ID No.	K3009
Project Title	Elucidation of mechanisms involved in tissue specific immunity during infection
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Report

The Project Team has been focusing on the understanding of the infectious diseases in the context of malaria and influenza and their tissue specificity, to essentially improve the effectiveness of vaccines. We particularly focused on two projects; 1) imaging cerebral malaria pathology after CUBIC clearing of brains in mice infected with *P. berghei*ANKA, an experimental cerebral malaria model, and 2) understanding of the novel role of TBK1, a serine/threonine kinase, in the modulation of adaptive immune responses during infection and vaccination. The CUBIC clearing of brain showed that Plasmodium parasites accumulate in the olfactory bulb of mice (*Matsuo-Dapaah et al., Int. Immunology, 2021*). We also found that TBK1 in B cells is exclusively required for germinal center formation and long lasting immune memory (*Lee et al., J Experimental Medicine, 2022*).