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## **RESEARCH INTEREST**

B cell immune response, B cell development

T - B cell interaction

Transplantation immunology

Pathogenesis of autoimmune diseases such as rheumatoid arthritis

Cancer immunology

## **Education and Experiences**

1982.3 –1988.2 Seoul National University College of Medicine, M.D.

1989.3 –1991.2 Seoul National University College of Medicine, M.S. (Pathology)

1991.3 –1994.2 Seoul National University College of Medicine, Ph.D. (Pathology)

1988.3 –1989.2 Seoul National University Hospital, Intern

1989.3 –1992.2 Seoul National University Hospital, Department of Pathology, Resident

1992.3 –1993.3 Seoul National University Cancer Institute Research Fellow

1993.4 –1997.3 Massachusetts General Hospital Cancer Center & Harvard Medical School,  
Research fellow

1997.4 –1997.8 Seoul National University Institute of Allergy and Clinical Immunology, Research  
Associate

1997.9 –present Sungkyunkwan University School of Medicine, Department of Molecular Cell  
Biology, Assistant Professor, Associate Professor, and Professor

## **Publications**

1. Choi SW, Woo J, Park KS, Ko J, Jeon YK, Choi SW, Yoo HY, Kho I, Kim TJ, Kim SJ\*. Higher expression of KCNK10 (TREK-2) K<sup>+</sup> channels and their functional upregulation by lipopolysaccharide treatment in mouse peritoneal B1a cells. *Pflugers Arch - Eur J Physiol.* (2021) 10.1007/s00424-021-02526-1

2. Lee S, Ko Y, Kim TJ\*. Homeostasis and regulation of autoreactive B cells. *Cell Mol Immunol.* (2020) 17:561-569. 10.1038/s41423-020-0445-4

3. Lee HW, Chung YS, Kim TJ\*. Heterogeneity of Human  $\gamma\delta$  T Cells and Their Role in Cancer Immunity. *Immune Netw.* (2020) 20:e5. 10.4110/in.2020.20.e5

4. Liu W\*, Tolar P\*, Song W\*, Kim TJ\*. Editorial: BCR Signaling and B Cell Activation. *Front Immunol.* (2020) 11:45. 10.3389/fimmu.2020.00045
5. Lee M, Park C, Woo J, Kim J, Kho I, Nam D-H, Park W-Y, Kim Y-S, Kong D-S\*, Lee HW\*, Kim TJ\*. Preferential Infiltration of Unique V $\gamma$ 9J $\gamma$ 2-V $\delta$ 2 T Cells Into Glioblastoma Multiforme. *Front Immunol.* (2019) 10:555. 10.3389/fimmu.2019.00555
6. Zhao X, Xie H, Zhao M, Ahsan A, Li X, Wang F, Yi J, Yang Z, Wu C, Raman I, Li Q-Z\*, Kim TJ\*, Liu W\*. Fc receptor-like 1 intrinsically recruits c-Abl to enhance B cell activation and function. *Sci Adv.* (2019) 5:eaaw0315. 10.1126/sciadv.aaw0315
7. Lee J-G, Jang JY, Fang T, Xu Y, Yan J-J, Ryu J-H, Jeon HJ, Koo TY, Kim DK, Oh K-H, Kim TJ\*, Yang J\*. Identification of Human B-1 Helper T Cells With a Th1-Like Memory Phenotype and High Integrin CD49d Expression. *Front Immunol.* (2018) 9:1617. 10.3389/fimmu.2018.01617
8. Park C, Kim TJ\*. Expansion and Sub-Classification of T Cell-Dependent Antibody Responses to Encompass the Role of Innate-Like T Cells in Antibody Responses. *Immune Netw.* (2018) 18:e34. 10.4110/in.2018.18.e34
9. Jeon HJ, Kim K, Lee J-G, Jang JY, Choi S, Fang T, Yan J-J, Han M, Jeong JC, Lee K-B, Kim TJ, Ahn C, Yang J\*. VDJ gene usage among B-cell receptors in ABO-incompatible kidney transplantation determined by RNA-seq Transcriptomic analysis. *BMC Nephrol.* (2017) 18:340. 10.1186/s12882-017-0770-8
10. Chen Y, Hu F, Dong X, Zhao M, Wang J, Sun X, Kim TJ\*, Li Z\*, Liu W\*. SHIP-1 Deficiency in AID(+) B Cells Leads to the Impaired Function of B10 Cells with Spontaneous Autoimmunity. *J Immunol.* (2017) 199:3063-3073. 10.4049/jimmunol.1700138
11. Yang JI, Park C, Kho I, Lee S, Suh K-S, Kim TJ\*. Serosal Cavities Contain Two Populations of Innate-like integrin  $\alpha$ 4 CD4 T Cells, Integrin  $\alpha$ 4 $\beta$ 1  $\alpha$ 6 $\beta$ 1  $\alpha$ 4 $\beta$ 7 and  $\alpha$ 4 $\beta$ 1  $\alpha$ 6 $\beta$ 1  $\alpha$ 4 $\beta$ 7 Cells. *Immune Netw.* (2017) 17:392-401. 10.4110/in.2017.17.6.392
12. Park C, Kho IS, In Yang J, Kim MJ, Park S, Cha HS, Lee J\*, Kim TJ\*. Positive selection of type II collagen-reactive CD80(high) marginal zone B cells in DBA/1 mice. *Clin Immunol.* (2017) 178:64-73. 10.1016/j.clim.2017.01.015
13. Kim H, Lee SK, Jin XL, Kim TJ, Park C, Lee JI, Kim HS, Hong SK, Yoon KC, Ahn SW, Lee KB, Yi NJ, Yang J, Lee KW, Hawthorne WJ, Suh KS. Memory T Cells Are Significantly Increased in Rejecting Liver Allografts of Rhesus Monkeys. *Liver Transpl.* (2017) 24:256-268. 10.1002/lt.24983
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15. Moon H, Park C, Lee JG, Shin SH, Lee JH, Kho I, Kang K, Cha HS, Kim TJ\*. Early Development in the Peritoneal Cavity of CD49dhigh Th1 Memory Phenotype CD4+ T Cells with Enhanced B Cell Helper Activity. *J Immunol.* (2015) 195:564-575. 10.4049/jimmunol.1401661
16. Chung YS, Son JK, Choi B, Joo S-Y, Lee Y-S, Park JB, Moon H, Kim TJ, Kim SH, Hong S, Chang J, Kang M-S, Kim SJ. Co-transplantation of human fetal thymus, bone and CD34(+) cells into young adult immunodeficient NOD/SCID IL2R $\gamma$ (null) mice optimizes humanized mice that mount adaptive antibody responses. *Clin Immunol.* (2015) 157:156-165. 10.1016/j.clim.2015.02.005
17. Kang BH, Min HS, Lee YJ, Choi B, Kim EJ, Lee J, Kim J-R, Cho K-H, Kim TJ, Jung KC, Park SH. Analyses of the TCR repertoire of MHC class II-restricted innate CD4+ T cells. *Exp Mol Med.* (2015) 47:e154. 10.1038/emm.2015.7 10.1038/emm.2015.7
18. Hong GU, Kim NG, Kim TJ, Ro JY. CD1d expressed in mast cell surface enhances IgE production in B cells by up-regulating CD40L expression and mediator release in allergic asthma in mice. *Cell*

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19. Lee JG, Moon H, Park C, Shin SH, Kang K, Kim TJ\*. Reversible Expression of CD138 on mature follicular B cells is downregulated by IL-4. *Immunol Lett.* (2013) 156:38-45. 10.1016/j.imlet.2013.09.004 10.1016/j.imlet.2013.09.004

20. Moon H, Lee JG, Shin SH, Kim TJ\*. LPS-induced migration of peritoneal B-1 cells is associated with upregulation of CXCR4 and increased migratory sensitivity to CXCL12. *J Korean Med Sci.* (2012) 27:27-35. 10.3346/jkms.2012.27.1.27

21. Kim J-Y, Huh K, Jung R, Kim TJ\*. Identification of BCAR-1 as a new substrate of Syk tyrosine kinase through a determination of amino acid sequence preferences surrounding the substrate tyrosine residue. *Immunol Lett.* (2011) 135:151-157. 10.1016/j.imlet.2010.10.016 10.1016/j.imlet.2010.10.016

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