

PD-AAZ-580

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add
 C = Change
 D = Delete

Amendment Number
K-1 62163

DOCUMENT CODE

3

2. COUNTRY/ENTITY

WORLDWIDE

3. PROJECT NUMBER

931-0453.82

4. BUREAU/OFFICE

Office of Health

5. PROJECT TITLE (maximum 40 characters)

Mal Imm & Vacc Res (Univ. of Hawaii)

6. PROJECT ASSISTANCE COMPLETION DATE (FACD)

MM DD YY
11 23 91

7. ESTIMATED DATE OF OBLIGATION
(Under "B" below, enter 1, 2, 3, or 4)

A. Initial FY 89

B. Quarter 4

C. Final FY 91

8. COSTS (\$000 OR EQUIVALENT \$1 =)

| A. FUNDING SOURCE | FIRST FY 89 | | | LIFE OF PROJECT | | |
|------------------------|-------------|--------|----------|-----------------|--------|-----------|
| | B. FX | C. L/C | D. Total | E. FX | F. L/C | G. Total |
| AID Appropriated Total | 550 | | 550 | 1,700 | | 1,700 |
| (Grant) | (550) | () | (550) | (1,700) | () | (1,700) |
| (Loan) | () | () | () | () | () | () |
| Other U.S. | | | | | | |
| 1. | | | | | | |
| 2. | | | | | | |
| Host Country | | | | | | |
| Other Donor(s) | | | | | | |
| TOTALS | 550 | | 550 | 1,700 | | 1,700 |

9. SCHEDULE OF AID FUNDING (\$000)

| A. APPROPRIATION | B. PRIMARY PURPOSE CODE | C. PRIMARY TECH CODE | | D. OBLIGATIONS TO DATE | | E. AMOUNT APPROVED THIS ACTION | | F. LIFE OF PROJECT | |
|------------------|-------------------------|----------------------|---------|------------------------|---------|--------------------------------|---------|--------------------|---------|
| | | 1. Grant | 2. Loan | 1. Grant | 2. Loan | 1. Grant | 2. Loan | 1. Grant | 2. Loan |
| (1) HE | 540 | 542 | | | | 1,700 | | 1,700 | |
| (2) | | | | | | | | | |
| (3) | | | | | | | | | |
| (4) | | | | | | | | | |
| TOTALS | | | | | | 1,700 | | 1,700 | |

10. SECONDARY TECHNICAL CODES (maximum 8 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code
B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

The project will conduct research to develop a blood stage Plasmodium falciparum vaccine using native parasite protein gp 195 and recombinant polypeptides derived from the gp 195. In addition, the project will identify and test adjuvants capable of inducing protection in Aotus monkeys.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY Final MM YY
05 91

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000 941 Local Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)

17. APPROVED BY

Signature
Kenneth J. Bart, M.D.
Agency Director for Health

Date Signed
MM DD YY
6/30/91

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY

AGENCY FOR INTERNATIONAL DEVELOPMENT

WASHINGTON, D.C. 20523

JUN 9 1989

ACTION MEMORANDUM FOR THE AGENCY DIRECTOR FOR HEALTH

FROM: S&T/H, Ann Van Dusen

Ann Van Dusen

SUBJECT: Malaria Immunity Vaccine Research--Authorization of Subproject Activity "Malaria Immunity and Vaccination: Studies towards the Development of a Blood Stage Plasmodium falciparum Vaccine using Parasite gp195, Recombinant gp195 Polypeptides and Synthetic Adjuvants" Project (931-0453)

Problem: Your approval is requested for a \$1,700,000 three year project entitled "Malaria Immunity and Vaccination: Studies towards the Development of a Blood Stage Plasmodium falciparum Vaccine using Parasite gp195, Recombinant gp195 Polypeptides and Synthetic Adjuvants."

Background: A research proposal has been received from the University of Hawaii to develop a blood stage vaccine for malaria using parasite gp195. The proposal has been reviewed by an external panel of scientific experts, the Scientific Consultants Group, and S&T/H malaria staff both for scientific merit and program relevance. As a result of the reviews, the proposal was recommended for funding with minor modifications. Specific project objectives include: (1) Evaluation of the structural properties of native P. falciparum gp195 which determine the specificity of the protective immune response to malaria; (2) Production and evaluation of gp195-based recombinant polypeptides as candidate blood stage malaria vaccines; (3) Evaluation of the significance of antigenic polymorphism to gp195-specific immunity; (4) Evaluation of the significance of antigenic polymorphism to gp195-specific immunity; (5) Characterization of the occurrence and distribution of antibodies to gp195 in serum samples from human populations living in hyperendemic areas; and (6) Identification and establishment of a safe and effective adjuvant capable of inducing protective immunity in Aotus monkeys to a blood-stage vaccine based on gp195.

Discussion: Over the past few years, the Principal Investigator has focussed his research on the parasite protein gp195 as a potential candidate for a malaria vaccine. Aotus monkeys have been protected against P. falciparum using the native gp195 precursor molecule. Colombian investigators have confirmed the vaccine potential of gp195 in studies in monkeys and man. The gene encoding the gp195 has been cloned and sequenced at the University of Hawaii. Collaborations with industrial partners are underway to express the vaccine candidate in yeast and

vaccinia. Immunogenic regions of the gp195 are being identified and, along with adjuvants, being tested in small animals.

The proposed work expands and extends current studies on the gp195 and does not duplicate or overlap with other work funded by the Malaria Immunity and Vaccine Research project. The roles of structural aspects of the gp195, a clear definition of the immunogenicity of gp195 based vaccine candidates and the degree of conservation of important regions will be examined as part of the proposed work. Trials in non-human primates are anticipated using vaccine candidates produced by industrial partners and enhanced by a variety of synthetic adjuvants. The proposal is attached for further information and details of specific experimental design.

Research Involving Testing of Animals and Human Subjects:

Research involving testing of animals and human subjects will comply with the following DHHS guidelines: "Guide for the Care and Use of Laboratory Animals" - U.S. Department of Health and Human Services (DHHS) Publication No. (NIH) 85-23; and "Guide for the Safety of Human Subjects in research - U.S. Department of Health and Human Services (DHHS) - Human Research Subjects -45 CFR, - PT46."

Clearances Obtained: This project was approved by the A.I.D. external expert panel on the basis of scientific methodology, qualifications and experience of the proposed investigators, and the institutional capability in accordance with FAR 15.506-2, FAR 15.507 (b) (i).

Recommendation: That you sign the attached authorization to approve funding in the amount of \$1,700,000 over a three-year period for the Subproject activity entitled "Malaria Immunity and Vaccination: Studies towards the Development of a Blood Stage Plasmodium falciparum Vaccine using Parasite gp195, Recombinant gp195 Polypeptides and Synthetic Adjuvants."

Attachments:

1. PAF Amendment
2. University of Hawaii Proposal
3. Letter from Acting Principal Investigator responding to reviewers comments
4. Scope of Work and Budget
5. Justification for Non Competitive Procurement

PROJECT AUTHORIZATION

Name of Country: Worldwide

Project Title: Malaria Immunity and Vaccination: Studies towards the Development of a Blood Stage Plasmodium falciparum Vaccine Using Parasite gp 195, Recombinant gp195 Polypeptides and Synthetic Adjuvants

Project Number: 931-0453

1. Pursuant to Section 104 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the centrally-funded project, "Malaria Immunity and Vaccination: Studies toward the Development of a Blood Stage Plasmodium falciparum Vaccine Using Parasite gp 195, Recombinant gp195 Polypeptides and Synthetic Adjuvants not to exceed \$1,700,000 of S&T/Bureau grant funds over a three year period from the date of authorization subject to the availability of funds in accordance with the A.I.D. OYB/Allotment process, to help in financing the cost of the project.
2. This project will conduct research to develop a blood stage Plasmodium falciparum vaccine using native parasite protein gp 195 and recombinant polypeptides derived from the gp 195. In addition, the project will identify and test adjuvants capable of inducing protection in Aotus monkeys.
3. The agreement(s) which may be negotiated and executed by the officer(s) to whom such authority is delegated in accordance with A.I.D. regulations and delegations of authority shall be subject to the following terms and conditions, together with such other terms and conditions as A.I.D. may deem appropriate.
4. Source and origin of Commodities, Nationality of Services
 - a. Commodities financed by A.I.D. under the project shall have their source and origin in the cooperating country* or the United States except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have the cooperating country or the United States as their place of nationality, except as A.I.D. may otherwise agree in writing;

*Each country where research, training, technical or other assistance takes place under the project shall be deemed to be a cooperating country for the purpose of permitting local cost financing of goods and services required for the research, training, technical or other assistance conducted in such country.

b. Ocean shipping financed by A.I.D. under the project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States.

Approve RA VanDusen
Disapproved _____
Date June 30 1989

| | | | |
|-------------|------------------|-----------------------|------------------------|
| Clearances: | S&T/H:JAustin | <u>John J. Austin</u> | Date <u>23 JUNE 89</u> |
| | S&T/H/M:CDiggs | <u>Cliff Diggs</u> | Date <u>23 June 89</u> |
| | S&T/H:GPettigrew | <u>Greg Pettigrew</u> | Date <u>6-23-89</u> |
| | AVanDusen | <u>RA VanDusen</u> | Date <u>6/23/89</u> |
| | S&T/PO:DSheldon | <u>David Sheldon</u> | Date <u>6/29/89</u> |
| | GC/CP:STisa | <u>Florie Miller</u> | Date <u>6-23-89</u> |

Drafter:S&T/H/M:CMiller:ps:x4601:5/31/89:wang#1817s