

REFERENCES

- Adams KM and Nelson JK (2004):** Microchimerism ! An investigative frontier in autoimmunity and transplantation JAMA mar. 3; 271 (9): 1127 – 31.
- Adams KM, Lambert NC and Heimfeld S (2002):** Male DNA in female danor apheresis and CD34+ enriched products. Blood; 102 : 3845-3847.
- Akbari O (2003):** Essential role of NKT cells producing IL-4 and IL-13 in the development of allergen – induced airway hyper reactivity. Nat Med., 9 : 582 – 588.
- Alugupalli KR, Leong JM and Woodland RT (2004):** B1b lymphocytes confer T cell – independent long – lasting immunity. Immunity; 21 : 379.
- Anderson MS and Bluestone JA (2005):** The NOD mouse : A model of immune dysregulation. Annu Rev Immunol; 23 : 447 – 485.
- Anderson MS, Venanzi ES and Klein L (2002):** Projection of an immunological self shadow within the thymus by the aire protein. Science; 298 : 1395 – 1401.
- Angello D, Lankford CS and Bream J (2003):** Cytokines and transcription factors that regulate T helper cell differentiation : New Players and new insights. J Clin Immunol; 23 : 147 – 161.

- Aractingi S, Uzan S, Dausset J, Carosello ED (2000):** Microchimerism in human diseases. *Immunol. Today*, 21 (3) : 116 – 118.
- Arbuckle MR, McClain MT, Rubertone MV (2003):** Development of autoantibodies before the clinical onset of systemic lupus erythromatosis. *N Engl J Med.*; 349 : 1526 – 1533.
- Arnett FC, Edworthy S and Block DA (1988):** The 1987 revised ARA criteria for classification of RA. *Arthritis Rheum.*, 31 : 315.
- Atkinson JP (2009):** Complement system. *Kelley Text Book of Rheumatology*, 8th edition, 323 – 336.
- Azzouz H, Rak JM, Balandraud N, Auger I, Martin M, Roudies J, and Lambert NC (2010):** How microchimerism can import HLA susceptibility to RA, Chimerism. *US National Library of Medicine*, 1 (1) : 23 – 25.
- Banda NK, Kraus DM and Muggli M (2003):** Prevention of collagen – induced arthritis in mice transgenic for the complement inhibitor complement receptor 1- related gene / protein y. *J Immunol.*, 171 : 2109.
- Bang H, Egerer K and Gaudiard A (2007):** Mutation and citrullination modifies vimentin to a novel autoantigen for rheumatoid arthritis. *Arthritis Rheum*; 56 : 2503 – 2511.
- Bansal – Pakala P, Jember AG, Croft M (2001):** Signaling through OX40 (CD134) breaks peripheral T – cell tolerance. *Nat Med*; 7 : 907 – 912.

- Barber DL (2006):** Restoring function in exhausted CD8T cells during chronic viral infection, 439 : 682 – 687.
- Benirschle K and Koufmann P (2000):** Pathology of the human placenta. 4th ed. New York : Springer – Verlag, Inc.
- Berland R, Fernandez L and Kari E (2006):** Toll – like receptor 7 – dependent loss of B cell tolerance in pathogenic autoantibody knockin mice. Immunity; 25 : 429.
- Bhole D and Stahl GL (2003):** Therapeutic potential of targeting the complement cascade in critical care medicine. Crit Care Med; 31 (1 Suppl): S97 – S104.
- Bianchi DW (2000):** Fetal cells in the mother : from genetic diagnosis to disease associated with fetal cell microchimerism. Eur J Obstet Gynecol Reprod Biol, 92 : 103 – 108.
- Bianchi DW and Fisk NM (2007):** Fetomaternal cell trafficking and the stem cell debate gender matters. JAMA; 297 : 1489 – 1491.
- Bianchi DW and Robert E (2007):** Fetomaternal cell trafficking : a story that begins with prenatal diagnosis and may end in stem cell therapy. J Pediatr. Surg, 42 : 12 – 8.
- Blades MC, Ingegnoli F and Wheller SK (2002):** Stromal cell – derived factor 1 (CXCL12) induces monocyte migration into human synovium transplanted onto SCID mice. Arthritis Rheum, 46 : 824.
- Bodolay E, Koch AE and Kim J (2002):** Angiogenesis and chemokines in rheumatoid arthritis and other systemic inflammatory rheumatic diseases. J Cell Mol Med., 6 : 357 – 376.

- Bolland S and Ravetch JV (2000):** Spontaneous autoimmune disease in Fc (gamma) RIIB – deficient mice results from strain – specific epistasis. *Immunity*, 13 : 277.
- Bravo J and Heath JK (2000):** Receptor recognition by gp 130 cytokines. *EMBO J*; 19 : 2399.
- Bresnihan B, Baeten D and Firestein GS (2005):** OMERACT7 Special interest Group : Synovial tissue analysis in clinical trials. *J Rheumatol.*; 32 : 2481.
- Buckley RH (2002):** Primary cellular immunodeficiencies, *J Allergy Clin Immunol.*, 109 : 747 – 757.
- Budagian V, Bulanova E and Paus R (2006):** IL-15/IL-15 receptor biology : A guided tour through an expanding universe. *Cytokine Growth Factor Rev.*, 17 : 259.
- Budd RC and Fortner KA (2009):** T lymphocytes. *Kelley text book of rheumatology*, 8th edition, 155 – 175.
- Burger D, Begue – Pastor N., Benavent S (2003):** The active metabolite of leftunomide, A77 1726, inhibits the production of prostaglandin E(2), matrix metalloproteinase 1 and interleukin 6 in human fibroblast – like synoviocytes. *Rheumatology (Oxf)*; 42 : 89.
- Burger JA, Zvaifler NJ and Tsukada N (2001):** Fibroblast – like synoviocytes support B – cell pseudoemperipolesis via a stromal cell – derived factor -1- and CD106 (VCAM-1)-dependent mechanism. *J Clin Invest*, 107 : 305.

- Burkhardt H, Huffmeier U and Spriewald B (2006):** Association between protein tyrosine phosphatase 22 variant R620W in conjunction with the HLA-DRB1 shared epitope and humoral autoimmunity to an immunodominant epitope of cartilage – specific type II collagen in early rheumatoid arthritis. *Arthritis Rheum*; 54 : 82.
- Bustos ML, Fraix S and Ramos S (2007):** Local and circulating microchimerism is associated with hypersensitivity pneumonitis. *Am J Respir Cret Care Med.*,176:90– 95.
- Campagnoli C, Roberts IA, Kumar S, Bennett PR, Bellantvono I and Fisk N., (2001):** Identification of mesenchymal stem / progenitor cells in human first – trimester fetal blood, liver, and bone marrow; blood; 98 (8): 2396 – 2402.
- Camps M, Ruckle T and Ji H (2005):** Blockade of P13Kgamma suppresses joint inflammation and damage in mouse models of rheumatoid arthritis. *Nat Med.*, 11 : 936.
- Carsetti R,Rosado MM, Wardemann H (2004):** Peripheral development of B cells in mouse and man. *Immunol. Rev.*, 197 : 179.
- Cha D, Khosrotebrani , Kim Y, Stroh H, Bianchi DW and Johnson KL (2003):** Cervical cancer and microchimerism. *Obstet Gynecol.*, 102 : 774 – 781.
- Chan OT and Shlomchik MJ (2000):** Cutting edge : B cells promote CD8+ T cell activation in MRL – Fas (1pr) mice independently of MHC class I antigen presentation. *J Immunol*; 164 : 1658 – 1662.

- Chen W and Wahl SM (2002):** TGF-beta: Receptors, signaling pathways and autoimmunity. *Curr Dir Autoimmun*, 5 : 62.
- Cherukuri A, Dyksra M., Pierce SK (2001):** Floating the raft hypothesis : lipid rafts play a role in immune cell activation. *Immunity*; 14 : 657.
- Chikuma S, Imboden JB and Bluestone JA (2003):** Negative regulation of T cell receptor – lipid raft interaction by cytotoxic T lymphocyte – associated antigen 4. *J Exp Med.*, 197 : 129 – 135.
- Cope AP (2002):** Studies of T – cell activation in chronic inflammation. *Arthritis Res.*; 4 (Suppl 3): S197.
- Crabtree GR and Olson EN (2002):** NFAT signaling : Choreographing the social lives of cells. *Cell*; 109 (Suppl): 567 – 579.
- Cramer T, Yamanishi Y and Clausen BE (2003):** HIF -1 alpha is essential for myeloid cell – mediated inflammation. *Cell*; 112 : 645.
- Croft M (2003):** Co-stimulatory members of the TNF family : Keys to effective T – cell immunity ? *Nat Rev Immunol*; 3 : 609 – 620.
- Diamond B and Grimaldi C (2009):** B lymphocytes. *Kelley Text Book of Rheumatology*, 8th edition, 177 – 199.
- Dubois S, Mariner J and Waldmann TA(2002):** IL-15 Ralpha recycles and presents IL-15 in trans to neighboring cells. *Immunity*, 17 : 537.

- Endo Y, Negishi I and Ishikawa O (2003):** Possible contribution of microchimerism to the pathogenesis of sjogeren syndrome, rheumatology Oxford, 42 (3) : 486 – 487.
- Evan PC, Lambert N, Malony S, Frust DE, Moore JM and Nelsong L (1999):** Long- term fetal microchimerism in peripheral blood mononuclear cells subset in healthy women and women with scleroderma. Blood. 15; (93 (6): 2003 – 2007.
- Fanzo JC, Yang W and Jang SY (2006):** Loss of IRF -4-binding protein leads to the spontaneous development of systemic autoimmunity. J Clin Invest, 116 : 703.
- Fast LD (2006):** Microchimerism : a lasting legacy of transfusion ?! transfusion, 46 : 1856 – 1858.
- Fava RA, Notidis E and Hunt J (2003):** A role for the lymphotoxin / Light axis in the pathogenesis of murine collagen – induced arthritis. J Immunol., 171 : 115.
- Feitsma N (2007):** Protective effect of non – inherited maternal HLA – DR antigens on rheumatoid arthritis development Proceeding of the national academy of science, 104 (50): 19966 – 19970.
- Feldmann M, Andreakos E and Smith C (2002):** Is NF-kappa B a useful therapeutic target in rheumatoid arthritis?. Ann Rheum Dis; 61 (Suppl 2): 13.
- Firestein GS (2003):** Evolving concepts of rheumatoid arthritis. Nature; 423 : 356 – 361.



- Firestein GS (2009):** Etiology and pathogenesis of rheumatoid arthritis. Kelley Text Book of Rheumatology, 8th edition, (P : 1035 – 1086).
- Fletcher JM (2005):** Cytomegalovirus- specific CD4+ T cells in healthy carriers are continuously driven to replicative exhaustion. J Immunol., 175 : 8218 – 8225.
- Frank MM and Atkinson JP (2001):** Complement system. In : Ausen KF, Frank MM, Atkinson JP, et al., ed. Samter's Immunologic Diseases, 6th ed. Philadelphia: Lippincott Williams & Wilkins, 281 – 299.
- Frazer JK and Capra JD (1999):** Immunoglobulins : Structure and function. In : Paul WE, ed. Fundamental immunology, Philadelphia: Lippincott – Raven, p. 37.
- Frisoni L, McPhie L and Colonna L (2005):** Nuclear autoantigen translocation and autoantibody opsonization lead to increased dendritic cell phagocytosis and presentation of nuclear antigens : A novel pathogenic pathway for autoimmunity?. Immunol; 175 : 2692 – 2701.
- Fujita T (2002):** Evolution of the lectin – complement pathway and its role in innate immunity. Nat Rev Immunol.; 2 : 346 – 353.
- Gabriel SB, Schaffner SF and Nguyen H (2002):** The structure of haplotype blocks in the human genome. Science; 296 : 2225 – 2229.

- Gadina M, Hilton D and Johnston JA (2001):** Signaling by type I and II cytokine receptors : Ten years after. *Curr Opin Immunol*; 13 : 363.
- Gannag M, Amovia Z, Lantz O., Piette JC and Caillat ZS (2002):** Feto – maternal microchimerism in connective tissue diseases. *Eur. J. Immunol.*, 32 (12): 3405 – 3413.
- Gekas C., Dieterlen F., Orkin H, and Mikkola K. (2003):** The placenta is a source of hematopoietic stem cells, *Dev. Cell.* 8 : 365 – 375.
- Genovese MC, Cohen S and Moreland L (2004):** Combination therapy with etanercept and anakinra in the treatment of patients with rheumatoid arthritis who have been treated unsuccessfully with methotrexate. *Arthritis Rheum*; 50 : 1412.
- Gerd RB and Antonio P (2001):** Pathological immune mechanisms and tolerance, hypersensitivity reactions. *Coloured Atlas of Immunology*, 66 – 72.
- Gerlag DM, Borges E and Tak PP (2001):** Suppression of murine collagen – induced arthritis by targeted apoptosis of synovial neovasculature. *Arthritis Res*, 3 : 357.
- Ghetie V and Ward ES (1997):** FcRn : The MHC class I – related receptor that is more than an IgG transporter. *Immunol., Today*, 18 : 592.
- Gleicher N and Barad DH (2007):** Gender at risk factor for autoimmune diseases. *J. Autoimmun*, 28 : 1-6.

- Goldrath AW, Bogatzki LY and Bevan M (2000):** Naïve T cells transiently acquire a memory – like phenotype during homeostasis – driven proliferation. *J Exp Med.*, 192 : 557 – 564.
- Goronyz JJ and Weyand CM (2001):** Thymic function and peripheral T – cell homeostasis in rheumatoid arthritis. *Trends Immunol.*, 22 : 251.
- Granet C and Miossec P (2004):** Combination of the pro-inflammatory cytokines IL-1, TNF-alpha and IL-17 leads to enhanced expression and additional recruitment of AP-1 family members, Egr-1 and NF-kappaB in osteoblast – like cells. *Cytokine*, 26 : 169.
- Greenwood J, Steinman L and Zamvil SS (2006):** Statin therapy and autoimmune disease : From protein prenylation to immunomodulation. *Nat Rev Immunol*, 6 : 358 – 370.
- Griffiths MM and Remmers EF (2001):** Genetic analysis of collagen – induced arthritis in rats : A polygenic model for rheumatoid arthritis predicts a common framework of cross – species inflammatory / autoimmune disease loci. *Immunol Rev.*; 184 : 172 – 183.
- Gross JA, Dillon SR and Mudri S (2001):** TACI – Ig neutralizes molecules critical for B cell development and autoimmune disease : Impaired B cell maturation in mice lacking BLyS. *Immunity*; 15 : 289.

- Guetta E, Gordon D, Simichen J, Goldman B and Barkai G (2003):** Haematopoietic progenitor cells as targets for non – invasive prenatal diagnosis, detection of fetal CD4+ cells and assessment of post- delivery persistence in the maternal circulation : blood cells Mal. Dis., 30 : 13 – 21.
- Haas KM, Hasegawa M and Steeber DA (2002):** Complement receptors CD21/35 link innate and protective immunity during streptococcus pneumonia infection by regulating IgG3 antibody responses. Immunity, 17 : 713.
- Hall JG (2007):** The importance of the fetal origins of adult disease for geneticists, Clin Genet, 72 : 67 – 73.
- Hamaguchi Y, Uchida J and Cain DW (2005):** The peritoneal cavity provides a protective niche for B1 and conventional B lymphocytes during anti – CD20 immunotherapy in mice. J Immunol.; 174 : 4389.
- Hansen G, McIntire JJ and Yeung VP (2000):** CD4 – T helper cells engineered to produce latent TGF-1 reverse allergen – induced airway hyperreactivity and inflammation. J. Clin. Invest. 105 : 61.
- Haringman JJ, Gerlag DM, Zwinderman AH (2005):** Synovial tissue macrophages : A sensitive biomarker for response to treatment in patients with rheumatoid arthritis. Ann Rheum Dis., 64 : 834.
- Haringman JJ, Smeets TJ and Reinders BP (2006):** Chemokine and chemokine receptor expression in paired peripheral blood mononuclear cells and synovial tissue of patients with

rheumatoid arthritis, osteoarthritis, and reactive arthritis. *Ann Rheum Dis.*, 65 : 294.

Harnett MM, Katz E and Ford CA (2005): Differential signaling during B-cell maturation. *Immunol Lett*; 98 : 33.

Harney S, Newton J, Milicic A, Brawn MA and Wordsworth BP (2003): Non – inherited maternal HLA alleles are associated with RA, *Rheumatology*; 42 (1) : 171 – 174.

Haura EB (2006): Is repetitive wounding and bone marrow – derived stem cell mediated – repair an aetiology of lung cancer development and dissemination ? *Med Hypoth.* 67 (4) : 951 – 956.

He X, Kang AH and Stuart JM (2001): Anti – Human type II collagen CD19 B cells are present in patients with rheumatoid arthritis and healthy individuals. *J Rheumatol.*, 28 : 2168.

Helgason CD, Kalberer CP and Damen JE (2000): A dualrole for Src homology 2 domain – containing inositol-5-phosphatase (SHIP) in immunity : Aberrant development and enhanced function of B lymphocytes in ship-/-mice. *J Exp Med.*; 191 : 781.

Helmy KY, Katschke Jr KJ and Gorgani NN (2006): CRIg: A macrophage complement receptor required for phagocytosis of circulating pathogens. *Cell*; 124 : 915 – 927.

Hideman DA (2002): Activated T cell death in vivo mediated by proapoptotic bcl-2 family member bim. *Immunity*, 16 : 759 – 767.



- Hori S, Nomura T, Sakaguchi S (2003):** Control of regulatory T cell development by the transcription factor Foxp3. *Science*; 299 : 1057- 1061.
- How LR and Weiss A (1995):** Multiple kinases mediate T- cell – receptor signaling. *Trends Biochem Sci.*, 20 : 59 – 64.
- Hromadnikova I, Zlacka D, Hien NT, Sedlackova L, Zejskova L and Sosna A (2008):** Fetal cells of mesenchymal origin in cultures derived from synovial tissue and skin of the patients with rheumatoid arthritis, joint bone spine, 75 (5) : 563 – 566.
- Huber S, Shi C and Budd RC (2002):** Gamma delta T cells promote a Th1 response during coxsackievirus B3 infection in vivo : Role of Fas and Fas ligand. *J Virol* 76 : L6487 – L6494.
- Huu SN, Oster M, Uzan S, Charegre E, Aractingi S and Khosrotehrani K (2005):** Maternal nesangiogenesis during pregnancy partly derives from fetal endothelial progenitor cells. *Proc Nat Acad Sci USA*, 104 : 1871 – 1876.
- Imaizumi M, Pritsker A, Unger P and Davis TF (2002):** Intrathyroidal fetal microchimerism in pregnancy and postpartum. *Endocrinology*, 143 : 247 – 253.
- Jackson L (2003):** Fetal cells and DNA in maternal blood, *prenat Diagn*; 23 : 837 – 846.
- Janeway JA, Travers P and Walport M (2001):** Structural variation in immunoglobulin constant regions. In *immunobiology*. Immunobiology, 5th ed. New York: Garland, p : 142.

- Janeway JA, Travers P and Walport M (2001):** The structure of a typical antibody molecule. Immunobiology, 5th ed. New York: Garland, 95.
- Janeway Jr CA and Medzhitov R (2002):** Innate immune recognition. Annu Rev Immunol., 20 : 197 – 216.
- Johnson KL and Bianchi DW (2004):** Fetal cells in maternal tissue following pregnancy : what are the consequences ?! Hum. Reprod. Update, 10 (6) : 497 : 501.
- Jongbloed SL, Lebre MC and Fraser AR (2005):** Enumeration and phenotypical analysis of distinct dendritic cell subsets in psoriatic arthritis and rheumatoid arthritis. Arthritis Res Ther, 8 : R15.
- Joosten LA, Van De Loo FA and Lubberts E (2000):** An IFN – gamma-independent proinflammatory role of IL-18 in murine streptococcal cell wall arthritis. J Immunol., 165 : 6553.
- Jordan MS, Singer AL and Koretzky GA (2003):** Adaptors as central mediators of signal transduction in immune cells. Nat Immunol., 4 : 110 – 116.
- Jou IM, Shiau AL and Chen SY (2005):** Thrombopondin 1 as an effective gene therapeutic strategy in collagen – induced arthritis. Arthritis Rheum, 52 : 339.
- Juurikivi A, Sandler C and Lindstedt KA (2005):** Inhibition of c-kit tyrosine kinase by imatinib mesylate induces apoptosis in mast cells in rheumatoid synovial : A potential approach to the treatment of arthritis. Ann Rheum Dis., 64 : 1126.

- Kang YS, Do Y and Lee HK (2006):** A dominant complement fixation pathway for pneumococcal polysaccharides initiated by SIGN-R1 interacting with C1q. *Cell*; 125 : 47 – 58.
- Karnell FG, Brezski RJ and King LB (2005):** Membrane cholesterol content accounts for developmental differences in surface B cell receptor compartmentalization and signaling. *J. Biol Chem.*; 280 : 25621.
- Kastelein RA, Hunter CA and Cua DJ (2007):** Discovery and biology of IL-23 and IL-27 : Related but functionally distinct regulators of inflammation. *Annu Rev Immunol*; 25 : 221 – 242.
- Kelly JA, Moser KL and Harley JB (2002):** The genetics of systemic lupus erythematosus: Putting the pieces together. *Genes Immunity*; 3 (Suppl 1): S71 – S85.
- Kennedy N.J., Russell JQ, Michail N and Budd RC (2001):** Liver damage by infiltrating CD8 + T cells is Fas dependent. *J Immunol.*, 167 : 6654 -6662.
- Khosrotehrani K and Bianchi DW (2005):** Multi lineage potential of fetal cells in maternal tissue, a legacy in reverse. *J Cell Sci*, 118 : 1559 – 1563.
- Khosrotehrani K, Ledue M, Bachy V, Huu SN, Oster M, Abbas A, Uzan S and Arctingi S (2010):** Pregnancy allows the transfer and differentiation of fetal lymphoid progenitor into functional T and B cells in Mother. *J. Immunol.*, 180, 889 – 897.

- Khosrotehrani K, Reyes RR and Johnson KL (2007):*** Fetal cells participate overtime. In the response to specific type of murine maternal hepatic injury. Hum Reprod, 22 : 654 – 661.
- Kikuchi K and Kondo M (2006):*** Developmental switch of mouse hematopoietic stem cells from fetal to adult type occurs in bone marrow after birth. Proc Natl Acad Sci USA; 103 : 17852.
- Kim CH (2005):*** The greater chemotactic network for lymphocyte trafficking : Chemokines and beyond. Curr Opin Hematol., 12 : 298.
- Kim WJ, Kang YJ and Koh EM (2005):*** Light is involved in the pathogenesis of rheumatoid arthritis by inducing the expression of pro-inflammatory cytokines and MMP-9 in macrophages. Immunology, 114 : 272.
- Kinjo Y (2006):*** Natural killer T cells recognize diacylglycerol antigens from pathogenic bacteria. Nat Immunol., 7 : 978 – 986.
- Klintschar M., Immel UD, and Kehlen A (2006):*** Fetal microchimerism in Hashimoto's thyroiditis : a quantitative approach. Eur J Endocrinol, 154 : 237 – 241.
- Klonisch T and Drovín R (2009):*** Fetal – maternal exchange of multipotent stem / progenitor cells : micro chimerism in diagnosis and disease, trends. Mol. Med. 15 (11) : 510 – 518.
- Koller M, Hayer S and Redlich K (2005):*** JNK1 is not essential for TNF-mediated joint disease. Arthritis Res Ther, 7 : R166.

- Kremer IC, Koopmans M, Baelde HJ, Heer E, Bruijn JA and Bajema IM (2007):** Tissue chimerism in SLE is related to injury. *Ann Rheum Dis.*, 66 : 1568 – 1573.
- Kronenberg M and Rudensky A (2005):** Regulation of immunity by self – reactive T cells. *Nature*; 435 – 598 – 604.
- Kumar KR, Li L and Yan M (2006):** Regulation of B cell tolerance by the lupus susceptibility gene Ly108. *Science*; 312 : 1665 – 1669.
- Lambert N and Nelson JL (2003):** Microchimerism in autoimmune disease : more questions than answers ?! *Autoimmun Rev.*, 2 : 133 – 139.
- Langrish CL, Chen Y, Blumenschein WM (2005):** IL-23 drives a pathogenic T cell population that induces autoimmune inflammation. *J Exp. Med*; 201 : 233 – 240.
- Lee DM, Friend DS and Gurish MF (2002):** Mast cells : A cellular link between autoantibodies and inflammatory arthritis. *Science*, 297 : 1689.
- Lee KH (2002):** T cell receptor signaling precedes immunological synapse formation. *Science*, 295 : 1539 – 1542.
- Lesage S and Goodnow CC (2001):** Organ – specific autoimmune disease : A deficiency of tolerogenic stimulation. *J Exp Med*; 194 : F31 – F36.
- Lipsky PE, van der Heijde DM, St Clair EW (2000):** Infliximab and methotrexate in the treatment of rheumatoid arthritis : Anti –

tumor necrosis factor trial in rheumatoid arthritis with concomitant therapy study group. N Engl J Med., 343 : 1594.

Liston A, Lesage S and Wilson J (2003): Aire regulates negative selection of organ – specific T cells. Nat Immunol; 4 : 350 – 354.

Locksley RM, Killeen N and Lenardo MJ (2001): The TNF and TNF receptor superfamilies : integrating mammalian biology. Cell; 104 : 487.

Lubberts E, Joosten LA and Chabaud M (2000): IL-4 gene therapy for collagen arthritis suppresses synovial IL-17 and osteoprotegerin ligand and prevents bone erosion. J Clin Invest., 105 : 1697.

Mandik NL and Allen PM (2005): Initiation of an autoimmune response: insights from a transgenic model of rheumatoid arthritis. Immunol. Res., 32 : 5.

Mangan PR, Harrington LE, O'Quinn DB (2006): Transforming growth factor – beta induces development of the T(H) 17 lineage. Nature; 44 : 2312 – 234.

Manicoort DH, Triki R, Fukodak, Devogelaer JP, Deuxchaisnes CN, Thonar E and Jmas S (1993): Level of tumor necrosis factor and interleukin -6 in patients with rheumatoid arthritis. Arthrit. And rheum. V. (3) : P 4.

Manzo A, Paoletti S and Carulli M (2005): Systematic microanatomical analysis of CXCL13 and CCL21 in situ production and

progressive lymphoid organization in rheumatoid synovitis.
Eur J Immunol., 35 : 1347.

Marrack P, Kappler J and Kotzin BL (2001): Autoimmune disease :
Why and Where it occurs. Nat Med.; 7 : 899 – 905.

Marshak RA (2006): Toll – like receptors in systemic autoimmune
disease. Nat Rev Immunol; 6 : 823.

Martinon F, Agostini L, Meylan E (2004): Identification of bacterial
muramyl dipeptide as activator of the NALP3/cryopyrin
inflammasome. Curr Biol; 14 : 1929 – 1934.

Martins GA (2006): Transcriptional repressor Blimp-1 regulates T cell
homeostasis and function. Nat Immunol., 7 : 457 – 465.

Matsuno H, Yudoh K and Uzuki M (2002): Treatment with the
angiogenesis inhibitor endostatin : A novel therapy in
rheumatoid arthritis. J Rheumatol., 29 : 890.

Matzinger P (2002): The danger model : A renewed sense of self.
Science; 296 : 301 – 305.

McClain MT, Poole BD and Bruner BF (2006): An altered immune
response to Epstein – Barr nuclear antigen 1 in pediatric
systemic lupus erythematosus. Arthritis Rheum; 54 : 360 –
368.

McGonale D and McDermott MF (2006): A proposed classification of
the immunological diseases. PLoS Med 3 : e297.

McInnes IB (2009): Cytokines. Kelley Text Book of Rheumatology, 8th
edition, 367 – 378.

- Medicherla S, Ma JY and Mangadu R (2006):** A selective p38 α mitogen – activated protein kinase inhibitor reverses cartilage and bone destruction in mice with collagen – induced arthritis. *J Pharmacol Exp Ther*; 318 : 132.
- Miech RP (2010):** The role of fetal microchimerism in autoimmune disease, *Int. J. Clin. Exp. Med.*, 3 (2) : 164 – 168.
- Mil AH, Verpoort KN, Breedveld FC, Huizing TW, Toes RE and Vries RR (2006):** The HLA – DRB1 shared epitope alleles and primarily risk factor for anti – cyclic citrullinated peptide antibodies and are not an independent risk factor for development of rheumatoid arthritis, *Arthritis and Rheum.*, 54 : 1117 – 1121.
- Monaco AP (2003):** Chimerism in organ transplantation : conflicting experiments and clinical observations, *transplant*, 75 : 135 – 165.
- Montecino RE, Leathers H and Dorshkind K (2006):** Identification of a B-1 B cell- specified progenitor. *Nat Immunol.*, 7 : 293.
- Morita Y, Gupta R and Seidl KM (2005):** Cytokine production by dendritic cells genetically engineered to express IL-4: Induction of Th2 responses and differential regulation of IL-12 and IL-23 synthesis. *J Genet Med*, 7 : 869.
- Muller G and Lipp M (2003):** Concerted action of the chemokine and lymphotoxin system in secondary lymphoid organs development. *Curr Opin. Immunol.*, 15 : 217.



- Munn DH, Sharma MD and Mellor AL (2004):** Ligation of B7-1/B7-2 by human CD4⁺ T cells triggers indoleamine 2,3 – dioxygenase activity in dendritic cells. *J Immunol.*, 172 : 4100 – 4110.
- Mustelin T and Tasken K (2003):** Positive and negative regulation of T – cell activation through kinases and phosphatases. *Biochem. J.*; 371 : 15 – 27.
- Myung PS, Boerthe NJ and Goretzy GA (2000):** Adapter proteins in lymphocyte antigen – receptor signal, *Curr. Opin. Immunol.* 12 : 256.
- Nauta AJ, Daha MR and van Kooten C (2003):** Recognition and clearance of apoptotic cells : A role for complement and pentraxins. *Trends Immunol.*;24 : 148 – 154.
- Nelson JL (2001):** HLA relationships of pregnancy microchimerism and autoimmune disease, *J Reprod Immunol*, 52 : 77 – 84.
- Nelson LJ (2009):** Naturally acquired microchimerism : for better or for worse. *Arthritis Rheum.*, 60 (1) : 5 – 7.
- Neumann E, Branum SR and Tarner IH (2002):** Local production of complement proteins in rheumatoid arthritis synovium. *Arthritis Rheum*, 46 : 934.
- Niederberger N (2003):** Allelic exclusion of the TCR α chain is an active process requiring TCR – mediated signaling and C – Cbl. *J Immunol.*, 170 : 4557 – 4563.

- Nielen MM, Van Schaardenburg D, Reesink HW (2004):** Specific autoantibodies precede the symptoms of rheumatoid arthritis : A study of serial measurements in blood donors. *Arthritis Rheum*; 50 : 38.
- Nielsen CH and Leslie RG (2002):** Complement's participation in acquired immunity. *J Leukoc Biol.*; 72 : 249 – 261.
- Nishimoto N, Yoshizaki K and Miyasaka N (2004):** Treatment of rheumatoid arthritis with humanized anti – interleukin -6 receptor antibody: A multicenter, double – blind, placebo – controlled trial. *Arthritis Rheum*, 50 : 1761.
- Nonaka M and Kimura A (2006):** Genomic view of the evolution of the complement system. *Immunogenetics*; 58 : 701 - 713.–
- Notkins AL and Lernmark A (2001):** Autoimmune type 1 diabetes : Resolved and unresolved issues. *J clin Invest*, 108 : 1247-1252.
- O'Donghue K, Choolani M and Chan J (2003):** Identification of fetal mesenchymal stem cells in maternal blood : implication for non – invasive prenatal diagnosis. *Mol Hum Reprod*. 9 : 497 – 502.
- O'Donoghue K (2008):** Fetal microchimerism and maternal health during and after pregnancy, *Obst Med*,1:56–64.
- Ohata J, Zvaifler NJ and Nishio M (2005):** Fibroblast – like synoviocytes of mesenchymal origin express functional B cell – activating factor of the TNF family in response to proinflammatory cytokines. *J Immunol*; 174 : 864.

- O'Riordan Mand Grosschedl R (2000):** Transcriptional regulation of early B – lymphocyte differentiation. *Immunol. Rev.*, 175 : 94.
- Osada H, Dio S, Fukushima T, Nakauchi H, Sekik and Sekiya S (2001):** Detection of fetal HPCs in maternal circulation after delivery. *Transfus.*, 41 : 499 – 503.
- Pasare C and Medzhitov R (2003):** Toll pathway- dependent blockade of CD4+ CD25+ T cell – mediated suppression by dendritic cells. *Science*; 299 : 1033 – 1036.
- Piccirillo CA and Shevach EM (2004):** Naturally – occurring CD4+ CD25+ immunoregulatory T cells : Central players in the arena of peripheral tolerance. *Semin Immunol*; 16 : 81 – 88.
- Plotz PH (2003):** The autoantibody repertoire : Searching for order. *Nat Rev Immunol.*, 3 : 73 – 78.
- Priatel JJ, The SJ and Dower NA (2002):** Ras GRP1 transduces low – grade TCR signals which are critical for T cell development, homeostasis, and differentiation. *Immunity*, 17 : 617 – 627.
- Purton JF (2007):** Antiviral CD4+ memory T cells are IL-15 dependent. *J Exp Med.*, 204 : 951 – 961.
- Rak JM, Maestroni L, Balandraud N, Guis S, Boudinet H, Guzain MC, Yan Z, Azzouz D, Auger I, Roodier C, Martin M, Didelot R, Roudier J and Lambert NC (2009):** Transfer of shared epitope through microchimerism in women with rheumatoid arthritis. *Arthritis and Rheum.*, 60 : 73 – 80.

- Ravetch JV and Bolland S (2001):** IgG Fc receptors. *Annu Rev Immunol.*; 19 : 275 – 290.
- Raz E (2007):** Organ – specific regulation of innate immunity. *Nat Immunol*; 8 : 3-4.
- Renne C, Ramos LE and Graver SA (2004):** Thyroid fetal male microchimerism in mother with thyroid disorders : presence of Y – chromosomal immunofluorescence in thyroid – infiltrating lymphocytes is more prevalent in Hashimoto thyroiditis and Graves disease than in follicular adenoma. *J Clin Endocrinol Metab*, 89 : 5810 – 5814.
- Ritchie DM, Boyle JA, McInnes JM, JasaniMK, Dalakas TG and Buchanan W (1968):** Clinical studies with an articular index for the assessment of joint tenderness in patients with rheumatoid arthritis : *Quiterly J. Med.*, 37 : 393 – 406.
- Rossi A, Kapahi P and Natoli G (2000):** Anti – inflammatory cyclopentenone prostaglandins are direct inhibitors of Ikappa B kinase. *Nature*, 403 : 103.
- Sakaguchi S (2001):** Immunologic tolerance maintained by CD25+ CD4+ regulatory T cells : their common role in controlling autoimmunity, tumor immunity, and transplantation tolerance. *Immunol Rev.*, 182:18 – 32.
- Salmena L. (2003):** Essential role for caspase 8 in T-cell homeostasis and T – cell – mediated immunity. *Genes Dev.*, 17 : 883 – 895.
- Sarkar K and Miller FW (2004):** Possible roles and determinants of microchimerism in autoimmune and other disorders. *Autoimmun.Rev.*, 3 : 454 – 463.

- Sawaya HH, Jimenez SA and Artlett CM (2004):** Quantification of fetal microchimeric cells in clinically affected and unaffected skin of patients with systemic sclerosis. *Rheumatology (Oxford)*, 43 : 965 - 968.
- Schett G, Tohidast – Akad M and Smolen JS (2000):** Activation, differential localization, and regulation of the stress – activated protein kinases, extracellular signal – regulated kinase, c-JUN N-terminal kinase, and p38 mitogen – activated protein kinase, in synovial tissue and cells in rheumatoid arthritis. *Arthritis Rheum*, 43 : 2501.
- Schmutz C, Hulme A and Burman A (2005):** Chemokine receptors in the rheumatoid synovium : Upregulation of CXCR5. *Arthritis Res Ther*; 7 : R217.
- Schramm CM (2000):** Proinflammatory roles of T-cell receptor (TCR) gamma delta and TCR alpha beta lymphocytes in a murine model of asthma. *Am J Respir Cell Mol Biol.*, 22 : 218 – 225.
- Scott BB, Zaratin PF and Colombo A (2002):** Constitutive expression of angiopoietin -1 and -2 and modulation of their expression by inflammatory cytokines in rheumatoid arthritis synovial fibroblasts. *J Rheumatol.*, 29 : 230.
- Seyler TM, Park YW and Takemura S (2005):** Blys and aPRIL in rheumatoid arthritis. *J. Clin Invest.*; 115 : 3083.
- Shaffer AL, Lin KI and Kuo TC (2002):** Blimp-1 orchestrates plasma cell differentiation by extinguishing the mature B cell gene expression program. *Immunity*, 17 : 51.

- Shape AH and Abbas AK (2006):** T – cell costimulation – biology, therapeutic potential, and challenges. N Engl. J Med; 355 : 973 – 975.
- Shevach EM (2004):** Regulatory / suppressor T cells in health and disease. Arthritis Rheum; 50 : 2721 – 2724.
- Shevach EM (2006):** From vanilla to 28 flavors : Multiple varieties of T regulatory cells. Immunity; 25 : 195 – 201.
- Shevach EM, DiPaolo RA, Andersson J (2006):** The lifestyle of naturally occurring CD4+ CD25 + Foxp3+ regulatory T cells. Immunol Rev.; 212 : 60.
- Shevach EM, McHugh RS, Piccirillo CA and Thornton AM (2001):** Control of T – cell activation by CD4+ CD25+ suppressor T cells. Immunol. Rev., 182 : 58 – 67.
- Shields LE and Andrews RG (1998):** Gestational age changes in circulating CD34 +ve hematopoietic stem / progenitor cells in fetal cord blood. Am. J. Gynecol. Obstet. 178 (5) : 931 -7.
- Shin H, Blackburn SD, Blattman JN and Wherry EJ (2007):** Viral antigen and extensive division maintain virus – specific CD8 T cells during chronic infection. J Exp Med., 204 : 941 – 949.
- Siegel RM and Lipsky PE (2009):** Autoimmunity. Kelley Text Book of Rheumatology, 8th edition, 259 – 275.
- Skuladottir H and Oslen JM (2006):** Can reproductive pattern explain better survival of women with lung cancer ? Acta Oncol, 45 : 47 – 53.

- Snapper CM and Finkelman FD (1999):** Immunoglobulin class switching. In : Paul W.E., ed. Fundamental immunology, Philadelphia : Lippincott – Raven, P :831.
- Sodin SS, Sapagnolo A and Barbaro B (2004):** Lipoxin A4 counteracts synergistic activation of human fibroblast – like synoviocytes. Int J Immunopathol Pharmacol., 17 : 15.
- Steinbrocker O, Traeger CH and Batterman RC (1949):** Therapeutic criteria in rheumatoid arthritis, JHMA, 140 : 659 – 662.
- Steinman RM (2003):** The control of immunity and tolerance by dendritic cell. Pathol Biol; 51 : 59 – 60.
- Szekanecz Z, Kim J and Koch AE (2003):** Chemokines and chemokine receptors in rheumatoid arthritis. Semin Immunol., 15 : 15 – 21.
- Takai T (2002):** Role of Fc receptors in autoimmunity. Nat Rev Immunol. 2 : 580 – 592.
- Takemura S, Klimiuk Pa and Braun A (2001):** T cell activation in rheumatoid synovium is B cell dependent. J Immunol., 167 : 4710.
- Takizawa T, Anderson CL and Robinson JM (2005):** A novel FC gamma – R- defined, IgG – containing organelle in placental endothelium. J Immunol., 175 : 2331.
- Tan XW, Liao X, Son L, Okabe M, Xiao ZC and Dawe GS (2005):** Fetal microchimerism in maternal mouse brain : a novel population of fetal progenitor or stem cells able to cross the blood brain barrier ? stem cells; 104 : 1871 – 1876.



- Tang Q, Adams JY and Tooley AJ (2006):** Visualizing regulatory T cell control of autoimmune responses in nonobese diabetic mice. *Nat Immunol*; 7 : 83 – 92.
- Tarlinton D (2006):** B – cell memory : Are subsets necessary ? *Nat Rev Immunol.*, 6 : 785.
- Terness P, Chuang JJ and Bauer T (2005):** Regulation of human atuo – and alloreactive T cells by indoleamine 2, 3-dioxygenase (IDO) – producing dendritic cells : too much ado about IDO? *Blood*; 105 : 2480 – 2486.
- Troy AE and Shen H (2003):** Cutting edge : Homeostatic proliferation of peripheral T lymphocytes is regulated by clonal competition. *J. Immunol.*, 170 : 672 – 676.
- Turco AE and Bambara LM (2004):** Pregnancy, microchimerism and autoimmunity an update lupus 3 (9) : 659 – 660.
- Vaishnaw AK (1999):** The molecular basis for apoptotic defects in patients with CD95 (Fas / Apo-1) mutations. *J Clin Invest.*, 103 : 355 – 363.
- Valencia X, Stephens G, Goldbach MR (2006):** TNF downmodulates the function of human CD4⁺ CD25⁺ T – regulatory cells. *Blood*; 108 : 253 – 261.
- Veldhoen M, Hocking RJ and Atkins CJ (2006):** TGFbeta in the context of an inflammatory cytokine milieu supports de novo differentiation of IL-17-producing T cells. *Immunity*; 24 : 179 – 189.

- Villarino AV and Hunter CA (2004):** Biology of recently discovered cytokines : Discerning the pro – and anti – inflammatory properties of interleukin -27. *Arthritis Res Ther*; 6 : 225.
- Virella G (2001):** Cell – mediated immunity, *Medial Immunology*, 5th edit., 193 – 225.
- Walker JG, Ahern MJ and Coleman M (2006):** Expression of Jak3, sSTAT1, STAT4, and STAT6 in inflammatory arthritis : Unique Jak3 and STAT4 expression in dendritic cells in seropositive rheumatoid arthritis. *Ann Rheum Dis.*, 65 : 149.
- Walport MJ (2001):** Complement : First of Two parts. *N Engl J Med*; 344 : 1058 – 1066.
- Wandstrat A and Wakeland E (2001):** The genetics of complex autoimmune diseases: Non – MHC susceptibility genes. *Nat Immunol*; 2 : 802 – 809.
- Wandstrat AE, Nguyen C and Limaye N (2004):** Association of extensive polymorphisms in the SLAM /CD2 gene cluster with murine lupus. *Immunity*; 21 : 769 – 780.
- Wang Y, Iwatani H and Ito T (2004):** Fetal cells in mother rats contribute to the remodeling of liver and kidney after injury. *Biochem. Biophys. Res Commun*, 325 : 961 – 967.
- Yan Z, Aydelotte T, Gardi UK, Gothrie KA and Nelson JL (2011):** Acquisition of the RA HLA shered epitope through microchimerism. *Arthritis and Rheum.*, 63 : 640 – 644.



Yasutomo K, Doyle C and Miele L (2000): The duration of antigen receptor signaling determines CD4 + versus CD8+ T – cell lineage fate. *Nature*; 404 : 506 -510.

Zandvoort A and Timens W (2002): The dual function of the splenic marginal zone : Essential for initiation of anti – T1-2 responsss but also vital in the general first – line defense against blood – borne antigens. *Clin Exp Immunol.*, 130 : 4.

Zarkadis IK, Mastellos D and Lambris JD (2001): Phylogenetic aspects of the complement system. *Dev Comp Immunol.*, 25 : 745 – 762.