

4th World Congress on **Virology**

October 06-08, 2014 Hilton San Antonio Airport, TX, USA

Influenza virus infection rise the temperature of cell

Ayae Honda
Hosei University, Japan

The genome of Influenza virus is negative stranded RNA and about 14000 nucleotides. The replication takes place in nucleus using own RNA dependent RNA polymerase. We prepared to temperature sensor to examine the cell temperature. Using this temperature sensor we measured influenza virus infected- and uninfected- cells. Result showed that the temperature of influenza virus infection rose cell temperature to about 5°C. To understand this phenomenon we assayed ATP level in the cell. ATP content of the virus infected cells rose up to 2hpi, and then decreased. RT-PCR for mRNA showed that the mRNA was increased 1000 fold up to 4hpi. We also assayed the viral protein content at each time after virus infection. At 6-8 hpi, most of viral proteins were detected by LC/MS correlated to the result of RT-PCR. This result indicated that a large amount of ATP consumption caused the rise of temperature inner cell.

ayhonda@hosei.ac.jp