Curriculum Vitae

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Employment

University of Shizuoka, School of Pharmaceutical Sciences: Associate Professor (2023-present)

Keio University, Faculty of Pharmacy: Lecturer (2020-2023)

University of Toyama, Graduate School of Medicine & Pharmaceutical Sciences: Assistant Professor (2013-2020)

RIKEN Research Center for Allergy and Immunology: Research Scientist (2011-2013)

RIKEN Research Center for Allergy and Immunology: Research Associate (2008-2011)

RIKEN Genomic Sciences Center: Technical Staff (2001-2008)

Education

Ph.D. in Engineering, Yokohama National University (2011)

Master of Pharmaceutical Sciences, Kyoto University (2001)

Bachelor of Pharmaceutical Sciences, Toho University (1999)

Research Field of Interest

Microbiome, Metabolites, Mucosal Immunology, DOHaD

Selected Publication

1. Sakamaki I, Fukushi M, Ohashi W, Tanaka Y, Itoh K, Tomihara K, Yamamoto Y, Iwasaki H. Sitafloxacin reduces tumor necrosis factor alpha (TNFa) converting enzyme (TACE) phosphorylation and activity to inhibit TNFa release from lipopolysaccharide-stimulated THP-1 cells. Sci. Rep. 11, Article number: 24154(2021)
2. Nakamura A, Kurihara S, Takahashi D, Ohashi W, Nakamura Y, Kimura S, Onuki M, Kume A, Sasazawa Y, Furusawa Y, Obata Y, Fukuda S, Saiki S, Matsumoto M, Hase K. Symbiotic polyamine metabolism regulates epithelial proliferation and macrophage differentiation in the colon. Nat. Commun. 2021 Apr8;12(1):2105 doi:10.1038/s41467-021-22212-1
3. Nishida K, Hasegawa A, Yamasaki S, Uchida R, Ohashi W, Kurashima Y, Kunisawa J, Kimura S, Iwanaga T, Watarai H, Hase K, Ogura H, Nakayama. M, Kashiwakura J, Okayama Y, Kubo M, Ohara O, Kiyono H, Koseki H, Murakami M, Hirano T. Mast cells play role in wound healing through the ZnT2/GPR39/IL-6 axis *Sci. Rep.,* 9(1):10842 (2019)

4. Ohashi W, Hara T, Takagishi T, Hase K, Fukada T. Maintenance of intestinal epithelial homeostasis by zinc transporters. *Dig. Dis. Sci.* Mar 4. (2019)
5. Ohashi W*, Fukada T*. Contribution of zinc and zinc transporters in the pathogenesis of inflammatory bowel diseases. *J. Immunol. Res.* 2019;8396878 (2019) (*: corresponding author)
6. Palikhe S, Ohashi W*, Sakamoto T, Hattori K, Kawakami M, Andoh T, Yamazaki H, Hattori Y. Regulatory role of GRK2 in the TLR signaling-mediated iNOS induction pathway in microglial cells. *Front. Pharmacol.* 4;10:59 (2019) (*: corresponding author)
7. Sakamoto T, Ohashi W, Tomita K, Hattori K, Matsuda N, Hattori Y. Anti-inflammatory properties of cilostazol: Its interruption of DNA binding activity of NF-kB from the Toll-like receptor signaling pathways. *Int. Immunopharmacol.,* 62;120-131 (2018)
8. Kawakami M, Hattori M, Ohashi W, Fujimori T, Hattori K, Takebe M, Tomita K, Yokoo H, Matsuda N, Yamazaki M, Hattori Y. Role of G protein-coupled receptor kinase 2 in oxidative and nitrosative stress-related neurohistopathological changes in a mouse model of sepsis-associated encephalopathy. *J. Neurochem.* 145(6);474-488 (2018)
9. Imaizumi T, Matsuda N, Tomita K, Ohashi W, Hattori K, Hattori Y. Activator protein-1 decoy oligodeoxynucleotide transfection is beneficial in reducing organ injury and mortality in septic mice. *Crit. Care Med.* (2018) May;46(5);e435-e442
10. Ohashi W*, Yamamine N, Imura J, Hattori Y. SKL2001 suppresses colon cancer spheroid growth through regulation of the E-cadherin/b-Catenin complex *Biochem. Biophys. Res. Commun.* 493(3);1342-1348 (2017) (*: corresponding author)
11. Misawa H, Ohashi W, Tomita K, Hattori K, Shimada Y, Hattori Y. Prostacyclin mimetics afford protection against lipopolysaccharide/d-galactosamine-induced acute liver injury in mice *Toxicol. Appl. Pharmacol.* 334;55-65 (2017)
12. Takashina M, Inoue S, Tomihara K, Tomita K, Hattori K, Zhao Q, Suzuki T, Noguchi M, Ohashi W, Hattori Y. Different effect of resveratrol to induction of apoptosis depending on the type of human cancer cells *Int. J. Oncol.* 50(3);787-797 (2017)
13. Hattori M, Yamazaki M, Ohashi W, Tanaka S, Hattori K, Todoroki K, Fujimori T, Ohtsu H, Matsuda N, Hattori Y. Critical role of endogenous histamine in promoting end-organ tissue injury in sepsis *Intensive Care Med. Exp.* 4(1);36 (2016)
14. Ohashi W, Kimura S, Iwanaga T, Furusawa Y, Irie T, Izumi H, Watanabe T, Hijikata A, Hara T, Ohara O, Koseki H, Sato T, Robin S, Mori H, Hattori Y, Watarai H, Mishima K, Ohno H, Hase K, Fukada T. Zinc transporter SLC39A7/ZIP7 promotes intestinal epithelial self-renewal by resolving ER stress *PLOS Genetics* 12(10);e1006349 (2016)
15. Wang Q, Yokoo H, Takashina M, Sakata K, Ohashi W, Abdelzaher LA, Imaizumi T, Sakamoto T, Hattori K, Matsuda N, Hattori Y. Anti-inflammatory profile of levosimendan in cecal ligation-induced septic mice and in lipopolysaccharide-stimulated macrophage. *Crit. Care Med.* 43(11);e508-520 (2015)
16. Ohashi W., Hattori K., Hattori Y. Control of Macrophage Dynamics as a Potential Therapeutic Approach for Clinical Disorders Involving Chronic Inflammation *J. Pharmacol. Exp. Ther.* 354(3);240-250 (2015)
17. Kambara K, Ohashi W, Tomita K, Takashina M, Fujisaka S, Hayashi R, Mori H, Tobe K, Hattori Y. In vivo depletion of CD206+ M2 macrophages exaggerates lung injury in endotoxemic mice *Am. J. Pathol.* 185(1);162-171 (2015)
18. Tomita K, Takashina M, Mizuno N, Sakata K, Hattori K, Imura J, Ohashi W, Hattori Y. Cardiac fibroblasts: contributory role in septic cardiac dysfunction *J. Surg. Res.*

193(2);874-887 (2014)
19. Bin BH, Hojyo S, Hosaka T, Bhin J, Kano H, Miyai T, Ikeda M, Kimura-Someya T, Shirouzu M, Cho EG, Fukue K, Kambe T, Ohashi W, Kim KH, Seo J, Choi DH, Nam YJ, Hwang D, Fukunaka A, Fujitani Y, Yokoyama S, Superti-Furga A, Ikegawa S, Lee TR, Fukada T. Molecular pathogenesis of Spondylocheirodysplastic Ehlers-Danlos syndrome caused by mutation of ZIP13 proteins *EMBO Mol. Med.* 6(8);1028-1042 (2014)
20. Taguchi K, Sakata K, Ohashi W, Imaizumi T, Imura J, Hattori Y. Tonic inhibition by G protein-coupled receptor kinase 2 of Akt/endothelial nitric-oxide syntehase signaling in human vascular endothelial cells under conditions of hyper glycemia with high insulin levels. *J. Parmacol. Exp. Ther.* 349(2);199-208 (2014)
21. Yamasaki S, Hasegawa A, Hojyo S, Ohashi W, Fukada T, Nishida K, Hirano T. A novel role of the L-type calcium channel a_{1D} subunit as a gatekeeper for intracellular zinc signaling: Zinc wave. *PLoS One* 7(6);e39654 (2012)
22. Masanura N, Ohashi W, Tsuge N, Imai S, Ishii-Nakamura A, Hirota H, Nagata T, Kumagai H. Identification of amino acid residues essential for onion lachrymatory factor synthase activity. *Biosci. Biotechnol. Biochem.* 76(3);447-453 (2012)
23. Bin BH, Fukada T, Hosaka T, Yamasaki S, Ohashi W, Hojyo S, Miyai T, Nishida K, Yokoyama S, Hirano T. Biochemical characterization of human ZIP13 protein: a homo-dimerized zinc transporter involved in the spondylocheiro dysplastic Ehlers-Danlos syndrome. *J. Biol. Chem.* 286(46);40255-40265 (2011)
24. Hojyo S, Fukada T, Shimoda S, Ohashi W, Bin BH, Koseki H, Hirano T. The zinc transporter SLC39A14/ZIP14 controls G-protein coupled receptor-mediated signaling required for systemic growth. *PLoS One* 6(3);e18059 (2011)
25. Ohashi W, Hirota H, Yamazaki T. Solution structure and fluctuation of the Mg^{2+}-bound form of calmodulin C-terminal domain. *Protein Sci.* 20(4);690-701 (2011)
26. Kitabayashi C, Fukada T, Kanamoto M, Ohashi W, Hojyo S, Atsumi T, Ueda N, Azuma I, Hirota H, Murakami M, Hirano T. Zinc suppresses Tn17 development via inhibition of STAT3 activation. *Int. Immunol.* 22(5);375-386 (2010)
27. Ohashi W, Inouye S, Yamazaki T, Hirota H. NMR analysis of the Mg^{2+}-binding properties of aequorin, a Ca^{2+}-binding photoprotein. *J. Biochem. (Tokyo)* 138(6);613-620 (2005)
28. Ohashi W, Inouye S, Yamazaki T, Doi-Katayama Y, Yokoyama S, Hirota H. Backbone 1H, 13C and 15N resonance assignments for the Mg^{2+}-bound form of the Ca^{2+}-binding photoprotein aequorin. *J. Biomol. NMR* 31(4);375-376 (2005)
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30. Futaki S, Ohashi W, Suzuki T, Niwa M, Tanaka S, Ueda K, Harashima H, Sugiura Y. Stearylated arginine-rich peptides: a new class of transfection systems. *Bioconjug. Chem.* 12(6);1005-1011 (2001)
31. Futaki S, Suzuki T, Ohashi W, Yagami T, Tanaka S, Ueda K, Sugiura Y. Arginine-rich peptides. An abundant source of membrane-permeable peptides having potential as carriers for intracellular protein delivery. *J. Biol. Chem.* 276(8);5836-5840 (2001)