

# 令和4年度 第70回 大学院セミナー

令和5年2月4日

分野名 Area of Research (責任者名)(内線)	熱帯ウイルス病学分野 責任者名(高松 由基) 内線(7829)
演題 Title	<b>Correlates of humoral immune responses against antigenically distinct SARS-CoV-2 variants in COVID-19 vaccine breakthrough infection</b>
講師等 Presenter	Dr. Sho Miyamoto, Doctor of Medicine, D.V.M. Department of Pathology, National Institute of Infectious Diseases
概要 Abstract	The immune responses to SARS-CoV-2 variants in COVID-19 cases are influenced by various factors including pre-existing immunity via vaccination and prior infection. Elucidating the drivers for upgrading neutralizing activity to SARS-CoV-2 in COVID-19 cases with pre-existing immunity will aid in improving COVID-19 booster vaccines with enhanced cross-protection against antigenically distinct variants, including the Omicron sub-lineages. We revealed that the magnitude and breadth of neutralization activity to SARS-CoV-2 variants after breakthrough infections are determined primarily by upper respiratory viral load and vaccination-infection time interval (Miyamoto <i>et al.</i> Med (NY). 2022, Miyamoto <i>et al.</i> iScience. 2023). Extensive neutralizing breadth, covering even the antigenically distant BA.4/5, was observed in cases with higher viral load and longer time intervals. Antigenic cartography depicted a critical role of the time interval in expanding the breadth of neutralization to SARS-CoV-2 variants. Our results illustrate the importance of dosing interval optimization as well as antigen design in developing variant-proof booster vaccines.
開催日時 Date and Time	令和5年2月16日(木) 15:00 ~ 16:00
開催方法 Online/Face to face	<b>TMGH 棟4階 405 室</b>
備考 Notes	お問合せ先: 熱帯ウイルス病学 内線 7829 or Email: yukiti@nagsaki-u.ac.jp

- 先端医療科学特論(基礎編)
- 先端新興感染症病態制御学特論
- 日本語(Japanese)
- 対面(Face to face)

- 先端医療科学特論(臨床編)
- 先端放射線医療科学特論
- 英語(English)
- オンライン(Online)