

## 8. Department of Immunology

- 1) Terahara, K., Ishige, M., Ikeno, S., Mitsuki, Y-y, Okada, S., Kobayashi, K. and Tsunetsugu-Yokota, Y. 2013 Expansion of activated memory CD4+ T cells affects infectivity of CCR5-tropic HIV in humanized NOD/SCID/JAK3. PLoS One 8:e53495.
- 2) Takeuchi, K., Nagata, N., Kato, S., Ami, Y., Suzuki, Y., Suzuki, T., Sato, Y., Tsunetsugu-Yokota, Y., Mori, K., Nguyen, V. N., Kimura, H., and Nagata, K. 2012 Wild-type measles virus with the hemagglutinin protein of the Edmonston vaccine strain retains wild-type tropism in macaques. J. Virol. 86:3027-3037.
- 3) Mitsuki, Y-Y., Terahara, K., Shibusawa, K., Yamamoto, T., Tsuchiya, T., Ishige, M., Kobayashi, K., Morikawa, Y., Nakayama, T., Takeda, M., Yanagi, Y., and Tsunetsugu-Yokota, Y. 2012 HIV-1 infection ex vivo accelerates measles virus infection by upregulating signaling lymphocytic activation molecule (SLAM) in CD4+ T cells. J. Virol. 86:7227-7234.
- 4) Nomura, T., Yamamoto, H., Shiino, T., Takahashi, N., Nakane, T., Iwamoto, N., Ishii, H., Tstukamoto, T., Kawada, M., Matsuoka, S., Takeda, A., Terahara, K., Tsunetsugu-Yokota, Y., Iwata-Yoshikawa, N., Hasegawa, H., Sata, T., Naruse, T.K., Kimura, A., Matano, T. 2012 Association of major histocompatibility complex class I haplotypes with disease progression after simian immunodeficiency virus challenge in Burmese rhesus macaques. J. Virol. 86:6481-6490.
- 5) Sugimoto,C., Nakamura,S., Hagen,S.I., Tsunetsugu-Yokota,Y., Villinger,F., Ansari,A.A., Suzuki, Y., Yamamoto,N., Nagai,Y., Picker,L.J., Mori, K. 2012 Glycosylation of SIV influences immune-tissue targeting during primary infection that leads to immunodeficiency or viral control. J. Virol. 86:9323-9336.
- 6) Tsunetsugu-Yokota, Y. and Terahara, K. 2012 Receptor usage and the pathogenesis in acute and chronic virus infections. Editorial, Front. Microbiol. 3:289.
- 7) Ato M, Takahashi Y, Fujii H, Hashimoto S, Kaji T, Itamura S, Horiuchi Y, Arakawa Y, Tashiro M, Takemori T. 2013. Influenza A whole virion vaccine induces a rapid reduction of peripheral blood leukocytes via interferon- $\alpha$ -dependent apoptosis. Vaccine. In Press.
- 8) Matsumura T, Kobayashi K, Ato M. 2013. Myeloid-derived suppressor cells (MDSCs) and their related cell subpopulations. The Research and Biology of Cancer I . iConcept Press. ISBN: 978-1477554-99-9. In Press
- 9) Riyapa D, Buddhisai S, Korbsrisate S, Cuccui J, Wren B, Stevens M, Ato M, Lertmemongkolchai G. 2012. Neutrophil extracellular traps exhibit antibacterial activity against *Burkholderia pseudomallei* and are influenced by bacterial and host factors. Infect. Immun. Nov;80(11):3921-3929.
- 10) Tiwananthagorn S, Iwabuchi K, Ato M, Sakurai T, Kato H, Kataoka K. 2012. Involvement of CD4+ Foxp3+ regulatory T cells in persistence of leishmania donovani in the liver of alymphoplastic aly/aly mice. PLoS Negl Trop Dis. 6(8): e1798.
- 11) Nakato G, Hase K, Suzuki M, Kimura M, Ato M, Hanazato M, Tobiume M, Horiuchi M, Atarashi R, Nishida N, Watarai M, Imaoka K, Ohno H. 2012. *Brucella abortus* exploits a cellular prion protein on intestinal M cells as an invasive receptor. J Immunol. 189(4):1540-1544.
- 12) Onodera T, Takahashi Y, Yokoi Y, Ato M, Kodama Y, Hachimura S, Kurosaki T, Kobayashi K. 2012. Memory B cells in the lung participate in protective humoral immune responses to pulmonary influenza virus reinfection. Proc Natl Acad Sci U S A. 109(7): 2485-2490. d
- 13) Shimizu YK, Hijikata M, Oshima M, Shimizu K, Alter HJ, Purcell RH, Yoshikura H, Hotta H. 2013. Isolation of human monoclonal antibodies to the envelope e2 protein of hepatitis C virus and their characterization. PLoS One. 8(2):e55874.
- 14) Sugamata, R. H. Dobashi, T. Nagao, K. Yamamoto, N. Nakajima, Y. Sato, Y. Aratani, M. Oshima, T. Sata, K. Kobayashi, S. Kawachi, T. Nakayama, and K. Suzuki. 2012. Contribution of neutrophil-derived myeloperoxidase in the early phase of fulminant acute respiratory distress syndrome induced by influenza virus infection. Microbiol. Immunol. 56:171-182.
- 15) Kurebayashi, Y., Nagai, S., Ikejiri, A., Ohtani, M., Ichiyama, K., Baba, Y., Yamada, T., Egami, S., Hoshii, T., Hirao, A., Matsuda, S., and Koyasu, S. 2012. PI3K-Akt-mTORC1-S6K1/2 axis controls Th17 differentiation by regulating Gfi1 expression and nuclear translocation of ROR $\gamma$ . Cell Reports 19: 360-373.
- 16) Kurebayashi, Y., Nagai, S., Ikejiri, A., and Koyasu, S. 2012. Recent advances in understanding the molecular mechanisms of the development and function of Th17 cells. Genes Cells 18: 247-265.
- 17) Kaji, T., Ishige, A., Hikida, M., Taka, J., Hijikata, A., Kubo, M., Nagashima, T., Takahashi, Y., Kurosaki, T., Okada, M., Ohara, O., Rajewsky, K., Takemori, T. 2012. Distinct cellular pathways select germ-line encoded and somatically mutated antibodies into immunological memory. J. Exp. Med., 209: 2079-2097.
- 18) Yanagibashi, T., Hosono, A., Oyama, A., Tsuda, M., Suzuki, A., Hachimura, S., Takahashi, Y., Morose, Y., Itoh, K., Hirayama, K., Takahashi, K., Kaminogawa, S. 2013. IgA production in the large intestine is modulated by a different mechanism than in the small

- intestine: *Bacteroides acidifaciens* promotes IgA production in the large intestine by inducing germinal center formation and increasing the number of IgA+ B cells. *Immunobiol.* 218: 645-651.
- 19) Knoll M, Yanagisawa Y, Simmons S, Engels N, Wienands J, Melchers F, Ohnishi K. 2012. The non-Ig parts of the VpreB and  $\lambda$ 5 proteins of the surrogate light chain play opposite roles in the surface representation of the precursor B cell receptor. *J. Immunol.* 188: 6010-6017.
- 20) Ohnishi K., Takahashi Y., Kono N., Noriko Nakajima N., Mizukoshi F., Misawa S., Yamamoto T., Mitsuki Y., Fu S., Hirayama N., Ohshima M., Ato M., Kageyama T., Odagiri T., Tashiro M., Kobayashi K., Itamura S. and Tsunetsugu-Yokota Y. 2012. Immunological detection of H5N1 influenza viruses by newly established monoclonal antibodies. *Jpn. J. Infect. Dis.* 65: 19-27.
- 21) Ohtaka-Maruyama C, Hirai, S., Miwa, A., Heng, JI., Shitara, H., Ishii, R., Taya, C., Kawano, H., Kasai, M., Nakajima, K., and Okado, H. 2013. RP58 regulates the multipolar-bipolar transition of newborn neurons in the developing cerebral cortex. *Cell Reports.* 21: 458-471.
- 22) Ishida, R., Aoki, K., Nakahara, K., Fukuda, Y., Ohhori, M., Saito, Y., Kano, K., Matsuda, J., Asano, S., Maziarz, RT., and Kasai, M. 2012. Translin/TRAX deficiency affects mesenchymal differentiation programs and induces bone marrow failure. *Stem Cells and Human Diseases* (Springer-Verlag, Chapter 21 p468-476).
- 23) Hirai, S., Miwa, A., Ohtaka-Maruyama C, Kasai, M., Okabe, S., Hata, Y., and Okado, H. 2012. RP58 controls neuron and astrocyte differentiation by downregulating the expression of Id1-4 genes in the developing cortex. *EMBO J.* 31: 1190-1202.
- 24) Niki, M., M. Niki, Y. Tateishi, Y. Ozeki, T. Kirikae, A. Lewin, Y. Inoue, M. Matsumoto, J. I. Dahl, H. Ogura, K. Kobayashi, and S. Matsumoto. 2012. A novel mechanism underlying growth phase-dependent tolerance to isoniazid in mycobacteria. *J. Biol. Chem.* 287: 27743-27752.
- 25) Tamaru, A., C. Nakajima, T. Wada, M. Inoue, R. Kawahara, R. Maekura, Y. Ozeki, H. Ogura, K. Kobayashi, Y. Suzuki, and S. Matsumoto. 2012. Dominant incidence of multidrug and extensively drug-resistant specific *Mycobacterium tuberculosis* clones in Osaka prefecture, Japan. *PLoS One* 7: e42505.
- 26) Tateishi, Y., S. Kitada, K. Miki, R. Maekura, Y. Ogura, Y. Ozeki, Y. Nishiuchi, M. Niki, T. Hayashi, K. Hirata, K. Kobayashi, and S. Matsumoto. 2012. Whole-genome sequence of the hypervirulent clinical strain *Mycobacterium intracellulare* M.i.198. *J. Bacteriol.* 194: 6336.
- 27) Osada-Oka, M., Y. Tateishi, Y. Hirayama, Y. Ozeki, M. Niki, S. Kitada, R. Maekura, K. Tsujimura, Y. Koide, N. Ohara, T. Yamamoto, K. Kobayashi, and S. Matsumoto. 2013. Antigen 85A and mycobacterial DNA-binding protein 1 are targets of immunoglobulin G in individuals with past tuberculosis. *Microbiol. Immunol.* 57: 30-37.
- 28) Fukuda, T., T. Matsumura, M. Ato, M. Hamasaki, Y. Nishiuchi, Y. Murakami, Y. Maeda, T. Yoshimori, S. Matsumoto, K. Kobayashi, and Y. S. Morita. 2013. Critical roles for lipomannan and lipoarabinomannan in cell wall integrity of mycobacteria and pathogenesis of tuberculosis. *mBio* 4: e00472-00412.
- 29) Fujiwara, N., S. Porcelli, T. Naka, I. Yano, S. Maeda, H. Kuwata, S. Akira, S. Uematsu, T. Takii, H. Ogura, and K. Kobayashi. 2013. Bacterial sphingophospholipids containing non-hydroxy fatty acid activate murine macrophages via Toll-like receptor 4 and stimulate bacterial clearance. *Biochim. Biophys. Acta* 1831: 1177-1184.
- 30) Kasama, T., H. Furuya, R. Yanai, K. Ohtsuka, R. Takahashi, N. Yajima, Y. Miwa, and K. Kobayashi. 2012. Correlation of serum CX3CL1 level with disease activity in adult-onset Still's disease and significant involvement in hemophagocytic syndrome. *Clin. Rheumatol.* 31: 853-860.