
11 2 金			
3 土	移動(東京→徳島)		
5 月	} 蛋白・アミノ酸の栄養 血中窒素成分の分析他(研修開始時に研修内容を検討する。)	徳島大学医学部 栄養生理学教室 岸 恭一教授 770 徳島市蔵本町3 (0886) 31-3111	藤原 J I C A 四国支部担当
91			
8 24 土	移動(徳島→東京)		
25 日			
26 月	評 価 会		
27 火	帰 国 準 備		
28 水	帰 国		

平成2年度ガーラ 野口記念研究所 C/P 研修
疫 学

Mr. Adeline Selina Assoku

月日	研 修 内 容	研 修 先	宿 舎、備 考
90			
8 28 火	来 日		8/28-11/9
29 水	ブリーフリング 17:00 プログラムオリエンテーション	T I C (H) J I C A (三井ビル 9 F)	・水道橋グリーン 11/10- '91 1/6
30 木	} オリエンテーション(21-B)	T I C (H)	・ T I C (H) 1/7-7/31
31 金			8/1-8/4 T I C (H)
9 1 土	外国人登録		9/8(土)オリエンテーション ・ (22-B)
3 月	} 日 本 語		
11 2 金			
5 月	} 母 子 保 健	社会福祉法人恩賜 財団 母子愛育会 106 港区南麻布 5-6-8 (03) 473-3815 FAX 473-8300	平山宗広(日本総合愛育研 究所所長)
12 26 水			
91			
1 7 月	移動(東京→津) 表 敬 ・新生児、未熟児医療 ・病院慢性疾患病棟 ・地域保健管理 ・予防接種 他	国立療養所三重病院 514-01 津市大里窪田町 357 (0592) 32-2531 神谷 齊院長 J I C A	
7 31 水			
8 1 木	移動(津→東京)		
2 金	評 価 会	J I C A (三井ビル 9 F)	
3 土	帰 国 準 備		
4 日	帰 国		

