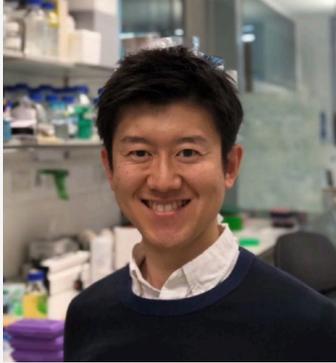


46th CCII Seminar

“Fenestrated capillaries and the sentinel macrophage-nociceptor unit in joint immunity”



Dr. Tetsuo Hasegawa

Principal Investigator of Molecular Immunity Unit,
MRC Laboratory of Molecular Biology
University of Cambridge

Joint inflammation is a common manifestation of systemic immune challenges, yet the anatomical basis for joint sensitivity remains unclear. Using whole-mount imaging of the synovium, we identify fenestrated capillaries localized to the lining–sublining interface of the lateral synovial compartment creating discrete permeable vascular niches. These capillaries permit entry of circulating inflammatory stimuli and are closely associated with specialized macrophage subsets and nociceptor neurons, forming a blood–joint barrier that coordinates immune defense and pain signaling.

Date: March 25, 2026 (Wed) 3:30pm - 4:30pm

Venue: NITORI Hall, Bristol Myers Squibb Building

Admission free | No advance registration required

Organized by Yuki Sato (Hakubi Center for Advanced Research / CCII) yukisato@kuhp.kyoto-u.ac.jp

Center for Cancer Immunotherapy and Immunobiology (CCII) kib.cci.mem@mail2.adm.kyoto-u.ac.jp

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