Tropical Medicine in USA and Japan: A Comparison

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Since I was born and educated in Japan and currently am working at the Case Western Reserve University School of Medicine, Cleveland, Ohio, USA, where I have been for many years, I may be in a unique position to compare the training systems in tropical medicine in both countries. My topics include: 1) educational systems, 2) soliciting candidates for tropical medicine study, 3) financial aspects of basic and applied research and 4) sociological influences.

Comparing these subjects between the two countries may be helpful in improving the prospects of Institutes of Tropical Medicine in the 21st century.

1) Educational System

US institutes for tropical medicine mainly are private institutions. They traditionally are affiliated with Schools of Public Health. At my school, Case Western University, there is no School of Public Health, but there is a strong tropical medicine program in the School of Medicine. Unfortunately, such a program is a rarity in American medical schools. In contrast, Japanese institutions for tropical medicine are supported by the Japanese government. The Institute of Tropical Medicine, Nagasaki University is the only institution which is entirely devoted to tropical medicine, whereas other schools teach tropical medicine as a part of the general medical school curriculum.

The main difference between the US and Japanese educational systems is private vs government-owned schools. The former have the advantage of more freedom in framing policies for education, while the latter have the advantage of constant financial support from the government. It is not my intention to judge which system is better for education in tropical medicine. However, this difference may have some impact on the prospects of tropical medicine in each country.

2) Soliciting Candidates for Tropical Medicine

Because the USA is a very large country, the pool of potential candidates for study of tropical medicine is obviously considerably larger than is the case in Japan. Moreover, for political and economic reasons, the United States historically has had an interest in fostering study of tropical medicine. American institutes of public health have acted as magnets, attracting not only American students, but students from foreign countries who have a vested interest in ridding their countries of the scourge of tropical disease. In contrast to the United States, Japan currently has but one institution wholly devoted to tropical medicine, namely, our host institution, the Institute of Tropical Medicine, Nagasaki University. It is to be
hoped that this institution will act as a model, and influence the Japanese government to establish other similar organizations, so that training of more Japanese as well as foreign students can be carried out at the high level exhibited here.

3) **Financial Aspects of Basic and Applied Research**

Research in tropical medicine in the USA is supported either by government or by privately sponsored research grants. Among them, US Government Agencies such as NIH, NSF, AID and US Army R & D Commands are major sponsors. In recent years, competition for research grants has reached a high, as Dr. Western indicated. Since most research grants run for a three year period, a long range research plan cannot easily be made. This may be a major shortcoming of this system.

In contrast, Japanese schools receive basic research funds from the Japanese government every year. They also compete for additional research funds from the government or private foundations. However, survival of academic activities is not dependent on relatively short-term research funding, as it is in the USA. In this respect, Japanese scientists are able to plan extended research projects. Since in the United States, the obtaining of research funds in large measure is dependent on continued publication of research results, American workers are more likely to publish than are their Japanese counterparts.

US AID supported research is mission oriented: for example, vector-control research or a malaria vaccine development program. JICA, which is equivalent to US AID is more interested in building infrastructures such as hospitals and research institutions. Both efforts are essential for the improvement of tropical medicine, but a combination of both efforts would be ideal.

4) **Sociological Influence**

The USA is a multi-ethnic and heterogenous country whereas Japan is a homogenous country. The heterogenous US attracts immigrants from all over the world, a circumstance which may result in the import of various tropical diseases. Although Japan is now experiencing an import of such tropical diseases, the percentage of disease occurrence is still relatively small. The presence of US Armed Forces in various tropical countries makes tropical medicine an important medical entity in the USA. The recent decision of the Japanese government to send armed forces with UN forces to various tropical countries may arouse more interest in tropical diseases among the Japanese public.

Foreign students who study in the USA may face various difficulties such as learning a different culture, language, customs, and living environment. However, foreign students usually reach an accommodation with American society.

Since Japan is a country with a homogenous race, foreigners often feel left out. However, in general, the Japanese are courteous to foreigners and try their best to be helpful.
5) Conclusion

In conclusion, it seems obvious that Japan and the United States have different approaches to education and research in tropical medicine. Both countries have strengths and weaknesses in their programs. Closer cooperation and greater exchange of information between Japan and the USA will work to the advantage of both. Between us, and in cooperation with other nations, we may lay to rest in the 21st century some of the major diseases that have plagued mankind since time immemorial.