

Manuscripts on B-cells & Antibodies

- Mohan C, Morel L, Yang P, Deng A, Wakeland EK. (1997). Genetic dissection of SLE pathogenesis: Sle2 on murine chromosome 4 leads to B-cell hyperactivity. *J Immunol* 159:454-465.
- Mohan C, Morel L, Yang P, Wakeland EK. (1998). Expansion of splenic B1-cells with strong antigen presenting capabilities in the NZM2410 lupus strain. *Arthritis Rheum* 41:1652-1662.
- Mohan C, Morel L, Yang P, Watanabe, H, Croker, B, Gilkeson, G, Wakeland EK. (1999). Genetic dissection of SLE pathogenesis: A recipe for nephrophilic autoantibodies. *J Clin Invest* 103:1685-1695
- Mohan C, Liu F, Xie C, Williams R. (2001) Antisubnucleosome reactivities in SLE patients and their first degree relatives. *Clin Exp Immunol* 123:119-126.
- Chen L, Chang, S, and Mohan C. (2002) Molecular Signatures of anti-ssDNA, anti-dsDNA, and anti-nucleosome autoantibody heavy chains. *Mol Immunol* 39: 333-347
- Sedrak P, Hsu K, Mohan C. 2003. Molecular signatures of anti-nuclear antibodies – contribution of heavy chain framework residues. *Mol Immunol* 40:483-563.
- Liang Z, Chen C and Mohan C. 2003. Molecular signatures of anti-nuclear antibodies – contributions of specific light chain residues and a novel NZB V_k1 germline gene. *J Immunol* 171:3886-94.
- Limaye N, and Mohan C. 2004. Pathogenicity of anti-DNA and anti-glomerular antibodies: weighing the evidence. *Drug Discovery Today: Disease Models* 1(4):395-403.
- Liang Z, Xie C, Chen C, Kreska D, Hsu K, Li L, Zhou X-J, and Mohan C. 2004. Pathogenic profiles and molecular signatures of ANAs derived from NZM2410 lupus mice. *J Exp Med* 199: 381-398.
- Chang S. and Mohan C. 2005. Identification of novel VH1/J558 immunoglobulin germline genes of C57BL/6 (Igh(b)) allotype. *Molecular Immunol.* 42(11):1293-1301.
- Kumar K. R, Zhu J, Bhaskarabhatla M, Yan M, Mohan C. 2005. Enhanced expression of Ly-6A/E correlates with disease severity in various lupus prone mice. *J Autoimmunity* 25:215-222.
- Qing X, Zavadil J, Crosby MB, Hogarth MP, Hahn BH, Mohan C, Gilkeson GS, Bottinger EP, Putterman C. Nephritogenic anti-DNA antibodies regulate gene expression in MRL/lpr mouse glomerular mesangial cells. *Arthritis Rheum* 54(7):2198-210, 2006
- Kumar KR, L Li, M Yan, M Bhaskarabhatla, AB Mobley, C Nguyen, J Mooney, JD Schatzle, EK Wakeland and C Mohan . 2006. Regulation of B-cell tolerance by the lupus susceptibility gene Ly108. *Science* 2006, 312(5780):1665

- Liu Y, L Li, C Xie, S Lightfoot, X J. Zhou, M Weigert and C Mohan. 2007. Lupus susceptibility loci breach B-cell tolerance to DNA by impairing receptor revision of nuclear antigen reactive B-cells. *J Immunol* 179: 1340 - 1352
- Xiaoyan Shi, Chun Xie, Sooghee Chang, Xin J Zhou, Thomas Tedder and Chandra Mohan. 2007. CD19 hyper-expression augments Sle1-induced humoral autoimmunity but not clinical nephritis. *Arthritis Rheum* 56(9):3057-69
- KR Kumar and C. Mohan. 2007. B-cell tolerance checkpoint violations in systemic lupus erythematosus. *Future Rheumatology* 2(4): 415-422.
- Culton DA, Nicholas MW, Bunch DO, et al.. Similar CD19 dysregulation in two autoantibody-associated autoimmune diseases suggests a shared mechanism of B-cell tolerance loss. *J Clin Immunol* 27 (1): 53-68, 2007
- T Wu, X Qin, Liu K, Z Kurepa, M Bhaskarabhatla, XJ Zhou, Satterthwaite AB, LS Davis and C Mohan. 2007. Shared signaling networks that fire up in lupus B cells from genetically distinct mouse models – implications for disease pathogenesis and therapy. *J Clin Invest* 117: 2186 – 2196.
- Kumar KR. Mohan C. Understanding B-cell tolerance through the use of immunoglobulin transgenic models. *Immunol Res.* 40(3):208-23, 2008.
- Y Liu, L Li and C Mohan. 2008. The role of rearrangement at the second immunoglobulin heavy chain locus in maintaining B-cell tolerance to DNA *J Immunol* 180(11):7721-7.
- Kui Liu and Chandra Mohan. 2009. Altered B Cell Signaling in Lupus. *Autoimmunity Rev* 8:214-218.
- Zhiyan Liang, Sooghee Chang, Min So Youn, and Chandra Mohan. 2009. Molecular Hallmarks of Anti-chromatin Antibodies Associated with the Lupus Susceptibility Locus, Sle1. *Mol Immunol* 46(13):2671-81
- Chang S. Yang L. Moon YM. Cho YG. Min SY. Kim TJ. Kim YJ. Patrick W. Kim HY. Mohan C. 2009. Anti-nuclear antibody reactivity in lupus may be partly hard-wired into the primary B-cell repertoire. *Mol Immunol.* 46(16):3420-6.
- Vuyyuru R. Mohan C. Manser T. Rahman ZS. 2009. The lupus susceptibility locus Sle1 breaches peripheral B cell tolerance at the antibody-forming cell and germinal center checkpoints. *J Immunol* 183(9):5716-27
- Peters AL. Stunz LL. Meyerholz DK. Mohan C. Bishop GA. Latent membrane protein 1, the EBV-encoded oncogenic mimic of CD40, accelerates autoimmunity in B6.Sle1 mice. *J Immunol.* 185(7):4053-62, 2010.

- J Hutcheson, D Sajitharan, K Vanarsa and C Mohan. Modulating proximal cell signaling by targeting Btk ameliorates humoral autoimmunity and end-organ disease in murine lupus. *Arthritis Research & Therapy* 2012, 8;14(6):R243.
- Wong EB, Khan TN, Mohan C, Rahman ZS. The Lupus-Prone NZM2410/NZW Strain-Derived Sle1b Sublocus Alters the Germinal Center Checkpoint in Female Mice in a B Cell-Intrinsic Manner. *J Immunol.* 2012 Nov 9. PMID: 23144494
- Chong BF, Tseng LC, Lee T, Vasquez R, Li QZ, Zhang S, Karp DR, Olsen NJ, Mohan C. IgG and IgM Autoantibody Differences in Discoid and Systemic Lupus Patients. *J Invest Dermatol.* 2012 Jul 5. doi: 10.1038/jid.2012.207.
- Li L, Nukala S, Du Y, Han J, Liu K, Hutcheson J, Pathak S, Li Q, Mohan C. Murine lupus strains differentially model unique facets of human lupus serology. *Clin Exp Immunol.* 2012 May;168(2):178-85. doi: 10.1111/j.1365-2249.2012.04568.x. PMID:22471278
- Oleksyn D, Pulvino M, Zhao J, Misra R, Vosoughi A, Jenks S, Tipton C, Lund F, Schwartz G, Goldman B, Mohan C, Mehta K, Mehta M, Leitgets M, Sanz I, Chen L. PKC β is required for lupus development in Sle mice. *Arthritis Rheum.* 2012 Dec 21. doi: 10.1002/art.37825.
- Richardson C, Chida AS, Adlowitz D, Silver L, Fox E, Jenks SA, Palmer E, Wang Y, Heimbarg-Molinario J, Li QZ, Mohan C, Cummings R, Tipton C, Sanz I. Molecular Basis of 9G4 B Cell Autoreactivity in Human Systemic Lupus Erythematosus. *J Immunol.* 2013 Oct 9. [Epub ahead of print]
- Chang SH, Kim TJ, Kim YJ, Liu Y, Min SY, Park MJ, Park HS, Lee SK, Nam KH, Kim HY, Mohan C, Kim HR. The Lupus Susceptibility Locus Sle1 Facilitates the Peripheral Development and Selection of Anti-DNA B Cells through Impaired Receptor Editing. *J Immunol.* 2014 Jun 15;192(12):5579-85. doi: 10.4049/jimmunol.1201558. Epub 2014 May 16. PMID:24835399
- Minghua Wu, Chandra Mohan. B cells in Systemic Sclerosis: Emerging evidence from genetics to phenotypes. *Curr Opin Rheumatology* 2015 (In Press)
-