ID No.	K3014
Project Title	Comparative analysis of antibody responses in iEvac-Z-vaccinated subjects and Ebola virus-infected individuals
Principal Investigator	Alhaji N'jai (Associate Prof., Univ. of Sierra Leone (USL)
Project Members IMSUT Host Researcher	Yoshihiro Kawaoka (Prof., IMSUT)
Members	Peter Halfmann Amie Eisfeld (Research Prof., Univ. of Wisconsin-Madison) Masaki Imai (Associate Prof., IMSUT) Tokiko Watanabe (Prof., Osaka Univ.) Tadashi Maemura (Researcher, IMSUT) Maki Kiso (Researcher, IMSUT) Moe Okuda (PhD Student, IMSUT)

Report

In this research project, to obtain a better understanding of immune responses to Ebola vaccination, we will conduct a comparative analysis of antibody responses between iEvac-Z-vaccinated subjects and individuals who were infected and recovered from Ebola virus infection by analyzing blood samples collected from these two cohorts. In clinical studies, 15 healthy adult males received iEvac-Z vaccine twice at 4-week intervals. During this fiscal year, we collected blood samples from subjects at the first administration, 1 week after the first administration, 4 weeks after the first administration (i.e., at the second administration), 5 weeks after the first administration (i.e., 2 weeks after the first administration), 8 weeks after the first dose (i.e., 2 weeks after the second dose), and 6 months after the first dose. Plasma and peripheral blood mononuclear cells were separated from blood. The production of antibodies against the GP, VP40, and NP proteins of Ebola virus in the iEvac-Z vaccinees was measured by using ELISA kits. The next step will be to compare these antibodies levels with those in Ebola survivors.