

## Session 2: 16:40 – 16:55

### Infectious diseases in developing countries (Haiti and Indonesia); Attempts to utilize genome technologies for better disease control



Mr. Fujihiko Minamoto

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#### Short CV

**Minamoto Seinsei**, graduated earned his clinical laboratory engineer License from Kitasato College, Health Science Institute.

He has been appointed on the testing of microorganisms at the Inspection Department of the Institute of Medical Science Hospital, University of Tokyo.

When he retired in 2012, He has been appointed to medical support for developing countries. For that, He supported the JICA tuberculosis control project in Haiti.

Currently, He is involved in the Malaria vaccine development projects in Indonesia at University of Tokyo, Department of Computational Biology and Medical Sciences

Since July 2018, Minamoto seinsei entered the market as a consultant for Tokyo Medical Consulting Co., Ltd. In Japan (TMEDC). TMEDC's main business is to create proposals for the "Small and Medium-sized Enterprise Overseas Expansion Support Project" promoted by JICA.

His QUOTE: "I am 70 years old now. I always think that my only merit is light footwork. What I keep in mind is, I will do anything for things that have interest".

#### Abstract

##### Infectious diseases in developing countries (Haiti and Indonesia); Attempts to utilize genome technologies for better disease control

In April 1999, as a medical expert at JICA, I had the opportunity to witness the medical situation in Zambia and Tanzania in Africa, which brought about a major change in my position as a clinical laboratory engineer.

That was the impetus for me to participate in events organized by various NPOs such as the Global Festival.

Participation in JICA's partnership seminar (Bangladesh) was a major starting point for me at that event, and after I retired, I was hired by the Graduate School of Frontier Sciences, the University of Tokyo, and entered the "Malaria Vaccine Development Project" in Indonesia.

After that, I was assigned to Haiti for 3 months from April 2013 to collect data on Mycobacterium tuberculosis diagnostic technology using the gene amplification method (LAMP method) developed by Eiken Chemical Co., Ltd in Japan. I did 640 cases of comparative verification between (MGIT method) and LAMP method were carried out, and WHO approval was obtained from the data, and Eiken Chemical Co., Ltd became able to sell worldwide. (Paper)

After that, I re-employed at the University of Tokyo, and as part of the "Malaria Vaccine Development Project", I am conducting training on the method of genome analysis of Plasmodium malaria to local doctors. In recent years, a workshop using a simple sequencer (MinION) for the identification method has also been held, and it is expected to be used in developing countries for more accurate pathogen identification in the future. It is particularly useful for the field identification of BSL4 pathogens such as Ebola virus (sample transfer is very risky).

Also, since July 2018, I has entered the market as a consultant for Tokyo Medical Consulting Co., Ltd. In japan(TMEDC). TMEDC's main business is to create proposals for the "Small and Medium-sized Enterprise Overseas Expansion Support Project" promoted by JICA. I was involved in "Investigation of project development aimed at expansion: Indonesia". I would like to talk my personal views on the episodes of this decade's activities and future challenges.