





## 第53回日本免疫学会学術集会 Technical Seminar

1日目 2024年12月3日(火)11:40-12:40 テクニカルセミナー T02 **Room D** 会場 (101C)

《出島メッセ長崎》

演題: Peripheral immune control of mucosal viral infection

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Dr. Norifumi Iijima

## 要旨:

Malignant tumors are now one of the leading causes of death worldwide, but 100 years ago, infectious diseases such as tuberculosis, pneumonia, typhoid, and gastroenteritis caused by cholera were the leading causes of death. Currently, the overall mortality rate from infectious diseases is declining. This is because effective vaccines and treatments have been developed for pathogens with high mortality rates.

Nevertheless, many viruses that still cause acute symptoms after infection, such as fever, headache, and general malaise after infection are RNA viruses (influenza virus, SARS-CoV2, RSV, norovirus, etc.) that undergo repeated mutations. If these acute symptoms become extremely severe, the body's homeostasis is disrupted and the patient may die.

There are also many DNA viruses whose genome is DNA. The smallpox virus, which was feared as a highly contagious and deadly pathogen, has been nearly eradicated by the development of smallpox vaccines. On the other hand, DNA viruses such as cytomegalovirus, HBV, HPV, and human herpesviruses are known to be transmitted through wounds, mucous membranes, urine, saliva, and breast milk, etc., but unlike many RNA viruses and the smallpox virus, acute symptoms are often not as severe. However, many DNA viruses are known to cause chronic or persistent infections. In other words, it is currently difficult to eliminate DNA viruses from the body, even if the host's immunity is intact or is enhanced by vaccination.

In this seminar, I will introduce the mechanisms of immune control against such DNA viruses that cause chronic infections in the host.

参加方法:整理券制 配布:1階 ホワイエ 7:45-11:00 ※整理券はセミナー開始時刻を過ぎると無効となります。

共催: 日本免疫学会・トミーデジタルバイオロジー株式会社