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AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

DATE: 8/13/87

MEMORANDUM

TO: AID/PPC/CDIE/DI, room 209 SA-18
FROM: AID/SCI, Victoria Ose *VO*
SUBJECT: Transmittal of AID/SCI Progress Report(s)

Attached for permanent retention/proper disposition is the following

AID/SCI Progress Report No. C7-171

Attachment

2 ap

US-Israel CDR Program Project # C7-171

Modulation of membrane transport: a biochemical approach to the chemotherapy of malaria

P.I. : Z.I. Cabantchik Hebrew University of Jerusalem
: Y. Yuthavong Mahidol University, Bangkok

Scientific report: Feb 87- July 87

This project has been physically initiated at the end of December 1986, and since then we have established active contacts with our CDR partners in Thailand in the form of human sera of malaria patients obtained in Thailand and shipped to Israel for immunological and immunophysiological testing. A second shipment is intended to be shipped during mid August and one of the senior members of the group will be coming to Israel to carry out experiments on the systems developed in the local laboratories. The basic techniques of immunofluorescence and fluorescence ELISA have been developed and tested in a recently acquired fluorescence microplate reader and they have been adapted for monitoring both surface antigens on the infected cells as well as for assessing several properties of the hyperimmune sera obtained from Thailand. Thus far, we have not obtained clear results about blockade of the new permeation pathways appearing in malaria infected cells by the above sera components, although clearly the sera reacted with the red cell surface. However, this reaction was apparent only after the cells were enriched in cholesteryl hemisuccinate (CHS), a treatment we have shown to expose otherwise cryptic antigens. Presently we are developing the means to stabilize the infected cells enriched in CHS so that we will be in a position to test possible inhibitory effects of the hyperimmune sera. We are presently engaged in assessing the monoclonal technique and the the immunoassay systems, to be used shortly in the production of monoclonal antibodies selected for the ability to block the malaria induced permeation pathways in infected cells.

With regard to the scientific collaboration, we expect to strengthen it even further with the arrival of the designated representative of Prof. Yuthavong's lab in mid October, this year.


Prof. Z.I. Cabantchik

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