

Blackwell

APR 11 1974

40079 ✓

NAMRU-2/RQB:sw

4.98.62

8 April 1974

Professor Joshua Lederberg
Department of Genetics
Stanford University School of Medicine
Stanford, California 94305

Dear Professor Lederberg:

I received your note of 15 March and appreciate very much your kind and accurate assessment of the role and traditions of the Naval Medical Corps. The considerable support in the past by Bu Med of a variety of research projects which were primarily humanitarian or of a basic science nature rather than one strictly relevant to military medicine certainly was in the best tradition of the Naval Medical Corps. As you pointed out, anyone familiar with the true situation would never come up with an idea such as that propounded by Hammerschlag.

Unfortunately, however, those proud traditions which supported or, at least allowed, basic research on a variety of interesting problems around the world are rapidly becoming inoperative under the current pressure of relevance and a policy of stricter mission orientation in the interest of efficiency and economy. In fact during the past 5 years there has been a complete change in the philosophy of support for scientific research in the Naval Medical Research laboratories. In my own case since almost nothing I am doing, except our laboratory support work for other departments, has had any direct military relevance, I am slowly losing the ability to continue the type of work in which I am interested. And that, in addition to the obvious professional and ethical aspects, makes the issues raised by Hammerschlag particularly galling to me.

What little I have accomplished in studying Asian ethnic groups was done strictly because of my own interest and the

see also reprints

desire to take advantage of a truly unique opportunity and began in a period of relaxed attitudes toward basic research. In the past five years it has become harder and harder to continue that work and instead of being supported by any government organization, either for good, or for ulterior reasons as suggested by Hammerschlag, I have met either indifference or open opposition.

There have been only two Commanding Officers at NAMRU-2 during the past 16 years and both of them have given me complete support within the constraints placed on them by Bu Med and, particularly, by an always limited budget. And there always have been intelligent, sympathetic individuals in the Research Division at Bu Med where broad policies for our research are formulated. But they have become increasingly immobilized by official policy from above and must respond to that policy.

I have received another letter from Hammerschlag in response to my detailed answer to his earlier inquiry. I enclose copies of the relevant correspondence for your information. I wonder if he has written to you again to point out that he may be reconsidering his previous position, if indeed he is. I would guess not. And I wonder how many other Senior Scientists he may have written to with his spurious inferences without a subsequent clarifying letter. In the local Taipei English language newspaper a few days ago there was a story (copy enclosed) concerning a paper and press conference by Hammerschlag at the spring ACS meeting. I sincerely hope this type of publicity will not prove to be embarrassing or damaging to the delicate relationship we have with our Chinese medical colleagues and with our colleagues throughout Southeast Asia.

I enclose the reprints you requested. The results we have obtained in study of toxins from sea snake venoms coupled with those reported from other laboratories in U.S. and Scandinavia are not only extremely interesting but also hold promise for some very practical applications. It appears more and more that all important toxins in venoms from several of the most abundant sea snakes scattered throughout Pacific and Indian Oceans are nearly identical in structure. Therefore antivenin

produced using one such purified toxin should be effective against most of the others. This should make possible an effective protection of the high risk individuals in the fishing fleets who encounter the sea snakes caught in fishing nets. Unfortunately, Bu Med quite correctly decided that the study of sea snake venoms has little or no military relevance. Consequently I currently am seeking to get the necessary group of Chinese organizations here in Taiwan together to pursue the problem including possible immunization of high risk individuals and eventually the production of human antivenin.

The main part of the maternal nutrition study which we did in collaboration with Professor Chow was completed at about the time of his death. We are getting all data verified and on to punch cards and will begin data analysis soon. We already know that there was a definite influence on birth weights of male infants - but not female - produced by maternal dietary supplementation. Whether this will be reflected in growth rates, nitrogen balance, behavior, disease resistance, and performance in school, for example, remains to be seen. Active support for this project by the Navy will end 30 June but I'm confident that between those interested at Johns Hopkins and myself the data analysis and reports for publication will be completed. When these are published I will send you reprints if you are interested.

I must apologize for this lengthy letter. My warmest regards.

Sincerely yours,



R. Q. Blackwell

Copy: Dr. R. H. Watten, NAMRU-2