

CURRICULUM VITAE

Hideharu Sekine

EDUCATIONAL HISTORY

- 1987 Graduated from Asaka High School (Fukushima, Japan)
- 1993 Graduated from Fukushima Medical University, Medical School (Fukushima, Japan)
- 1993 M.D. Fukushima Medical University, Medical School (Fukushima, Japan)
- 1997 Graduated from Fukushima Medical University, Graduate Medical School (Fukushima, Japan)
- 1997 Ph.D. (Dr. of Medical Science) Fukushima Medical University, Graduate Medical School (Fukushima, Japan)

PROFESSIONAL BACKGROUND (EMPLOYMENT HISTORY)

- May/1993 Passed the Examination of National Board
- May/1993-Sep/1997 Graduate Student in Department of Internal Medicine II, Fukushima Medical University
- May/1993-Sep/1994 Resident in Department of Internal Medicine II, Fukushima Medical University
- Oct/1994-Sep/1997 Researcher in Department of Immunology, Fukushima Medical University
- Oct/1997-Mar/1998 Resident in Iwase Public Hospital
- Apr/1998-Mar/1999 Resident in Iwaki Municipal Joban Hospital
- Apr/1999-May/1999 Medical Staff, Department of Internal Medicine II, Fukushima Medical University
- June/1999-June/2003 Postdoctoral Fellow, Division of Rheumatology and Immunology, Department of Medicine, MUSC
- July/2003-December/2004 Faculty Staff, Department of Internal Medicine II, Fukushima Medical University
- January/2005-Present Assistant Professor, Division of Rheumatology and Immunology, Department of Medicine, MUSC

LICENSE AND CERTIFICATION

1993 Japanese Medical License Registration

MEMBERSHIPS

Japanese Society of Internal Medicine

American Association of Immunology

RESEARCH SUPPORT

- 1) Altered somatic mutation in IgAD/CVID; association with deficiency of Msh4/5

Role: PI

Agency: NIH/NIAID

- 2) A role for the Msh4/5 heterodimers in IgA deficiency and CVID

Role: PI

Agency: USIDnet

PUBLICATIONS

1. **Sekine H**, Ferreira RC, Pan-Hammarström Q, Hammarström L, Gilkeson GS, and Behrens TW. Comment on "Reassessment of the role of mut S homolog 5 in Ig class switch recombination shows lack of involvement in cis- and trans-switching". *J Immunol.* 182(8): 4495-4496, 2009.
2. **Sekine H**, Ferreira RC, Pan-Hammarström Q, Graham RR, Ziemba B, de Vries SS, Liu J, Hippen K, Koeuth T, Ortmann W, Iwahori A, Elliott MK, Offer S, Skon C, Du L, Novitzke J, Lee AT, Zhao N, Tompkins JD, Altshuler D, Gregersen PK, Cunningham-Rundles C, Harris RS, Her C, Nelson DL, Hammarström L, Gilkeson GS, and Behrens TW. Role for Msh5 in the regulation of Ig class switch recombination. *Proc Natl Acad Sci USA.* 104(17): 7193-7198, 2007.
3. Alexander JJ, Jacob A, Vezina P, **Sekine H**, Gilkeson GS, and Quigg RJ. Absence

- of functional alternative complement pathway alleviates lupus cerebritis. *Eur J Immunol.* 37(6): 1691-1701, 2007.
4. **Sekine H**, Graham KL, Zhao S, Elliott MK, Ruiz P, Utz PJ, and Gilkeson GS. Role of MHC-Linked Genes in Autoantigen Selection and Renal Disease in a Murine Model of Systemic Lupus Erythematosus. *J Immunol.* 177(15): 7423-7434, 2006.
 5. Iwadate H, Kobayashi H, Shio K, Noguchi E, Watanabe K, Sasajima T, **Sekine H**, Watanabe H, Ohira H, Obara K, and Sato Y. A case of systemic lupus erythematosus complicated by pure red cell aplasia and idiopathic portal hypertension after thymectomy. *Mod Rheumatol.* 16(2): 109-112, 2006.
 6. Sugisaki K, Saito R, Takagi T, Shio K, Shioya Y, Fukaya E, Iwadate H, **Sekine H**, Orikasa H, Kobayashi H, Watanabe H, and Sato Y. HLA-B52-positive vasculo-Behcet disease: usefulness of magnetic resonance angiography, ultrasound study, and computed tomographic angiography for the early evaluation of multiarterial lesions. *Mod Rheumatol.* 15(1): 56-61, 2005.
 7. Shio K, Kobayashi H, Ikeda T, Fukaya E, Iwadate H, Hikichi T, **Sekine H**, Watanabe H, Obara K, and Sato Y. Nonsystemic vasculitic neuropathy treated with steroid and azathioprine. *Nippon Naika Gakkai Zasshi.* 94(7): 1406-1408, 2005.
 8. Sugisaki K, Honma F, Iwadate H, Shio K, Shioya Y, Fukaya E, Sato K, Saito H, **Sekine H**, Kobayashi H, Orikasa H, Watanabe H, and Sato Y. Ulcerative colitis occurring in the course of rheumatoid arthritis: a case successfully treated with mesalamine enema. *Intern Med.* 43(11): 1046-1050, 2004.
 9. **Sekine H**, Watanabe H, and Gilkeson GS. Enrichment of anti-glomerular antigen antibody-producing cells in the kidneys of MRL/MpJ-Fas(lpr) mice. *J Immunol.* 172(6): 3913-3921, 2004.
 10. Molano ID, Redmond S, **Sekine H**, Zhang XK, Reilly C, Hutchison F, Ruiz P, and Gilkeson GS. Effect of genetic deficiency of terminal deoxynucleotidyl transferase on autoantibody production and renal disease in MRL/lpr mice. *Clin Immunol.* 107(3): 186-197, 2003.
 11. **Sekine H**, Kenjo A, Azumi K, Ohi G, Takahashi M, Kasukawa R, Ichikawa N, Nakata M, Mizuochi T, Matsushita M, Endo Y, and Fujita T. An ancient

- lectin-dependent complement system in an ascidian: novel lectin isolated from the plasma of the solitary ascidian, *Halocynthia roretzi*. *J Immunol*. 167(8): 4504-4510, 2001.
12. **Sekine H**, Reilly CM, Molano ID, Garnier G, Circolo A, Ruiz P, Holers VM, Boackle SA, and Gilkeson GS. Complement component C3 is not required for full expression of immune complex glomerulonephritis in MRL/*lpr* mice. *J Immunol*. 166(10): 6444-6451, 2001.
 13. Nonaka M, Azumi K, Ji X, Namikawa-Yamada C, Sasaki M, Saiga H, Dodds AW, **Sekine H**, Homma MK, Matsushita M, Endo Y, and Fujita T. Opsonic complement C3 in the solitary ascidian, *Halocynthia roretzi*. *J Immunol*. 162(1): 387-391, 1999.
 14. Endo Y, Takahashi M, Nakao M, Saiga H, **Sekine H**, Matsushita M, Nonaka M, and Fujita T. Two liniages of mannose-binding lectin-associated serine protease (MASP) in vertebrates. *J Immunol*. 161(9): 4924-4930, 1998.
 15. Ochiai H, **Sekine H**, Ohira H, Kuroda M, Miyata M, Obara K, Nishimaki T, and Kasukawa R. Analysis of peripheral blood mononuclear cell stimulated with pyruvate dehydrogenase complex, T-cell receptors from patients with primary biliary cirrhosis. *J Gastroenterol*. 33(5): 694-701, 1998.
 16. Miyata M, **Sekine H**, Sato Y, Watanabe K, Endo Y, Kato H, Uchiyama T, and Kasukawa R. Selective expansion of large lymphoblasts expressing Vb6.1-3 or 7 in synovial fluid from patients with rheumatoid arthritis. *Japanese J Rheumatol*. 8(4): 369-384, 1998.
 17. Miyata M, Kurokawa M, Watanabe S, Ishikawa H, **Sekine H**, Ito O, Nishimaki T, and Kasukawa R. Periarticular ectopic calcinosis probably due to 1 alpha-OH-vitamin D3 therapy, and successful treatment with bisphosphonate compound in a patient with systemic lupus erythematosus. *Fukushima J Med Sci*. 42(1-2): 39-46, 1996.
 18. Miyata M, Ueno Y, **Sekine H**, Ito O, Sakuma F, Koike H, Nishio S, Nishimaki T, and Kasukawa R. Protective effect of beraprost sodium, a stable prostacyclin analogue, in development of monocrotaline-induced pulmonary hypertension. *J Cardiovasc Pharmacol*. 27(1): 20-26, 1996.