

シンポジウム基調講演

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Education and Appointment

1984–1990: “Iuliu Hatieganu” University of Medicine and Pharmacy, Cluj, Romania.

Degree: Medical Doctor

1991–1994: Specialty in Clinical Laboratory, Microbiology, Biochemistry and Hematology, University of Medicine and Pharmacy, Cluj.

1994: Assistant, Department of Microbiology, University of Medicine and Pharmacy, Cluj.

1995–2000: Assistant Professor, Department of Microbiology, University of Medicine and Pharmacy, Cluj.

1998: Mombusho Visiting Researcher, Department of Medical Chemistry, Kyoto University, Faculty of Medicine, Kyoto, Japan.

2000: PhD degree, Kyoto University: “Alymphoplasia (*aly*)-type nuclear factor κ B-inducing kinase (NIK) causes defects in secondary lymphoid tissue chemokine receptor signaling and homing of peritoneal cells to the gut-associated lymphatic tissue system”.

2002–present: Team leader, Laboratory for Mucosal Immunity, RIKEN Center for Allergy and Immunology (RCAI), Yokohama, Japan

Specialty & Research Field of Interest

Mucosal Immunity

Publication List

1. Tsuji M, Komatsu N, Kawamoto S, Suzuki K, Kanagawa O, Honjo T, Hori S, Fagarasan S. Preferential generation of follicular B helper T (T_{FH}) cells from Foxp3⁺ T cells in gut Peyer’s patches. *Science*, 2009, 323 : 1488–1492.
2. Tsuji M, Suzuki K, Kitamura H, Maruya M, Kinoshita K, Ivaylo II, Itoh K, Littman DR, Fagarasan S. Requirement for Lymphoid tissue inducer cells in isolated follicle formation and T cell-independent immunoglobulin A generation in the gut. *Immunity*, 2008, 29 : 261–271.
3. Ha SA, Tsuji M, Suzuki K, Meek B, Yasuda N, Kaisho T, Fagarasan S. Regulation of B1 cell migration by signals through Toll-like receptors. *J Exp Med*, 2006, 203 : 2541–2550.
4. Suzuki K, Meek B, Doi Y, Honjo T, Fagarasan S. Two distinctive pathways for recruitment of naive and primed IgM⁺ B cells to the gut lamina propria. *Proc Natl Acad Sci U S A*, 2005, 102 : 2482–2486.
5. Suzuki K, Meek B, Doi Y, Muramatsu M, Chiba T, Honjo T, Fagarasan S. Aberrant expansion of segmented filamentous bacteria in IgA-deficient gut. *Proc Natl Acad Sci U S A*, 2004, 101 : 1981–1986.

Intestinal IgA Synthesis: a Form of Adaptive Immunity that Regulates Microbial Communities in the Gut

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Our intestine is colonized by an impressive bacterial community, that has profound effects on the immune functions. The relationship between gut microbiota and the immune system is one of reciprocity: commensals have important contribution in nutrient processing and education of the immune system and conversely, the immune system, particularly gut-associated lymphoid tissues (GALT) plays a key role in shaping the repertoire of gut microbiota. I attempt to discuss the mechanisms that underlie this reciprocity, and emphasize the key role of mucosal IgA in maintenance of an appropriate segmental distribution of microbiota, which is necessary for immune homeostasis. I will discuss recent advances in our understanding of the dynamic pathways leading to IgA synthesis, in extra-follicular sites and in gut follicular structures, by T cell-independent and T cell-dependent mechanisms.