

2007 AAI Block Symposia Schedule

Note: All session rooms are at the Miami Beach Convention Center

FRIDAY, MAY 18, 2007 — 12:30 PM

Room A104/105 Mast Cells, Basophils and Eosinophils — Chairs: A.D. KEEGAN; D.W. MACGLASHAN

- 38.1 A rapid method for the isolation of eosinophils without Ficoll or RBC lysis. **M.A. Fairhurst, M. Nauer and T.E. Thomas.** StemCell Technologies Inc., Vancouver.
- 38.2 Effect of IL-4 and IL-13 on the chemotaxis of mouse eosinophils. **N. Heller, W.M. Gwinn, J.J. Lee, S.L. Constant and A.D. Keegan.** Univ. of Maryland Sch. of Med., George Washington Univ. Med. Ctr. and Mayo Clin. Scottsdale.
- 38.3 The role of Rab27A in human eosinophil exocytosis. **J.J. Coughlin and R. Moqbel.** Univ. of Alberta.
- 38.4 Thymic stromal lymphopoietin is a potent activator of human mast cells. **H.K. Jessup, Z. Allakhverdi, M.R. Comeau, B-R. Park-Yoon, S.F. Ziegler and G. Delespesse.** Amgen, Seattle, CHUM Res. Ctr., Notre- Dame Hosp., Montreal and Benaroya Res. Inst., Seattle.
- 38.5 Insights into mast cell signaling from rigid trivalent DNA-based ligands. **D. Sil, J.B. Lee, D. Luo, D. Holowka and B. Baird.** Cornell Univ.
- 38.6 Basophils function as initiators rather than effectors in IgE-mediated chronic allergic inflammation, independently of T cells and mast cells. **H. Karasuyama, K. Mukai, K. Obata, K. Ishiwata, N. Watanabe, Y. Kawano and Y. Minegishi.** Tokyo Med. and Dent. Univ. Grad. Sch. and Jikei Univ. Sch. of Med., Japan.
- 38.7 Studies of IgE receptor (FcεRI) processing in human basophils. **D. MacGlashan.** Johns Hopkins Univ.
- 38.8 Substance P stimulates human mast cells and together they activate T cells: inhibition by luteolin. **D. Kempuraj, B.P. Iliopoulou, A. Clemons, W. Boucher, M. Tagen, M. Vasiadi, M. House, A. Wolfberg and T.C. Theoharides.** Tufts Univ. Sch. of Med. and Tufts-New England Med. Ctr.

Room A101/102 Mediators of Inflammation — Chairs: E.J. GOETZL; D. GANEA (Supported by an educational grant from Merck Research Laboratories)

- 100.1 Vasoactive intestinal peptide upregulates IL-17 generation by mouse CD4 T cells. **Q. Dai and E.J. Goetzi.** UCSF.
- 100.2 Through melanocortin 1 receptor, alpha-melanocyte stimulating hormone regulates macrophage function. **A.W. Taylor and D. Li.** Schepens Eye Res. Inst. and Harvard Med. Sch.
- 100.3 Prostaglandin E2 induces MMP-9 production in myeloid dendritic cells. **J-H. Yen and D. Ganea.** Temple Univ.
- 100.4 Anaphylatoxins play a key role in the development of experimental lupus cerebritis. **J.J. Alexander and R.J. Quigg.** Univ. of Chicago.
- 100.5 High levels of ROS block the differentiation of human and mouse osteoclasts. **J.L. Moreno, C.M. Celluzzi, A.D. Keegan and M.S. Williams.** Univ. of Maryland Baltimore.
- 100.6 Targeting different isoforms of HMGB1 leads to different beneficial effects in preclinical models of sepsis and inflammatory arthritis. **L-L. An, L. Xu, A.S. Barber, S. Mao, S-Y. Mao, G.J. LaRosa, C. Gao, M.P. McCarthy, H. Wu, P.A. Kiener, A.J. Coyle and L.P. Audoly.** MedImmune Inc., Gaithersburg, MD and Critical Therapeutics Inc., Lexington, MA.
- 100.7 Nicotinamide as an anti-inflammatory agent: an in vivo and in vitro study in a mouse model of septic shock. **F. Van Gool, M. Galli, A. Rongvaux, A. Fabien and O. Leo.** Free Univ. of Brussels.
- 100.8 Mast cell deficiency leads to decreased expression of cyclooxygenase-1 (COX1), COX2, Toll-like receptor-4 and endothelial nitric oxide synthase mRNA in mouse aorta. **X. Tan, A. Idiculla, D.D. Smith, D.J. Stechschulte and K.N. Dileepan.** Univ. of Kansas Med. Ctr.

FRIDAY, MAY 18, 2007 — 2:45 PM

Room A104/105 Regulation and Therapy of Hypersensitivity Responses — Chairs: M.I. LUSTER; H. XU

- 37.1 New STAT6 inhibitors with potential therapeutic application in asthma. **J. Zamorano, J.R. Cortes, M. Perez-G, C. Fernandez and M. Gonzalez-Nunez.** H San Pedro Alcantara, Spain.
- 37.4 Global patterns of gene expression following inhalation of toluene diisocyanate suggest development of allergic rhinitis. **V.J. Johnson, M.L. Kashon, B. Yucesoy and M.I. Luster.** NIOSH, CDC.
- 37.5 Rgs13 inhibits IgE-mediated allergic responses. **G. Bansal, Z. Xie and K. Druey.** NIAID, NIH.
- 37.6 siRNA knockdown of SPHK1 protects mice from IgE-mediated anaphylaxis. **A.J. Melendez, M. Jayapal and P.N. Pushparaj.** Natl. Univ. of Singapore and Univ. of Glasgow.
- 37.7 Novel therapy for allergic disease through gene silencing of CD40. **M. Suzuki, X. Zhang, X. Zheng, M. Li, C. Vladau, D. Chen, B. Garcia and W-P. Min.** Univ. of Western Ontario.
- 37.8 Dual functionality of B7-DC-expressing dendritic cells in lung draining lymph nodes: effects on Th1, Th2, and Th17. **T.B. Oriss, M. Arora, B. Dixon-McCarthy, P. Ray and A. Ray.** Univ. of Pittsburgh.
- 37.18 CD8⁺ Tc1 and TIL-17 cells mediate allergic contact hypersensitivity by different mechanisms. **D. He, L. Wu, H.K. Kim, H. Li, C.A. Elmets and H. Xu.** Univ. of Alabama at Birmingham.
- 37.19 IL-12 treatment alleviates allergic lung inflammation in T-bet^{-/-} mice. **D.M. Durrant and D.W. Metzger.** Albany Med. Col.

Room A101/102 Disease Immunomodulation — Chairs: R.P. DeMatteo; P. Kubes

- 101.1 Susceptibility of PIR-B deficient mice to salmonella infection. **I. Torii, S. Oka, M. Hotomi, W.H. Benjamin, J.F. Kearney, T. Takai, D.E. Briles and H. Kubagawa.** Univ. of Alabama at Birmingham and Tohoku Univ., Japan.
- 101.2 Biliary obstruction expands T_{REG} which suppress liver T cell function. **S.C. Katz, U.I. Chaudhry, T.P. Kingham, J. Raab and R.P. DeMatteo.** Mem. Sloan-Kettering Cancer Ctr.
- 101.3 Tetracyclines tigecycline and doxycycline inhibit LPS-induced nitric oxide production by RAW 264.7 murine macrophages. **V. Kaushik, D. Beduya, I. Kalampokis, S. Kohlhoff, R.O. Joks, H.G. Durkin and M. Nowakowski.** SUNY Downstate Med. Ctr.
- 101.4 Oxylipins derived from docosapentaenoic acid (DPA_n-6) possess potent anti-inflammatory activity. **L.M. Arterburn, B. Dang, J.M. Nauroth, M. Teymourlouei and M. Obeng.** Martek Biosciences Corp., Columbia, MD.
- 101.5 Anti-inflammatory activity of algal oils containing docosahexaenoic acid and omega-6 docosapentaenoic acid. **J.M. Nauroth, M. Van Elswyk, Y. Liu and L. Arterburn.** Martek Biosciences Corp., Columbia, MD.
- 101.6 Modulation of apoptosis and the production of reactive oxygen species in human neutrophils with epigallocatechin-3-gallate. **G.F. Babcock, A.R. Osterburg, S. Schwemberger, S-H. Hyon and T. Koizumi.** Shriners Hosps. for Children, Cincinnati and Kyoto Univ.
- 101.7 TNF-like weak inducer of apoptosis (TWEAK) in pathogenesis of autoimmune renal disease. **H-X. Gao, N. Schwartz, S. Campbell, L. Burkly, I. Jarchum, B. Banas, M. Saleem, P. Mathieson, J. Michaelson and C. Putterman.** Albert Einstein Col. of Med., Biogen Idec, Cambridge, MA, Univ. of Regensburg, Germany and Univ. of Bristol, UK.
- 101.8 Characterization of the interaction between human LAIR-1 and collagens. **X. Tang, S. Narayanan, J.E. Coligan and F. Borrego.** NIAID, NIH, Rockville.

SATURDAY, MAY 19, 2007 — 8:00 AM

Room A104/105 Vaccines and Immunotherapeutics — Chairs: D.B. McGavern; Y. He

- 47.1 Cytokine and phenotypic profiles of specific T cells induced by newborn BCG vaccination. **W. Hanekom, A. Soares, T. Scriba, G. Hussey and G. Kaplan.** Univ. of Cape Town, South Africa and UMDNJ, Newark.
- 47.2 Incorporation of the TLR5-ligand flagellin in a recombinant influenza A hemagglutinin vaccine provides enhanced immunogenicity and efficacy in vivo. **J.W. Huleatt, J. Tang, A. Jacobs, D. Jock, A. Price, W. McDonald, L. Song, V. Nakaar, L. Tussey and T.J. Powell.** VaxInnate Corp., New Haven.
- 47.3 Comprehensive analysis of the antibody response to Yersinia pestis by use of a novel whole proteome microarray. **S.L. Keasey, K. Schmid, B.K. Purcell, G.L. Morefield, J. Meegan, A. Tikhonov, B. Schweitzer and R.G. Ulrich.** U.S. Army Med. Res. Inst. of Infect. Dis., Frederick, MD and Invitrogen Corp., Branford, CT.
- 47.4 CD8⁺ T cells primed by a non-replicating adeno-associated virus vector undergo apoptosis at the site of antigen expression. **V. Best, D. Bowen and C. Walker.** Columbus Children's Res. Inst., Ohio State Univ.
- 47.5 Antibody-mediated protection against lethal respiratory tularemia. **G.S. Kirimanjeswara, J.M. Golden and D.W. Metzger.** Albany Med. Col.
- 47.6 Interferon mimetic as a therapeutic for lethal vaccinia virus infection. **C.M. Ahmed, J.P. Martin and H.M. Johnson.** Univ. of Florida.
- 47.7 Memory T cells require costimulation and dendritic cell migration to purge an established persistent viral infection. **D.B. McGavern, H. Lauterbach and P. Truong.** The Scripps Res. Inst.
- 47.8 Blockade of PD-1/B7-h1 interaction restores antigen-specific CD8⁺ T cell responses in HCV core transgenic mice. **J.R. Lukens and Y.S. Hahn.** Univ. of Virginia.

Room A201/202 Regulatory T Cell and NK Cell Control Mechanisms — Chairs: M.I. Greene; K.A. Smith

- 88.48 Inhibition of glycogen synthase kinase-3 promotes human CD4⁺ T regulatory type 1 activity. **C.A. Garcia, K. Rehani and M. Martin.** Univ. of Louisville Sch. of Dent.
- 88.45 Contrasting effects of cyclosporine and rapamycin in de novo generation of alloantigen-specific regulatory T cells. **W. Gao, Y. Lu, B. ElEssawy, M. Oukka, V. Kuchroo and T.B. Strom.** Brigham and Women's Hosp., Harvard Med. Sch., Boston and Cambridge.
- 88.8 The importance of IL-2 for FOXP3 expression. **Z. Popmihajlov and K.A. Smith.** Weill Med. Col. of Cornell Univ.
- 88.18 CD101 surface expression discriminates potency among murine FoxP3⁺ regulatory T cells. **I. Fernandez, R. Zeiser, H. Karsunky, N. Kambham, A. Beilhack, K. Sodestrom, R. Negrin and E. Engleman.** Stanford Univ.
- 88.40 CD25⁺CD4⁺ T regulatory cells utilize β -galactoside-binding protein to suppress proliferation of CD8⁺ T cells. **D. Baatar, P.B. Olkhanud, G. Almanzar, V. Wells, L. Mallucci and A. Biragyn.** NIA, NIH, Baltimore and Sch. of Hlth. and Life Sci., King's Col. London.
- 88.30 FOXP3 is a homo-oligomer, and its interactions with histone acetyltransferase and class II histone deacetylases are required for repression. **B. Li, A. Samanta, X. Song, K.T. Iacono, P. Brennan, J. Riley, T.A. Chatila, A. Banham, Y. Shen, S.J. Saouaf and M.I. Greene.** Univ. of Pennsylvania, UCLA and John Radcliffe Hosp., Headington, UK.
- 88.13 T regulatory cells control the numbers of NK cells and thereby protect CD8 α ⁺ immature dendritic cells presence in the lymph node paracortex. **M. Giroux, E. Yurchenko, J. St-Pierre, C.A. Piccirillo and C. Perreault.** Univ. of Montreal, McGill Univ. and Maisonneuve-Rosemont Hosp., Montreal.
- 88.31 Definition of a Qa-1-Qdm-dependent interaction between NK cells and activated T cells that inhibits expansion and memory development of pathogenic T cells. **L. Lu, K. Ikizawa, M.B.F. Werneck and H. Cantor.** Dana-Farber Cancer Inst., Harvard Med. Sch.

SATURDAY, MAY 19, 2007 — 10:15 AM

Room B210/211 Costimulation and Coinhibition of the Immune Response — Chairs: J. MADRENAS; T. GAJEWSKI

- 88.1 The dynamic equilibrium between dimeric and monomeric cell surface B7-1 regulates T cell activation and CD28 expression. **S. Bhatia, S.C. Almo, S.G. Nathenson and R.J. Hodes.** NCI, NIH and Albert Einstein Col. of Med.
- 88.26 The inverse agonist activity of soluble CTLA-4 ligands requires oligomerization of this receptor and CD28 expression. **W.A. Teft and J. Madrenas.** Univ. of Western Ontario.
- 88.27 Regulation of CD28 costimulation versus anergy in T cells by RasGRP and DGK- α . **T.F. Gajewski, Y-Y. Zha, K. Praveen and S. Janardhan.** Univ. of Chicago.
- 88.12 Galectin-3 translocates to the immunological synapse and inhibits cytokine production in CD4⁺ T cells activated by engagement of TCR. **H-Y. Chen, I-C. Weng, E. Maverakis, R-Y. Yang, D.K. Hsu and F-T. Liu.** Sch. of Med., Univ. of California-Davis, Sacramento.
- 88.33 HVEM-BTLA interactions regulate early CD8⁺ T cell response against *Listeria monocytogenes*. **Y. Sun, M. Ruddy, M. Miller, Y. Wang, Y. Lee, J. Kaye, K. Murphy, K. Pfeffer and Y-X. Fu.** Univ. of Chicago, The Scripps Res. Inst., Washington Univ. Sch. of Med. and Univ. of Düsseldorf.
- 88.24 PD-L1 interacts specifically with B7-1 to regulate T cell function. **M.J. Butte, M.E. Keir, T.B. Phamduy, A.H. Sharpe and G.J. Freeman.** Harvard Med. Sch., Harvard Univ. and Dana-Farber Cancer Inst.
- 88.43 PD-1 plays a stimulatory role in CD8 T cell priming and an inhibitory role after activation. **J. Chen, A. Zajac, Q. Wu, P. Yang, X. Xu, H-C. Hsu and J.D. Mountz.** Univ. of Alabama at Birmingham.

Room A201/202 Signal Transduction by Cytokine and Toll-Like Receptors — Chairs: D.K. DALTON; S.L. GAFFEN

- 94.1 Properties of a SOCS-1 small molecule antagonist. **L.W. Waiboci, H.M. Johnson, J.P. Martin and C.M. Ahmed.** Univ. of Florida.
- 94.2 Signaling motifs in the IL-17 receptor. **S.L. Gaffen, F. Shen, A. Maitra, W. Hanel and K. Mossman.** SUNY at Buffalo and McMaster Univ., Canada.
- 94.3 Temporal regulation of Stat5 activity determines cell differentiation program. **H. Fujii and A. Hoshino.** NYU Sch. of Med.
- 94.4 IL-2 inhibits its own production through a Blimp-1- dependent autoregulatory loop. **D. Gong and T.R. Malek.** Univ. of Miami Miller Sch. of Med.
- 94.5 The paradoxical pro- and anti-inflammatory activities of IFN- γ reflect negative feedback loop regulation and apoptosis. **D.K. Dalton and X. Li.** Trudeau Inst. Inc., Saranac Lake, NY.
- 94.6 Sensitivity of TLR4- and 7-induced NF κ B1 p105-ERK pathway to TNF-receptor-associated factor 6 revealed by RNA interference in mouse macrophages. **N. Parameswaran, S. Patial and K.J. Loniewski.** Michigan State Univ.
- 94.7 PLIC-1 is an inhibitor of TLR signaling. **T. Wang and N. Biswas.** Univ. of Pittsburgh.
- 94.8 Protein phosphatase 2A destabilizes TNF alpha mRNA by dephosphorylating tristetraprolin. **L. Sun, G. Stoecklin, S.M. Van Way, V. Hinkovska-Galcheva, RF. Guo, P. Anderson and T. Shanley.** Univ. of Michigan Med. Sch. and Brigham and Women's Hosp., Harvard Med. Sch.

SATURDAY, MAY 19, 2007 — 2:45 PM

Room A106/107 Immunopathogenesis of Infection — Chairs: Y.-X. Fu; A. Xu

- 46.1 Adaptive immune cells temper initial innate responses. **Y-X. Fu, K.D. Kim, J. Zhao and H. Tang.** Univ. of Chicago and Inst. of Biophys., Chinese Acad. of Sci., Beijing.
- 46.2 Regulation of the CD8 T cell response to influenza virus by lymph node dendritic cells. **R.A. Langlois and K.L. Legge.** Univ. of Iowa.
- 46.3 IL-10 blockade resurrects T cell activity and eliminates a persistent viral infection. **D.G. Brooks, D.B. McGavern and M.B. Oldstone.** The Scripps Res. Inst.
- 46.4 HIV gp120 alone may mediate lymphopenia and lymphadenopathy in HIV infected individuals. **D.S. Green, R. Morgan, C. Curcio-Bonner, C.M. David and W.W. Cruikshank.** Boston Univ. Sch. of Med.
- 46.5 In vitro and in vivo induction of B7-H1 and B7-DC expression by human rhinovirus infection of airway epithelial cells. **J. Kim, L.F. Heinecke, D. Proud and R.P. Schleimer.** Johns Hopkins Univ. Sch. of Med., Univ. of Calgary, Canada and Northwestern Feinberg Sch. of Med.
- 46.6 Evasion of the innate response of circulating DC populations by foot-and-mouth disease virus. **C.K. Nfon, G.S. Ferman and W.T. Golde.** USDA, Greenport, NY.

Room A104/105 Strategies and Challenges for Mucosal Vaccination — Chairs: M.S. VAJDY; P.N. BOYAKA

- 41.1 Beta7-integrin independent enhancement of mucosal and systemic anti-HIV antibody responses following combined mucosal and systemic gene delivery. **M. Vajdy, A. Goodsell, F. Zhou, M. Singh, P. Malyala, J. Kazzaz, C. Greer, J. zur Megede, S. Barnett, D. O'Hagan and J. Polo.** Novartis Vaccines and Diagnostics, Inc., Emeryville, CA.
- 41.2 Induction of mucosal immunity by hsp gp96. **N. Strbo, S. Pahwa, M. Kolber and E.R. Podack.** Univ. of Miami Miller Sch. of Med.
- 41.3 Differential regulation of mucosal immunity by *Bacillus anthracis* edema toxin and cholera toxin as adjuvants for transcutaneous vaccines. **A. Duverger, W-J. Tang, S.H. Leppla and P.N. Boyaka.** Ohio State Univ., Univ. of Chicago and NIAID, NIH.

- 41.4 Development of needle-free vaccine: rice-based oral vaccine induced protective immunity against cholera toxin. **T. Nochi, Y. Yuki, H. Takagi, L. Yang, T. Masumura, M. Mejima, U. Nakanishi, A. Matsumura, T. Hiroi, S. Morita, K. Tanaka, F. Takaiwa and H. Kiyono.** Univ. of Tokyo, Natl. Inst. of Agrobiol. Sci., Tsukuba, Grad. Sch. of Agr., Kyoto Prefect. Univ. and Tokyo Metro. Inst. of Med. Sci.
- 41.5 Th2 polarizing helminth infection alters the immune response to an oral Salmonella-OVA vaccine. **O.I. Iweala, D.W. Smith, J.F. Urban, Jr. and C.R. Nagler.** Massachusetts Gen. Hosp., Charlestown and USDA, Beltsville.
- 41.6 Generation and maintenance of antigen-specific CD8 T cells in the vaginal mucosa following systemic versus mucosal routes of immunization. **T.M. Onami, P.K. Suvas, H.M. Dech and F. Sambira.** Univ. of Tennessee.
- 41.7 Epithelial cells trigger frontline immunoglobulin class switching through an SLPI-regulated pathway. **W. Xu, B. He, A. Chiu, A. Chadburn, M. Shan, M. Buldys, A. Ding, D.M. Knowles, P.A. Santini and A. Cerutti.** Weill Med. Col. of Cornell Univ.

SUNDAY, MAY 20, 2007 — 8:00 AM

Room B118/119 Asthma — Chairs: O. AKBARI; F.D. FINKELMAN

- 39.1 Endotoxin tolerance abrogates eotaxin-2 production and eosinophil recruitment while increasing airways hyperresponsiveness in murine asthma. **S. Natarajan, J. Kim and D.G. Remick.** Boston Univ. Med. Ctr. and Univ. of Michigan.
- 39.2 Skewed polarization of pulmonary dendritic cells in RSVinfection and susceptibility to asthma. **M.H. Qureshi, K. Durre and W. Yang.** Touro Univ. Nevada.
- 39.3 Effects of lactose- β -sitosterol and β -sitosterol on ovalbumin-induced asthmatic mice. **I.S. Kim, J.E. Yuk, C-Y. Yun, J-S. Lee, D-H. Kim, J-W. Kim and E.J. Yang.** Eulji Univ. Sch. of Med. and Daejeon Univ. Col. of Natl. Sci., Republic of Korea.
- 39.4 ICOS/ICOSL interaction is required for CD4⁺NKT cells function and for the induction of airway hyperreactivity. **O. Akbari, E.H. Meyer, G.J. Freeman, A.H. Sharpe, R.H. DeKruyff and D.T. Umetsu.** Children's Hosp., Dana-Farber Cancer Inst. and Harvard Med. Sch.
- 39.6 Smooth muscle responsiveness to IL-13 is sufficient for IL-13 induction of airway hyperresponsiveness. **F.D. Finkelman, C. Perkins, T. Orekov, C. Potter, G. Smulian, L. Gildea, M. Wills-Karp and F. Brombacher.** Cincinnati VA Med. Ctr., Cincinnati Children's Hosp Med. Ctr. and Groote Schuur Hosp., Cape Town.
- 39.7 Follistatin is a candidate endogenous negative regulator of activin A in experimental allergic asthma. **C.L. Hardy, H-A. Nguyen, J. Yao, D.M. De Kretser, J.M. Rolland, G.P. Anderson, D.J. Phillips and R.E. O'Hehir.** Monash Univ., Australia, Alfred Hosp., Melbourne and Univ. of Melbourne.
- 39.10 Regional increases of CD103⁺ Tregs corresponds with resolution of murine allergic airway disease. **J.T. McNamara, W.F. Carson IV, L.A. Guernsey, E.R. Secor, Jr., A. Singh, C.M. Schramm and R.S. Thrall.** Univ. of Connecticut Hlth. Ctr.
- 39.11 Complex role of STAT6 in allergic airway inflammation. **S.P. Chapoval, A.E. Kelly-Welch, E. Smith and A.D. Keegan.** Univ. of Maryland Sch. of Med.

Room A101/102 Regulation of Tumor Immunity — Chairs: J.L. RILEY; M. CHIRIVA-INTERNATI

- 50.6 Proteasome inhibition promotes tumor cell apoptosis by exogenous TRAIL without blocking anti-tumor immune effectors in vivo. **A. Shanker, A.D. Brooks, C.A. Tristan, J. Wine and T.J. Sayers.** NCI-Frederick, SAIC-Frederick.
- 50.8 Targeting activation-induced cytidine deaminase promotes rejection of large established tumors by cytotoxic T lymphocytes in a mouse myeloma model. **X-F. Bai, J-Q. Liu, P.S. Joshi, C-G. Liu, L-C. Wu and Y. Liu.** Ohio State Univ. and Univ. of Michigan.
- 50.19 Hsp70-containing exosomes — potent stimulators of the innate immune system. **G. Multhoff.** Tech Univ. and GSF Munich.
- 50.26 Role of type I and type II NKT cells in the host's innate antitumor immune response to a B-cell lymphoma. **R.J. Gourapura, M.A. Khan, M. Vieira and R.R. Brutkiewicz.** Indiana Univ. Sch. of Med.
- 50.22 TGF-beta1-induced expression of alphaE(CD103)beta7 integrin on Ag-specific tumor-infiltrating T lymphocytes promotes killing of E-cadherin-bearing tumor cells by triggering polarized cytotoxic granule exocytosis. **F. Mami-Chouaib, A. Jalil, I. Vergnon, B. Le Maux Chansac, V. Lazar, G. Bismuth, S. Chouaib and A. Lefloc'h.** INSERM U753 and IGR, Villejuif and INSERM U567 Inst. Cochin, Paris.
- 50.25 OX40-ligand inhibits function of IL-10-producing intratumoral CD4⁺CD25⁺ regulatory T cells in human follicular B-cell lymphoma. **K.S. Voo, L.d. Bover, S.S. Neelapu, L.W. Kwak and Y-J. Liu.** Univ. of Texas M.D. Anderson Cancer Ctr.
- 50.27 Depletion of CD4⁺CCR4⁺ cells enhances T cell-mediated responses in vitro and vaccine-induced anti-tumor immune responses in mice. **A. Biragyn, P.B. Olkhanud, K. Sumitomo and D. Baatar.** NIA, NIH, Baltimore.
- 50.30 Host-derived ccl5 is critical for mammary tumor growth and metastasis. **J. Liu and X. Ma.** Weill Med. Col. of Cornell Univ.

Room A201/202 Tolerance and Autoimmunity — Chairs: E. KRAIG; D.W. SCOTT

- 128.10 TGF β 1 is not essential for generation and maintenance of natural T_{REG} cells. **R. Bommireddy, G.F. Babcock, R.R. Singh and T. Doetschman.** Univ. of Arizona, Univ. of Cincinnati, Shriners Hosp. for Children, Cincinnati and UCLA.
- 128.9 Viral infection enables CD4⁺CD25⁺ regulatory T cells to protect from autoimmune diabetes. **M. von Herrath, J. Oldham, U. Christen, M. Martinic and L. Togher.** La Jolla Inst. for Allergy and Immunol. and Wolfgang Goethe Univ. Frankfurt.
- 128.8 Myelin specific regulatory T cells expand from naturally occurring regulatory T cells and accumulate in the CNS during EAE. **M. Oukka, E. Bettelli, T. Korn, W. Gao, R. Sobel, T.B. Strom, K. Wucherpfennig, and V. Kuchroo.** Brigham and Women's Hosp., Harvard Med. Sch. and Stanford Univ.
- 128.1 Reduced sensitivity of effectors to regulation, and not reduced Treg function, may lead to autoimmune diabetes in NOD. **A. Nettles, M.M. Honkanen-Scott and P. Bansal-Pakala.** Univ. of Minnesota, Minneapolis.
- 128.25 T cell tolerance to AChR, the autoantigen in myasthenia gravis, is mediated primarily by peripheral mechanisms. **E. Williams,**

- S. Stacy, P. Carlisle, A. Infante, M. Lenardo and E. Kraig.** Univ. of Texas Hlth. Sci. Ctr. at San Antonio and NIAID, NIH.
- 128.24** Regulatory interactions between two innate immune cells, iNKT and MZB cells, suppress autoimmunity. **X. Wen, J-Q. Yang and R.R. Singh.** UCLA and Univ. of Cincinnati.
- 128.35** Regulation of TLR9 dependent DNA immune complex mediated cell activation by high mobility group box protein 1 and receptor for advanced glycation end products. **J. Tian, A.M. Avalos, B. Chen, K.A. Fitzgerald, C. Sirois, D. Golenbock, A. Marshak-Rothstein, M.K. Crow, L.P. Audoly, P.A. Kiener, E. Latz and A.J. Coyle.** MedImmune Inc., Gaithersburg, MD, Boston Univ. Sch. of Med., Univ. of Massachusetts Med. Sch. and Hosp. for Spec. Surg., New York.
- 128.33** Mechanism of B-cell mediated tolerance in LPS versus CpG treated cells. **I. Carey, Y. Su, X. Li and D.W. Scott.** Univ. of Maryland Sch. of Med. and George Washington Univ.

Room A204/205 Quantitation and Visualization of the Immune Response — Chairs: M. DUSTIN; N.R.J. GASCOIGNE

- 87.49** The role of non-stimulatory MHC-peptides in aiding antigen recognition by CD8⁺ T cells. **N.R. Gascoigne, P.P. Yachi, C. Lotz and J. Ampudia.** The Scripps Res. Inst.
- 87.31** Monomeric agonist pMHC ligand triggers TCR signaling independent of endogenous ligand. **Z. Ma, K.A. Sharp, P.A. Janmey and T.H. Finkel.** Children's Hosp. of Philadelphia and Univ. of Pennsylvania.
- 87.50** From a single viral peptide epitope to effective lysis of target cells by CTL. **Y. Sykulev, N. Anikeeva, A. Beal, G. Vasiliver, R. Varma, P.J. Norris, H. Mattoussi and M.L. Dustin.** Thomas Jefferson Univ., NYU Med. Ctr., Blood Sys. Res. Inst., San Francisco and U.S. Naval Res. Lab., Washington, DC.
- 87.13** Measurement of nuclear translocation in primary cells using correlation analysis of images obtained on the ImageStream imaging flow cytometer. **T.C. George, I. Harmon, E.J. Peterson, B.J. Burbach, Y. Shimizu, J.L. Matsuda, L. Gapin, M. Connors, K.C. Dowdell, J.D. Farrar, B.E. Hall and P.J. Morrissey.** Amnis Corp., Seattle, Univ. of Minnesota Med. Sch., Natl. Jewish Med. and Res. Ctr., NIAID, NIH and Univ. of Texas Southwestern Med. Ctr.
- 87.32** T-cell activation requires mitochondrial translocation towards the immunological synapse. **C. Schwindling, A. Quintana, A.S. Wenning, U. Becherer, J. Rettig, E.C. Schwarz and M. Hoth.** Univ. of Saarland, Germany.
- 87.36** Stomatin-like protein 2 sustains signaling from T cell receptor signalosomes. **M.G. Kirchhof, L.A. Chau, C.D. Lemke, S. Vardhana, P.J. Darlington, M.E. Márquez, R. Taylor, K. Rizkalla, I. Blanca, M.L. Dustin and J. Madrenas.** Univ. of Western Ontario, Skirball Inst. of Biomolec. Med., New York, Univ. Central de Venezuela and London Hlth. Sci. Ctr., Canada.
- 87.52** IFN- γ secretion is polarized at effector immunological synapses in vivo. **P.R. Lowenstein, C. Barcia, C. Liu, K. Wawrowsky, K.M. Kroeger and M.G. Castro.** Cedars-Sinai Med. Ctr., UCLA.
- 87.27** In situ visualization of CD8 T cell-DC interactions reveals distinct features of the early and late response to antigen after influenza virus infection. **L.S. Cauley, K.M. Khanna and L. Lefrancois.** Univ. of Connecticut.

SUNDAY, MAY 20, 2007 — 10:15 AM

Room A101/102 Tumor-Associated Antigens and Cancer Vaccines — Chairs: J.L. RILEY; M. CHIRIVA-INTERNATI

- 48.4** Alpha-enolase elicits specific pancreatic adenocarcinoma specific-T cell responses in healthy donors and in tumor patients. **F. Novelli, B. Tomaino, M. Ciccarelli, M. Capello, M. Giovarelli, A. Novarino and P. Cappello.** Univ. of Turin and San Giovanni Battista Hosp.
- 48.7** Allogeneic melanoma vaccine expressing alphaGal epitopes induce anti-tumor immunity to autologous melanoma antigens without signs of toxicity. **G.R. Rossi, M. Mautino, H. Lejukole, M. Koenigsfeld, N. Vahanian and C.J. Link.** Newlink Genetics, Ames.
- 48.12** 4-1BB is superior to CD28 costimulation for generating effector CD8⁺ T cells for adoptive immunotherapy. **H. Zhang, K. Snyder, M. Suhoski, M. Maus, V. Kapoor, C.H. June and C.L. Mackall.** NCI, NIH and Univ. of Pennsylvania.
- 48.13** Genetic immunizations in the presence of a specific neurokinin 1 receptor agonist triggers Th1-Tc1 biased immune responses that protect against B16 melanomas. **A.R. Mathers, O.A. Tkacheva, B. Janelins, W. Schuffeski, A.E. Morelli and A.T. Larregina.** Univ. of Pittsburgh.
- 48.14** Xenogeneic tyrosine hydroxylase DNA vaccination is effective against neuroblastoma. **H.N. Lode and N. Huebener.** Charité Univ. Med. Berlin.
- 48.17** Modulation of adenoviral vector immune responses through the over-expression of immune adaptor and viral immunomodulatory genes. **Z. Hartman, X.Y. Yang, G. Lei, A. Amalfitano, M. Morse, H.K. Lysterly and T. Clay.** Duke Univ. and Michigan State Univ.
- 48.18** Induction of antigen-specific CD8⁺ T cells in melanoma patients using a prime-boost therapeutic vaccine. **R.J. Anderson, K. Whale, D. Brown, C. Scheibenbogen, A.M. Asemissen, M. Cripps, J. Schneider and T-8.P. Study Group.** Oxxon Therapeutics Ltd, Oxford and Charité, Med. Univ. Berlin.
- 48.9** Biodegradable artificial antigen presenting cells for ex vivo stimulation of antigen-specific T lymphocytes. **T.M. Fahmy and E.R. Steenblock.** Yale Univ.

Room A201/202 Immunopathogenic Mechanisms and Immunogenetics of Autoimmunity —

Chairs: D.C. ROOPENIAN; R.R. CASPI

- 129.12** The Yaa locus confers apoptosis, NF- κ B and rapamycin signaling resistance through multiple receptors in C57BL/6J mice. **A.C. Brown, J.A. Bubier, T.J. Sproule, G.J. Christianson and D.C. Roopenian.** The Jackson Lab.
- 129.11** Phenotypes of TLR7-overexpressing B cells suggest a TLR7-mediated increase in antigen presentation. **P. Pisitkun, J.A. Deane and S. Bolland.** NIAID, NIH, Rockville.
- 129.34** CD24 inhibits thymic deletion of myelin antigen-specific T cells. **J.W. Carl, Jr., P. Joshi, C.C. Whitacre, Y. Liu and X-F. Bai.** Ohio State Univ. Med. Ctr. and Univ. of Michigan Med. Sch.

- 129.28 Treg development and suppression of experimental allergic encephalomyelitis. **C.L. Haymaker, P. Yu, J. Ellis, R.D. Divekar, R. Jain, D. Tartar, H-H. Lee, J. Hardaway, C.M. Hoeman, F.B. Guloglu and H. Zaghouni.** Univ. of Missouri-Columbia.
- 129.33 IFN- γ receptor signaling in the CNS, but not periphery, is critical for the induction of experimental autoimmune encephalomyelitis. **A. Elhofy, R.N. Dogan and W.J. Karpus.** Northwestern Univ. Feinberg Sch. of Med.
- 129.25 IL13 induces IL17 by regulating dendritic cell maturation in autoimmune myocarditis. **D. Cihakova, J.G. Barin, G.C. Baldeviano, M. Kimura, M.V. Talor and N.R. Rose.** Johns Hopkins Univ. and Johns Hopkins Univ. Bloomberg Sch. of Publ. Hlth.
- 129.26 IL-23 and IL-17 in pathogenesis of experimental ocular autoimmunity: requirement for IL-23 may extend beyond its role in sustaining the IL-17 effector response. **R. Caspi, P. Silver, D. Cua, Z. Chen, C-C. Chan and D. Luger.** NEI, NIH and DNAX, Schering- Plough Inc., Palo Alto.
- 129.24 Th17 cells alone are not sufficient to induce CNS autoimmunity, but can synergize with Th1 cells to induce EAE. **L. Shriver, M. Mann and B.N. Dittel.** BloodCenter of Wisconsin and Med. Col. of Wisconsin.

Room A204/205 Cytokines and Chemokines in Health and Disease — Chairs: G. GRUNIG; N.W.LUKACS

- 96.1 Complex roles of the CXCR3 chemokines in immunemediated neurological disease. **I.L. Campbell, M. Mueller, S. Carter, D.R. Getts and N.J.C. King.** Sch. of Molec. and Microbial Biosci., Univ. of Sydney.
- 96.2 CCL25-CCR9 axis role in ovarian cancer progression. **E. Johnson, C. Johnson-Holiday, S. Singh, U. Singh, E. Partridge and J.W. Lillard.** Morehouse Sch. of Med., Univ. of Louisville and Univ. of Alabama at Birmingham.
- 96.3 Altered T lymphocyte response to respiratory syncytial virus in CCR6-/- mice. **L.K. Kelley, M. Schaller and N.W. Lukacs.** Univ. of Michigan.
- 96.4 Gp100 is chemotactic for mononuclear cells and utilizes chemokine receptors. **O.M.Z. Howard, K. Buzas, H. Dong and J.J. Oppenheim.** NCI- and SAIC-Frederick.
- 96.5 Latent membrane protein 1 of Epstein Barr viruses activates the PI3K pathway to induce production of IL- 10. **S.L. Lambert and O.M. Martinez.** Stanford Univ. Sch. of Med.
- 96.6 Respiratory syncytial virus vaccine-enhanced pulmonary eosinophilia requires IL-13, IL-4R α , and STAT6. **E. Castilow and S.M. Varga.** Univ. of Iowa.
- 96.7 Critical role of IL-17R signaling in granulocyte recruitment and airway hyperreactivity in an Aspergillus model of asthma. **S.B. Kapadia, L. McKinley, A.C. Henry, A. Ray and J.K. Kolls.** Children's Hosp. of Pittsburgh, Univ. of Pittsburgh Sch. of Med.
- 96.8 A Th2 response to chronic intermittent antigen exposure induces pulmonary vascular muscularization. **G. Grunig, E. Daley, C. Emson, L. Taraseviciene- Stewart, V.P. Kurup, R. de Waal-Malefyt, C. Hogaboam, E. Grunig and N.F. Voelkel.** Columbia Univ., St. Luke's-Roosevelt Hosp., Schering-Plough Biopharma, Palo Alto, Univ. of Colorado, Denver, Med. Col. of Wisconsin, Univ. of Michigan and Univ. of Heidelberg.

SUNDAY, MAY 20, 2007 — 12:30 PM

Room B210/211 Bone Marrow and B Cell Development — Chairs: K.L. MEDINA; R. GERSTEIN

- 83.1 Developmental-associated differences in membrane cholesterol content account for the differential responses of transitional immature and mature B cells to B cell receptor engagement. **F.G. Karnell, R.J. Brezski, L.B. King, K.B. Sanborn and J.G. Monroe.** Univ. of Pennsylvania.
- 83.2 BCR signaling generates NF- κ B2 (p100) for BR3- mediated processing and survival. **J.E. Stadanlick, J.L. Scholz, J.P. Miller and M.P. Cancro.** Univ. of Pennsylvania.
- 83.3 The beta-catenin pathway is involved in normal B cell development and function. **A.Y. Ko, C. Zierold-Fairman and E.A. Ranheim.** Univ. of Wisconsin Sch. of Med.
- 83.4 Multiple effects of Wnt3a on lymphoid progenitors and their environment. **S. Malhotra and P.W. Kincade.** Oklahoma Med. Res. Fndn. and Univ. of Oklahoma Hlth. Sci. Ctr.
- 83.5 A molecular mechanism for the increased degradation of E47 mRNA in old murine B cells involves tristetraprolin. **D. Frasca, A.M. Landin, J.P. Alvarez, R.L. Riley and B.B. Blomberg.** Univ. of Miami Miller Sch. of Med. and Univ. of Rome La Sapienza.
- 83.6 Regulation of B-lineage specification by the IL-7/JAK3/ STAT5 pathway. **R.M. Gerstein, L. Tian, M. Wallace, P. De, A. Prince, L. Berg and D. Allman.** Univ. of Massachusetts Med. Sch. and Univ. of Pennsylvania Med. Sch.
- 83.7 Regulation of B cell fate determination by EBF. **K.L. Medina.** Mayo Clin. Col. of Med.

Room A101/102 Tumor Immunosuppression and Immunobiology — Chairs: D. GABRILOVICH; M.R. YOUNG

- 49.9 The role of paracrine IL-6 and IL-10 in neuroblastoma progression. **L. Song, T. Ara, J. Salo, Z-B. Deng, S. Asgharzadeh, L. Ji, R. Sposto, Y.A. DeClerck, R.C. Seeger and L.S. Metelitsa.** Childrens Hosp. Los Angeles, USC.
- 49.10 Lipid accumulation and dendritic cell function in cancer. **D.L. Herber, J.L. Kroeger, M. Makris and D.I. Gabrilovich.** H. Lee Moffitt Cancer Ctr. and Res. Inst., Tampa.
- 49.11 A novel role of myeloid related protein in dendritic cell differentiation. **P. Cheng, B. Yu, S. Nadaf, D.P. Carbone, W. Nacken, C. Sorg and D.I. Gabrilovich.** Univ. of South Florida, Vanderbilt Univ. and Univ. of Münster.
- 49.13 Expansion of spleen myeloid suppressor cells represses NK cell cytotoxicity in tumor bearing host. **C. Liu, S. Yu, K. Zinn, J. Wang, W.E. Grizzle, J. Kappes and H-G. Zhang.** Univ. of Alabama at Birmingham and Birmingham VA Med. Ctr.
- 49.14 Tumor exosomes inhibit differentiation of bone marrow dendritic cells. **S. Yu, C. Liu, J. Wang, Y. Liu, L. Zhang, Y. Cong, W.E. Grizzle and H-G. Zhang.** Univ. of Alabama at Birmingham.
- 49.17 Understanding the interplay of the human immune system with cancer in humanized mice. **A. Pedroza-Gonzalez, C. Aspord,**

M. Gallegos, S. Tindle, E. Burton, F. Marches, J. Banchereau and A.K. Palucka. Baylor Inst. for Immunol. Res. and Baylor Univ. Med. Ctr.

- 49.21** The role of immature myeloid suppressor cells in transgenic mammary tumor chemoprevention and therapy by Celecoxib. **J.E. Talmadge, M. Donkor, E. Scholar, R. Singh, A. Dafferner, T. Hoke, S. Westphal and J.C. Solheim.** Univ. of Nebraska Med. Ctr.
- 49.5** Tumor-secreted VEGF-A disrupts endothelial cell stimulation of T cell, macrophage and NK cell functions. **J.K. Mulligan, D.M.R. Lathers and R.I. Young.** Med. Univ. of South Carolina and Ralph Johnson VA Med. Ctr.

Room A201/202 Animal Models of Autoimmunity — Chairs: M. MONESTIER; Y.H. CHEN

- 130.23** Activation of NKT cells exacerbates environmentally induced autoimmunity. **J. Vas, J. Mattner, A. Bendelac, A. Howell, S. Richardson, R. Ndonge and M. Monestier.** Temple Univ., Univ. of Chicago and Univ. of Connecticut.
- 130.29** Nectin-1 and Nectin-2 are causative agent or trigger of primary biliary cirrhosis? **J. Mattner, P.B. Savage, L. Teyton, L. Wicker, W.M. Ridgway, S.M. Oertelt, M.E. Gershwin and A. Bendelac.** Univ. of Chicago, Brigham Young Univ., The Scripps Res. Inst., Univ. of Cambridge, Univ. of Pittsburgh and Univ. of California-Davis.
- 130.39** $V\gamma 4+$ $\gamma\delta$ T cells act as TH-17 cells in a mouse model of collagen-induced arthritis. **C. Roark, J.D. French, M.A. Taylor, A.M. Bendele, W.K. Born and R.L. O'Brien.** Natl. Jewish Med. and Res. Ctr. and Bolder BioPATH Inc., Univ. of Colorado.
- 130.21** IL-17 promotes germinal center response and AID-regulated pathogenic autoantibody production in autoimmune BXD2 mice. **H-C. Hsu, P. Yang, Q. Wu, J. Chen, J. Wang, G. Job, A.L. Stanus, R.G. Lorenz, J.K. Kolls and J.D. Mountz.** Univ. of Alabama at Birmingham, Children's Hosp. of Pittsburgh and VA Med. Ctr., Birmingham.
- 130.4** $CD4+$ T cells mediate autoimmune disease in a new transgenic murine model induced by U1 RNA and U1-70kD ribonucleoprotein self antigens. **R.W. Hoffman, E.L. Greidinger, Y. Zang, K. Jaimes, L. Martinez and I. Fernandez.** Univ. of Miami and VA Med. Ctr.
- 130.36** Countervailing actions of myeloid and plasmacytoid dendritic cells control autoimmune diabetes. **V. Saxena, J.K. Ondr, A.F. Magnusen, D. Munn and J.D. Katz.** Children's Hosp. Res. Fndn., Cincinnati and Med. Col. of Georgia.
- 130.5** PD20, a novel regulator of lymphocyte responses and immune homeostasis. **H. Sun, S. Gong, A. Hilliard and Y.H. Chen.** Univ. of Pennsylvania.
- 130.17** Intrinsic B cell defect results in abnormal TD antigen response in lupus-prone mice. **H. Niu and L. Morel.** Univ. of Florida.

Room A208/209 Leukocyte Recruitment — Chairs: M.B. GRISHAM; J.M. COOK-MILLS

- 98.1** PARP-1 and iNOS relationship in allergen-induced lung inflammation: dependence of iNOS expression on PARP-1 and its dispensability for eosinophil recruitment post-IL-5 production. **H. Boulares, Y. Suzuki, A. Naura, M. Oumouna, R. Datta and C. Hans.** LSU Hlth. Sci. Ctr., New Orleans.
- 98.2** Lung eosinophils homing in homeostasis. **S-S.J. Sung, J.A. Lannigan and C.E. Rose, Jr.** Univ. of Virginia Sch. of Med.
- 98.3** Non-hematopoietic NADPH oxidase regulation of lung eosinophilia and airway hyperresponsiveness in experimentally-induced asthma. **H. Abdala-Valencia, J. Earwood, G.F. Babcock, B.A. Garvy, M. Wills-Karp and J. Cook-Mills.** Northwestern Univ. Feinberg Sch. of Med., Univ. of Cincinnati, Univ. of Kentucky and Cincinnati Children's Hosp. Res. Fndn.
- 98.4** The key role of a G protein coupled receptor mFPR2 in the development of inflammatory airway disease. **J.M. Wang, Y. Li, J. Hu, J. Huang, W. Gong and K. Chen.** NCI-Frederick, Inst. for Nutr. Sci., Chinese Acad. of Sci., Shanghai, Xiang-Ya Sch. of Med., Central South Univ., People's Republic of China and SAIC-Frederick.
- 98.5** Initiation of adaptive-innate immune interaction sequences in contact sensitivity responses. **D.D. Kish and R.L. Fairchild.** Cleveland Clin.
- 98.6** T-cell induced colitis is associated with enhanced myelopoiesis, PMN infiltration into secondary lymphoid tissue and modulation of T-cell activation. **D.V. Ostanin, D. D'Souza, J. Hoffman, L. Gray, S. Pruett and M.B. Grisham.** LSU Hlth. Sci. Ctr., Shreveport.
- 98.7** CX₃CR1 deficiency impairs the recruitment of dendritic cells to the arterial intima and reduces atherosclerotic burden. **P. Liu, J.A. Spencer, A.E. Johnson and D.D. Patel.** Univ. of North Carolina at Chapel Hill Sch. of Med. and Novartis Inst. for BioMed. Res., Basel.
- 98.8** Migration and expansion of dendritic cells improves cross-presentation of tumor antigens in virotherapy. **R. Edukulla, N. Woller, B. Mundt, F. Kuehnel and S. Kubicka.** Hannover Med. Sch.

SUNDAY, MAY 20, 2007 — 2:45 PM

Room A104/105 Memory and Aging — Chairs: S.P. SCHOENBERGER; P.T. LE

- 85.1** Impaired GATA3-dependent chromatin remodeling and Th2 cell differentiation leading to attenuated allergic airway inflammation in aging mice. **A. Hasegawa and T. Nakayama.** Chiba Univ. Grad. Sch. of Med., Japan.
- 85.2** Epigenetic patterns at the neonatal Th2 cytokine locus are developmentally regulated. **M.R. Foote, S. Rose, M.G. Lichtenheld and B. Adkins.** Univ. of Miami Miller Sch. of Med.
- 85.3** Inflammation regulates memory CD8 T cell development. **W. Cui, N. Joshi and S.M. Kaech.** Yale Univ. Sch. of Med.
- 85.4** Functional significance of PD-1 expression on aging T cells. **S. Suvas, H.M. Joo, S. Sehrawat, P.K. Suvas, M.Y. Sangster, H. Yagita, M. Azuma and B.T. Rouse.** Univ. of Tennessee, Juntendo Univ. Sch. of Med., Japan and Tokyo Med. and Dent. Univ.
- 85.5** CCR2 identifies first responders among human CD4⁺ memory T cells: long-lived, apoptosis-resistant, antigen-responsive cells with enhanced migration potential, a low threshold for activation, and immediate effector capabilities. **J.M. Farber, K. Song, H.H. Zhang, R.L. Rabin, B.J. Hill, I. Sereti, C. Prussin, R.M. Siegel, D.C. Douek and M. Roederer.** NIAID, NIH, FDA, Bethesda and NIAMS, NIH.

- 85.6 Endogenous naive CD8 T cell precursor frequency and infection type control CD62L gene expression. **J. Obar, K.M. Khanna, Q-M. Pham and L. Lefrancois.** Univ. of Connecticut Hlth. Ctr.
- 85.7 Identification of a mouse mutant with highly deficient cytotoxic T cell memory generation using ENU-induced genome-wide mutagenesis. **J.T. Kung.** Inst. of Molec. Biol., Acad. Sinica, Taipei.

Room A101/102 Immunotherapy of Cancer — Chairs: A.J. KORMAN; R.P. JUNGHANS

- 48.19 Immunization with PSA/anti-PSA complexes induces T and B cell responses to PSA in PSA-transgenic mice. **B.C. Schultes, F. Hou, L.M. Smith, C.F. Nicodemus and J.F. Frelinger.** Unither Pharmaceut., Wellesley, MA and Univ. of Rochester Med. Ctr.
- 48.26 Identification of an antigenic and immunogenic motif expressed by two 7-mer Rituximab-specific cyclic peptides. **F. Perosa, E. Favoino, F. Merchionne and F. Dammacco.** Univ. of Bari Med. Sch., Italy.
- 48.27 Importance of decay accelerating factor (CD55) in tumor avoidance of immune destruction. **B. Li, D. Allendorf, R. Hansen, J. Marroquin, D. Cramer, C. Harris and J. Yan.** Univ. of Louisville and Cardiff Univ., UK.
- 48.30 Blockade of hyaluronan, a CD44 ligand, inhibits IL-2– induced vascular leak syndrome while maintaining effective treatment of melanoma. **H. Guan, P.S. Nagarkatti and M. Nagarkatti.** Univ. of South Carolina .
- 48.32 Adenovirus-human HER2 vaccine inhibits breast cancer growth and vaccine induced antibodies are efficacious against Herceptin-refractory human breast cancer. **J. Wei, Z. Hartman, T. Osada, X.Y. Yang, G. Lei, H. Jiang, G. Chong, A. Amalfitano, H.K. Lyerly, M. Morse and T. Clay.** Duke Univ. and Michigan State Univ.
- 48.33 Phase I clinical and U.S. regulatory experience with designer T cells in cancer. **R.P. Junghans.** Roger Williams Med. Ctr.
- 48.37 Activity of anti-PD-1 in murine tumor models: role of host PD-L1 and synergistic effect of anti-PD-1 and anti- CTLA-4. **A. Korman, B. Chen, C. Wang, L. Wu, P. Cardarelli and M. Selby.** Medarex, Milpitas, CA.
- 48.38 Selective metalloproteinase inhibition of human CD30 shedding increases specificity of targeted immunotherapy. **H.P. Hansen, V.L. Simhadri, D. Eichenauer, A. Ludwig, A. Engert and E. Pogge von Strandmann.** Univ. Hosp. Cologne and Univ. of Kiel, Germany.

Room A201/202 Immunotherapy for Autoimmune Disease — Chairs: L. WEN; R.C. BUDD

- 131.21 Pre-ligand assembly domain is an important therapeutic target in inflammatory arthritis. **G-M. Deng and M.J. Lenardo.** Beth Israel Deaconess Med. Ctr., Harvard Med. Sch. and NIAID, NIH.
- 131.23 ARALAST or anti-TNF- α treatment prevents autoimmune destruction of islet grafts in nonobese diabetic mice. **M. Koulmanda, L. Hoffman, A. Qipo, H. Shi, Z. Fan, J.F. Flier and T.B. Strom.** Harvard Med. Sch., Beth Israel Deaconess Med. Ctr.
- 131.6 How PPAR γ mediates immunoregulation: an integral role for PPAR γ in regulatory T cells. **E.A. Wohlfert and R.B. Clark.** Univ. of Connecticut Hlth. Ctr.
- 131.7 CD8 $^+$ T-cells are required for the therapeutic effects of glatiramer acetate (Copaxone) on autoimmune demyelination. **J.P. Mendoza, N.R. York, A. Benagh and N.J. Karandikar.** Univ. of Texas Southwestern Med. Ctr.
- 131.4 Induced organ-specific T regulatory cells prevent autoimmunity by reducing the ability of dendritic cells to present self-antigen. **R.J. DiPaolo, T.S. Davidson, J. Andersson, C. Brinster and E.M. Shevach.** NIAID, NIH.
- 131.37 Application of humanized FcRn mouse model for in vivo testing of therapeutic antibodies. **S.B. Petkova, Y-J.G. Meng, T.J. Sproule, G.J. Christianson and D.C. Roopenian.** The Jackson Lab. and Genentech Inc.
- 131.26 Anti-CD20 therapy in NOD model of type 1 diabetes. **C. Hu, D. Rodriguez, W. Du, A. Ahuja, F.S. Wong, M. Shlomchik and L. Wen.** Yale Univ. Sch. of Med. and Bristol Univ., UK.
- 131.36 Prevention of type 1 diabetes in NOD mice by helminth infection. **Q. Liu, K. Sundar, G. Mousave, D. Bleich and W.C. Gause.** UMDNJ-New Jersey Med. Sch.

Room A208/209 T Cell Trafficking — Chairs: S.R. BARNUM; D.B. CORRY

- 99.1 Effects of TH17 cell transfer on the airways. **L. McKinley, A. Magill, A. Logar and J.K. Kolls.** Children's Hosp. of Pittsburgh, Univ. of Pittsburgh Med. Ctr.
- 99.2 Developmental and antigen-driven switches in the trafficking receptors of Foxp3 $^+$ regulatory T cells. **C.H. Kim, J. Lee and S.G. Kang.** Purdue Univ.
- 99.3 In vitro generated antigen specific CD4 $^+$ CD25 $^+$ Foxp3 $^+$ regulatory T cells control the severity of virus-induced immunoinflammatory lesion. **S. Sehrawat, S. Suvas and B.T. Rouse.** Univ. of Tennessee.
- 99.4 Differential expression of beta2-integrins, CNS trafficking, and cytokine production between gamma/ delta and alpha/beta T cells in EAE. **S.S. Smith and S.R. Barnum.** Univ. of Alabama at Birmingham.
- 99.5 The role of LFA-1 in T cell trafficking and functions in demyelinating disease. **K.J. Dugger, K.R. Zinn, D.C. Bullard and S.R. Barnum.** Univ. of Alabama at Birmingham.
- 99.6 Developmental control of integrin expression regulates T helper-2 effector homing. **S-H. Lee, F. Kheradmand and D. Corry.** Baylor Col. of Med.
- 99.7 Studying lineage relationships of T cells by cellular barcoding. **J.W.J. van Heijst, K. Schepers, E. Swart, C. Gerlach, R.M. Kerkhoven, R. Arens and T.N.M. Schumacher.** Netherlands Cancer Inst., Amstamsam.
- 99.8 CXCR6 promotes atherosclerosis by supporting T cell homing, interferon gamma production and macrophage accumulation in the aortic wall. **E. Galkina, B. Harry and K. Ley.** Univ. of Virginia.

MONDAY, MAY 21, 2007 — 8:00 AM

Room A204/205 Early T and NK Cell Development — Chairs: M.K. ANDERSON; S. WINANDY

- 82.1 Regulation of T cell development by the transcription factor HEBALt. **M.K. Anderson, D. Wang, C.L. Claus, M. Braunstein and G. Vaccarelli.** Univ. of Toronto and Univ. of Bari, Italy.
- 82.2 Development of all CD4 T lineages requires nuclear factor TOX. **P. Aliahmad and J. Kaye.** The Scripps Res. Inst.
- 82.3 Growth factor independence 1b is an E2A target gene that modulates Gata3 in T cell lymphomas. **W. Xu and B.L. Kee.** Univ. of Chicago.
- 82.4 The regulation of T cell development and leukemogenesis by Ikaros: mechanism of action through Notch. **S. Chari, K. Kathrein and S. Winandy.** Northwestern Univ., Chicago.
- 82.5 PLZF is essential for iNKT cell development. **O.U. Uche and D.B. Sant'Angelo.** Weill Grad. Sch. of Med. Sci., Cornell Univ. and Mem. Sloan-Kettering.
- 82.6 Natural killer dendritic cells are an intermediate of developing dendritic cells. **J-X. Gao, L. Chen, E. Calomeni, J. Wen and R. Shen.** Ohio State Univ.

Room A101/102 Molecular Recognition of Dendritic Cells and Macrophages — Chairs: Y.-J. LIU; C.V. HARDING

- 89.25 CD303 (BDCA-2) mediated inhibition of interferon type I production in plasmacytoid dendritic cells is linked to SYK, BLNK and PKC delta signaling. **J. Röck, J. Schmitz and G. Winkels.** Miltenyi Biotec GmbH, Bergisch Gladbach, Germany.
- 89.9 High concentrations of CpG-B ODNs induce a novel IFN $\alpha\beta$ -specific inhibitory pathway in dendritic cells. **R.C. Gray, J. Kuchtey and C.V. Harding.** Case Western Reserve Univ. Sch. of Med. and Vanderbilt Univ. Med. Ctr.
- 89.22 A novel role for Ku70 in differential regulation of proinflammatory cytokine response to CpG-DNA. **X. Wang, A-M. Dragoi, M. Riolo, M. Peng and W-M. Chu.** Brown Univ.
- 89.24 A novel role for HMGB1 in TLR9-mediated inflammatory responses to CpG-DNA. **W-M. Chu, S. Ivanov, A-M. Dragoi and X. Wang.** Brown Univ.
- 89.20 Plasmacytoid dendritic cell receptor BDCA2/Fc ϵ R γ complex uses BCR-like signaling cascade to modulate Toll-like receptor responses. **W. Cao, L. Zhang, D.B. Rosen, L. Bover, G. Watanabe, M. Bao, L.L. Lanier and Y-J. Liu.** Univ. of Texas M.D. Anderson Cancer Ctr. and UCSF.
- 89.16 Cell specific inactivation of multiple TLRs via conditional deletion of their master chaperone gp96/grp94. **Y. Yang and Z. Li.** Univ. of Connecticut Hlth. Ctr.
- 89.3 Knockout of Mkp-1 enhances the host inflammatory responses to Gram-positive bacteria. **Y. Liu, X. Wang, X. Meng, J.R. Kuhlman, L.D. Nelin and B.K. English.** Columbus Children's Res. Inst. and Univ. of Tennessee Hlth. Sci. Ctr.

Room A208/209 Genetic and Epigenetic Regulation of the Immune System I — Chairs: B.K. BIRSHTEIN; L.A. ECKHARDT

- 35.47 Physical interaction between the IgH 3' regulatory region and its target, the expressed VH gene. **Z. Ju and B.K. Birshtein.** Albert Einstein Col. of Med.
- 35.1 IgH intronic enhancer, E μ , and associated matrix attachment regions are required for efficient somatic hypermutation. **F. Li and L.A. Eckhardt.** Hunter Col. and Grad. Ctr. of CUNY.
- 35.8 RAG2 PHD finger couples histone H3 lysine 4 trimethylation with V(D)J recombination. **A.G.W. Matthews, A. Kuo, S. Ramon-Maiques, S. Han, M. Gallardo, W. Yang, O. Gozani and M. Oettinger.** Massachusetts Gen. Hosp., Harvard Univ., Stanford Univ. and NIDDK, NIH.
- 35.5 A large-scale survey of human Ig heavy chain genes in Genbank: structural correlates of autoreactivity and statistical signatures of molecular mechanisms. **J.M. Volpe and T.B. Kepler.** Duke Univ.
- 35.27 Identification and characterization of a conserved negative regulatory element in the human DAP10 gene. **S. Burgess, A. Marusina, F. Borrego and J.E. Coligan.** NIAID, NIH, Rockville.
- 35.49 Regulation of the perforin locus by IL-2 during CD8 α Tcell differentiation. **M.E. Pipkin, F. Cruz-Guilloty, M.G. Lichtenheld and A. Rao.** Harvard Med. Sch. and Univ. of Miami Miller Sch. of Med.
- 35.29 Histone acetyltransferase p300 acts as a potent transcriptional co-activator for Pax5. **T. He, Z. Yu, H. Kwon, C.A. Toleman, J. Kudlow and Z. Zhang.** Univ. of Alabama at Birmingham and Swarthmore Col.

Room B212/213 Guarding the Mucosal Barrier: the Border Patrol — Chairs: D. ARTIS; C.C. WHITACRE

- 42.1 Oral tolerance defects in congenital T cell-deficient mice. **J.Y. Lee, N. Oh and C.D. Surh.** The Scripps Res. Inst.
- 42.2 Exacerbation of spontaneous colitis in the absence of flora-derived TLR4 signals. **B. Mingle, R. Afshar, G. Priault, H. Murakami and C.R. Nagler.** Massachusetts Gen. Hosp., Charlestown, Nestle Res. Ctr., Lausanne and Ehime Univ. Sch. of Med., Japan.
- 42.3 Immunomodulatory actions of Treg PPAR γ in the gut mucosa. **R. Hontecillas and J. Bassaganya-Riera.** Virginia Tech.
- 42.4 Epithelial cell-intrinsic IKK β expression regulates innate and adaptive immunity in the gut. **C. Zaph, A.E. Troy, B.C. Taylor, L.D. Berman-Booty, K.J. Guild, Y. Du, E.A. Yost, A.D. Gruber, M.J. May, F.R. Greten, L. Eckmann, M. Karin and D. Artis.** Univ. of Pennsylvania, Free Univ. Berlin, Tech Univ. Munich and UCSD.
- 42.5 Role of NKT cells in the placenta and uterus of pregnant mice infected by Chlamydia trachomatis. **C. Kanellopoulos-Langevin, C. Delarbre, M. Habbedine, P. Verbeke, R. Moutier and D. Ojcius.** J. Monod Inst., Paris and Univ. of California-Merced.
- 42.6 CD8 $\alpha\alpha$ -specific CD8 $\alpha\beta$ effector memory T cell differentiation in the gut. **Y. Huang, S. Schoenberger and H. Cheroutre.** La Jolla Inst. for Allergy and Immunol.

- 42.7 Immunomodulation of activated immune cells in experimental autoimmune encephalomyelitis. **F. Song, I.E. Gienapp, T.M. Shawler and C.C. Whitacre.** Ohio State Univ.
- 42.8 Influenza-specific CD8 T cells require interactions with pulm onary DC in the lungs in order to mount an effective immune response. **J. McGill and K.L. Legge.** Univ. of Iowa.

Room B210/211 Development and Regulation of Innate Immunity — Chairs: K.E. PETERSON; M.A. JUTILA

- 52.1 In vivo synergy of TLR ligands through activation of distinct signaling pathways in dendritic cells. **Q. Zhu, I.M. Belyakov, D.M. Klinman and J.A. Berzofsky.** NCI, NIH and FDA, Bethesda.
- 52.2 Heat shock protein gp96 is a critical chaperone for Tolllike receptor 9. **B. Liu, Y. Yang and Z. Li.** Univ. of Connecticut Hlth. Ctr.
- 52.3 Neuroinflammatory pathways induced by TLR7 stimulation in the developing brain. **N.B. Butchi, S. Pourciau and K.E. Peterson.** LSU Sch. of Vet. Med.
- 52.4 Priming of $\gamma\delta$ T cells. **J.F. Hedges, D. Buckner, K. Rask, H. Kerns, L. Jackiw, T. Trunkle, D.W. Pascual, E. Dobrinin, M. Radke, J. Holderness and M.A. Jutila.** Montana State Univ.
- 52.5 Functional evidence supporting the predicted role of KIR3DS1 in the host response to HIV: KIR3DS1 is an activating receptor expressed by human natural killer cells. **V. Pascal, E. Yamada, M.P. Martin, G. Alter, M. Altfeld, M. Carrington, S.K. Anderson and D.W. McVicar.** NCI, SAIC-Frederick Inc. and Massachusetts Gen. Hosp., Harvard Med. Sch.
- 52.6 NTAL negatively regulates TREM-1/DAP12 function. **A.S. Tessarz, S. Weiler, K. Zanzinger, P. Angelisová, V. Horejší and A. Cerwenka.** German Cancer Res. Ctr., Heidelberg and Inst. of Molec. Genet., Acad. of Sci., Czech Republic.
- 52.7 Human vitamin D3-induced antimicrobial activity against Mycobacterium tuberculosis is dependent on cathelicidin. **P.T. Liu, D. Tang, S.R. Krutzik and R.L. Modlin.** UCLA.
- 52.8 P2Y₆ levels in human monocytes and monocyte-derived macrophages regulate IL-1 β processing and release. **S. Seshadri, M.D. Duncan, J.M. Hart, M.A. Gavrilin and M.D. Wewers.** Ohio State Univ.

Room A106/107 Antigen Processing and Presentation — Chairs: S. SADEGH-NASSERI; N. SHASTRI

- 93.3 Nonsense mediated decay associated pioneer round of translation peptides as source for MHC I mediated antigen presentation. **A. Schmidt and N. Shastri.** Univ. of California-Berkeley.
- 93.5 The TCP-1 ring complex binds antigenic peptides and facilitates their cross-presentation by APCs. **R.E. Vatner and P.K. Srivastava.** Univ. of Connecticut Sch. of Med.
- 93.14 Viral sequestration of antigen subverts cross priming. **E.F. Tewalt, J.M. Grant, E.L. Granger, K.B. Donohue and C.C. Norbury.** Penn State Col. of Med.
- 93.7 Developing a novel approach to follow the processing of viral antigens for MHC class I presentation. **S.J. Cardinaud and N. Shastri.** Univ. of California- Berkeley.
- 93.21 Survival of antigenic epitope requires class II MHC capture prior to lysosomal proteolysis. **A. Kim, I. Hartman and S. Sadegh-Nasseri.** Johns Hopkins Univ. Sch. of Med.
- 93.22 Partial MHC class II molecules preferentially bind to B cells. **J.M. Link, R. Meza-Romero, M. Afentoulis, M. Agotsch, D. LaTocha, G. Burrows and A.A. Vandenbark.** Portland VA Med. Ctr. and Oregon Hlth. & Sci. Univ.

MONDAY, MAY 21, 2007 — 10:15 AM

Room A204/205 Cell Death and Self-Renewal In Development — Chairs: J.C. TELFER; T. NAKAYAMA

- 84.1 A critical role for DRAK2 in the germinal center reaction and the antibody response. **A. Al-Qahtani, Z. Xu, C.M. Walsh and P. Casali.** Univ. of California-Irvine.
- 84.2 Pax5 acts as a negative regulator for p53. **Z. Zhang, S. Park, J. Zhou, X. Chen and Z. Yu.** Univ. of Alabama at Birmingham.
- 84.3 Shnurr2 controls memory Th1 and Th2 cell numbers in vivo. **T. Nakayama, M.Y. Kimura, C. Iwamura, A. Hasegawa and M. Yamashita.** Chiba Univ., Japan.
- 84.4 Novel aspects of the FADD function in lymphocytes revealed using hypomorphic FADD mutant and conditional FADD-deficient mice. **J. Zhang, H. Imtiyaz and S. Rosenberg.** Thomas Jefferson Univ.
- 84.5 T cells undergo asymmetric cell division — a new mechanism to dictate T cell fate. **S.M. Russell, J. Oliaro, A. Pasam, F. Sacirbegovic and K. Pham.** Peter MacCallum Cancer Ctr., East Melbourne and Swinburne Univ. of Technol., Hawthorn, Australia.
- 84.6 Runx1/AML1 and hematopoietic dysplasia. **J.C. Telfer, N. Malcuit, E. Hedblom and C. Kane.** Univ. of Massachusetts Amherst.

Room A106/107 Cellular Adhesion, Migration and Inflammation — Chairs: D.C. BULLARD; M.A. JUTILA

- 97.1 Loss of Mac-1 expression in mice leads to more severe forms of inflammatory disease in both the MRL/MpJFas^{lpr} and CIA models. **D.C. Bullard, X. He, T.R. Schoeb and C. Raman.** Univ. of Alabama at Birmingham.
- 97.2 ICAM-1 expression is required for regulatory T cell localization in the lungs of M. tuberculosis infected mice. **H.L. Plessner and J.L. Flynn.** Univ. of Pittsburgh.
- 97.3 ICAM-1 expressed on neutrophils is critically involved in vaccine-induced protection in a murine model of acute pneumonia. **G.P. Priebe, R.L. Walsh, T.A. Cederroth and G.B. Pier.** Brigham and Women's Hosp. and Children's Hosp. Boston.
- 97.4 STAT6 is a novel regulator of CD44 expression in human B cells. **J.P. Mishra, S. Mishra and A. Kumar.** Univ. of Ottawa.
- 97.5 The adhesion molecules CD44 and hyaluronan, not physical trapping, are responsible for neutrophil sequestration in inflamed liver sinusoids. **E. McAvoy, B. McDonald and P. Kubes.** Univ. of Calgary, Canada.
- 97.6 Crucial role of CD44 in liver inflammation. **K. Kimura, M. Nagaki, K. Kakimi, T. Nakayama, M. Taniguchi and H. Moriwaki.**

Gifu Grad. Univ. Sch. of Med., Univ. of Tokyo, Grad. Sch. of Med., Chiba Univ. and RIKEN Res. Ctr. for Allergy and Immunol., Yokohama.

- 97.7 Immobilized SDF-1 α triggers rapid VLA-4 affinity increases to stabilize lymphocyte tethers on VCAM-1 and subsequently initiate firm adhesion. **M.B. Lawrence, J.A. Divietro, R.S. Larson and L.A. Sklar.** Univ. of Virginia and Univ. of New Mexico.
- 97.8 Microfluidic platform simulation of leucocyte adhesion to the endothelium. **V. Williams, D. Kashanin, F. O'Dowd and A.J. Robinson.** Cellix Ltd., St. James Hosp, Dublin and Univ. of Aberdeen, UK.

Room B212/213 Regulation of Antigen Presentation and T Cell Responses — Chairs: R.P. DeMatteo; T.H. Hansen

- 36.1 Regulation of antigen presentation by amyloid precursorlike protein 2. **A. Tuli, M. Sharma, M.R. Menezes, N. Naslavsky, S. Caplan, M.M. McIlhane and J.C. Solheim.** Univ. of Nebraska Med. Ctr.
- 36.12 MHC class II expression and antigen presentation function of mouse-developing B cells. **X. Chen, L.C. Chen, Y. Gu and P.E. Jensen.** Univ. of Utah and Georgia Inst. of Technol.
- 36.14 B220-murine splenic natural killer dendritic cells can acquire MHC II expression and become potent stimulators of T cells. **U.I. Chaudhry, G. Plitas, T.P. Kingham, J. Raab and R.P. DeMatteo.** Mem. Sloan-Kettering Cancer Ctr.
- 36.4 Apoptosis-induced inhibition of CD1d-mediated antigen presentation: different roles for caspases and p38 MAPK. **M.A. Khan, V. Sriram, R.J. Gourapura, M. Nagala and R.R. Brutkiewicz.** Indiana Univ-Purdue Univ. Indianapolis and Scios Inc., Fremont, CA.
- 36.7 Differential T cell responses to glycoantigens. **A. Neaga and B.A. Cobb.** Case Western Reserve Univ.
- 36.19 Replicating dendritic cells transmit internalized antigen to progeny for presentation. **J. Diao, E. Winter, W. Chen and M.S. Catral.** Toronto Gen. Hosp. Res. Inst.
- 36.11 Exosome-mediated B cell activation. **U. Saunders and J.F. Kearney.** Univ. of Alabama at Birmingham.
- 36.28 Fetal/neonatal ethanol exposure irreversibly alters immune parameters in young mice. **J. Fan, B.M. Young, R.T. Cook, M.R. Edsen, K.L. Legge, T.J. Waldschmidt, L.T. Tygrett and A.J. Schlueter.** Univ. of Iowa.

MONDAY, MAY 21, 2007 — 12:30 PM

Room A101/102 Hematopoietic Stem Cells and Microenvironments — Chairs: D.M. Allman; D. Su

- 81.5 Hematopoietic stem cells did not have a synchronized defect with age-related thymic involution during murine aging. **D-M. Su, X. Zhu and J. Gui.** Univ. of Texas Hlth. Ctr. at Tyler.
- 81.6 Multiple prethymic defects underlie age-related loss of T progenitor competence. **V.P. Zediak, I. Maillard and A. Bhandoola.** Univ. of Pennsylvania .
- 81.1 Analysis of the in vivo vascular contribution potential of hemato-vascular progenitor cells derived from fetal stages of development. **M.J. Sánchez, A.M. Garcia and C. Quintero.** CSIC-Univ. Pablo de Olavide, Spain.
- 81.2 Presence of Id2- and ROR γ t-independent lymphoid tissue organogenesis. **T. Nagatake, S. Fukuyama, D.Y. Kim, K. Takamura and H. Kiyono.** Univ. of Tokyo.
- 81.3 RNA-binding protein Pum2 promotes self-renewal and suppresses differentiation of multipotent hematopoietic cells by maintaining them in inactive CD34-state. **J. Zayas, R.G. Nachtman, J. George and R. Jurecic.** Univ. of Miami Miller Sch. of Med.
- 81.4 LIM domain binding protein 1 is required for the maintenance of hematopoietic stem cells. **L. Li, J. Lee, T. Cohen, M. Gorivodsky, S.M. Hayes, Y. Zhao, D. El-Khoury, A. Grinberg, H. Westphal and P.E. Love.** NICHD, NIH and SUNY Upstate Med. Univ.

Room A106/107 Role of Complement, Fc Receptors, and Acute Phase Proteins In Host Defense — Chairs: M.K. Pangburn; J.H. Weis

- 53.1 Complement receptors 1 and 2 influence immune responses in a B cell receptor-independent manner. **A. Jacobson, J. Weis and J. Weis.** Univ. of Utah Sch. of Med.
- 53.2 Cell surface complement regulatory functions of factor H are essential for the survival of normal and paroxysmal nocturnal hemoglobinuric red blood cells. **V.P. Ferreira and M.K. Pangburn.** Univ. of Texas Hlth. Sci. Ctr. at Tyler.
- 53.3 Properdin: cell death's little helper? **C. Kemper, L.M. Mitchell and D.E. Hourcade.** Washington Univ. Sch. of Med.
- 53.4 Complement-mediated hemolytic anemia and platelet activation in mCd59a and mCd59b double knockout mice. **X. Qin, W. Hu, W. Song, L. Grubisich, Y. Song, G. Wu, X. Hu, S. Ferris, M. Dobarro, S. Bauer, M. Feelisch, J.A. Leopold, J. Loscalzo and J.A. Halperin.** Brigham and Women's Hosp., Harvard Med. Sch. and Boston Univ. Sch. of Med.
- 53.5 The neonate Fc receptor for IgG is important for the development of rotavirus-specific IgG responses and clearance of rotavirus from the intestines of mice. **G. Marcelin and M.E. Conner.** Baylor Col. of Med.
- 53.6 Immune opsonins modulate BLYS/BAFF release in a receptor-specific fashion. **X. Li, K. Su, A.J. Szalai, T. Zhou, R.P. Kimberly and J.C. Edberg.** Univ. of Alabama at Birmingham.
- 53.7 Control of germinal center reaction against T-independent antigens by the Fc α μ receptor. **A. Shibuya, U. Cho, S. Tahara-Hanaoka, K. Shibuya and S-I. Honda.** Univ. of Tsukuba, Japan.
- 53.8 Complement c5 regulates insulin-like growth factors binding proteins in chronic experimental autoimmune encephalomyelitis. **C.D. Cudrici, E. Zafrańskaia, S. Weerth, H. Chen, A. Gherman, T. Ito, V. Rus, C. Raine and H. Rus.** Univ. of Maryland Baltimore and Albert Einstein Col. of Med.

Room B212/213 Host Defense Against Parasitic and Fungal Infections — Chairs: B.A. GARVEY; C.M. HOGABOAM

- 51.1 Regulatory T cells contribute to suppression of antimalarial immunity by concurrent nematode infection. **M.M. Stevenson, Z. Su and M. Segura.** McGill Univ. Hlth. Ctr.
- 51.2 Fc γ R1II mediates IgG-induced IL-10 and is required for chronic Leishmania lesions. **L.U. Buxbaum and B.N. Thomas.** Univ. of Pennsylvania Sch. of Med. and VA Med. Ctr.
- 51.3 Agent based model of the T_{H1}/T_{H2} differentiation decision. **M.B. Lawrence, B.J. Schmidt, A.K. Chavali and L. Glaw.** Univ. of Virginia.
- 51.4 Macrophages produce a soluble mediator which enables neutrophils to kill the parasitic nematode *Strongyloides stercoralis*. **A.E. O'Connell and D. Abraham.** Thomas Jefferson Univ.
- 51.5 Neutrophils play critical role for the type 2 protective responses against nematode parasite *N. brasiliensis*. **Z. Liu, J.T. Pesce, H. Hamed, F. Alem, H. Lin, D. Chaussabel, Q. Liu, J.F. Urban, Jr. and W.C. Gause.** UMDNJ-New Jersey Med. Sch., NIAID, NIH and USDA, Beltsville.
- 51.6 Defensin α -1 expression is upregulated in human cells in response to early *Trypanosoma cruzi* infection as an innate immune mechanism to decrease cellular infection via membrane pore formation leading to apoptosis. **M.N. Madison, Y. Kleshchenko, P. Nde, K. Simmons, M.F. Lima and F. Villalta.** Meharry Med. Col.
- 51.7 Expression of TREM-1 in macrophages is TLR2 dependent. **E.S. Choi, K. Buckland and C. Hogaboam.** Univ. of Michigan.
- 51.8 A soluble Dectin-1 Fc fusion protein enhances innate immunity against invasive pulmonary aspergillosis. **P.E. Mattila, A.E. Metz, R.R. Repaka and C. Steele.** Children's Hosp. of Pittsburgh, Univ. of Pittsburgh.

Room A201/202 Transplantation Immunology — Chairs: M.L. ALEGRE; M. SYKES

- 102.21 Presensitized B cells prevent anti-CD154-mediated cardiac allograft tolerance. **A.M. Troutman, L. Ma, J. Ding, J. Shen and A. Chong.** Univ. of Chicago.
- 102.22 Prolonged survival of vascularized skin grafts across a full MHC mismatch using donor antigen-pulsed tolerogenic GM+Rapa dendritic cells. **M. Feili-Hariri, E. Horibe, J. Sacks, J. Unadkat, Z. Wang, G. Raimondi, R. Ikeguchi, A. Thomson, W.P. Lee and D. Marsteller.** Univ. of Pittsburgh.
- 102.23 Mutations to Bid cleavage sites protect hepatocytes from apoptosis following ischemia/reperfusion injury. **S.M. Krams, K. Nagasaki, C.O. Esquivel, O.M. Martinez and E. Riddle.** Stanford Univ. Sch. of Med.
- 102.24 Fas mediated cell death promotes cardiac allograft acceptance in T cell-NF- κ B impaired mice. **L.L. Molinero, Y. Wang, P. Zhou, H. Yagita and M-L. Alegre.** Univ. of Chicago and Juntendo Univ. Sch. of Med., Japan.
- 102.25 Surprising kinetics of the T cell response to HY. **A.J. Tyznik and M.J. Bevan.** Univ. of Washington.
- 102.26 The superdominant minor histocompatibility antigen H60 recognized by CD8 T cells fails to elicit lethal graft versus host disease regardless of its tissue expression pattern. **M. Al-Awwami, T.J. Sproule, H. Al-Khabbaz and D.C. Roopenian.** The Jackson Lab.
- 102.27 NFAT1 in cord blood-derived human CD4⁺ T cells: regulatory implications for graft versus host disease. **R.P. Weitzel, M. Lesnewski, L.R. Fanning and M.J. Laughlin.** Case Western Reserve Univ.
- 102.28 Diversity and fate of pre-immune anti-tumor T cells after umbilical cord blood transplantation. **N. Merindol, M. Caty, S. Gimmig, M. Duval, M.A. Champagne and H. Soudeyns.** CHU Sainte-Justine and CHUM-Hosp. Saint-Luc, Montreal.

MONDAY, MAY 21, 2007 — 2:45 PM

Room A204/205 Signaling for Lymphocyte Activation, Proliferation and Survival — Chairs: M. RINCON; L.B. JUSTEMENT

- 87.22 Ets1-dependent IP3R3 expression in naive CD4⁺ T cells is required for cytokine gene expression. **V.K. Nagaleekar, S. Diehl, I. Juncadella, C. Charland, L.A. Garrett-Sinha, N. Muthusamy, J. Anguita and M. Rincón.** Univ. of Vermont, Univ. of Massachusetts Amherst, SUNY at Buffalo and James Cancer Hosp., Columbus.
- 87.21 Negative regulation of CD40-mediated B cell responses by E3 ubiquitin ligase Cbl-b. **J. Zhang, G. Qiao, M. Lei and Z. Li.** Univ. of Chicago.
- 87.53 Regulation of B cell differentiation by the adaptor protein HSH2. **L.B. Justement, B.R. Herrin and R.G. King.** Univ. of Alabama at Birmingham.
- 87.48 A non-apoptotic FADD/caspase-8 dependent mechanism essential for T cell clonal expansion. **C.M. Walsh, S. Leverrier, B.D. Bell, A.F. Arechiga and B.M. Weist.** Univ. of California-Irvine.
- 87.5 Synergy between molecular targets of costimulation in promoting persistence of CD8 T cells. **J. Song, A. Song and M. Croft.** La Jolla Inst. for Allergy and Immunol.
- 87.38 Bcl-3 is required for adjuvant mediated T cell survival and sustained inhibition of GSK3 β . **P. Jayaraman, P.M. Chilton, S. Sengupta and T.C. Mitchell.** Univ. of Louisville.
- 87.8 Ubiquitination of RIP1 regulates an NF- κ B-independent cell death switch in TNF signaling. **M.A. O'Donnell, D. Legarda Addison and A.T. Ting.** Mount Sinai Sch. of Med.
- 87.20 Rac GTPases are required for restimulation-induced CD4⁺ T cell death. **M. Ramaswamy, C. Dumont, J.R. Muppidi, V.L. Tybulewicz and R.M. Siegel.** NIAMS, NIH and NIMR, Mill Hill, UK.

Room A208/209 Regulation of Immune Cell Development and Function — Chairs: T.R. MALEK; H. ZAGHOUBANI

- 95.1 Follicular CD4⁺ T helper cells induce human B cells to undergo Ig isotype switching and differentiation to Ig-secreting cells through the production of IL-21. **S.G. Tangye, D.T. Avery, V.L. Bryant and C.S. Ma.** Garvan Inst. of Med. Res., Darlinghurst, Australia.

- 95.2 A developmental maturation of a dendritic cell subset controls the Th2 bias of neonatal immunity through IL-12 production and downregulation of IL-13R α 1. **H-H. Lee, C.M. Hoeman, J.C. Hardaway, R. Jain, R.D. Divekar, J.E. Ellis, D.M. Nast, C.L. Haymaker, F.B. Guloglu and H. Zaghouani.** Univ. of Missouri- Columbia.
- 95.3 Interleukin-15 (IL-15) enhances, as well as increases the sensitivity of human CD8⁺ memory T cell subsets to stimulation by the pro-inflammatory cytokines IL-12 and IL-18. **R.B. Smeltz.** Virginia Commonwealth Univ.
- 95.4 Epstein-Barr virus-induced gene 3 is a negative regulator of IL-17 and protective immunity against *Listeria monocytogenes*. **J. Yang, M. Yang, T.M. Htut, A. Hanidu, X. Li, S. Sellati, H. Jiang, S. Zhang, H. Li, A.T. Ting, L. Mayer, J.C. Unkeless, M.E. Labadia, M. Hodge, J. Li and H. Xiong.** Boehringer Ingelheim Pharmaceuticals and Mount Sinai Sch. of Med.
- 95.5 Thymic IL-2R expression is sufficient for production of CD4⁺CD25⁺ Foxp3⁺ T regulatory cells. **A.L. Bayer, A. Yu and T.R. Malek.** Univ. of Miami Miller Sch. of Med.
- 95.6 IL-15 acts as a potent inducer of CD4⁺CD25^{high} cells expressing forkhead box protein P3. **H. Imamichi, I. Sereti and H.C. Lane.** SAIC-Frederick Inc. and NIAID, NIH.
- 95.7 Exposure to Ips induces the generation of immunosuppressive myeloid cells. **M. Arora, A. Ray and P. Ray.** Univ. of Pittsburgh.
- 95.8 Preferential chemotaxis and fugetaxis of CD4⁺CD8⁺ thymocytes in response to CXCL16. **J.O. Manilay and B. McLelland.** Sch. of Nat. Sci., Univ. of California- Merced.

Room A101/102 Cellular Responses To Pathogens — Chairs: S. CROTTY; D. JANKOVIC

- 43.1 Deterministic linkage between CD4 T cell and B cell specificities to a large virus: vaccinia virus. **S. Crotty, M. Moutaftsi, M. McCausland, D.H. Davies, J. Moyron Quiroz, R. Johnston, R.M. Benhnia, H. Grey, J. Hoffmann, S. Head, D. Garboczi and A. Sette.** La Jolla Inst. of Allergy and Immunol., Univ. of California- Irvine, The Scripps Res. Inst. and NIH, Rockville.
- 43.2 CD28 costimulation is required by effector and memory CD8⁺ T cells. **A.C. Boesteanu, D.V. Dolfi, C.H. Ollai, A. Borowski and P.D. Katsikis.** Drexel Univ. Col. of Med.
- 43.3 CD4 T cell memory of prior influenza infections regulate new CD4 and CD8 T cell responses. **D.M. Jelley- Gibbs, K. McKinstry, T. Strutt, J. Dibble and S. Swain.** Trudeau Inst., Saranac Lake, NY.
- 43.4 Lung resident memory CD4 T cells provide optimal protective immunity to influenza challenge. **J. Teijaro, M.P. Ndjambi, L. Lorenzo, S. Chandran and D. Farber.** Univ. of Maryland Baltimore.
- 43.5 The precarious balance of immune response to *Mycobacterium tuberculosis* — are T regulatory cells predictive of infection outcome in a non-human primate model of tuberculosis? **A.M. Green, K.S. Bongers and J.L. Flynn.** Univ. of Pittsburgh Sch. of Med.
- 43.6 Length of antigenic stimulation during expansion dictates commitment to CD8 T cell memory subsets. **S. Sarkar, V. Kalia, W.N. Haining, B.T. Konieczny, S. Subramaniam and R. Ahmed.** Emory Univ. and Dana-Farber Cancer Inst.
- 43.7 Type I interferon and IL-12 induce phenotypic variegation of human CD4⁺ T cells. **A.M. Davis, L.A. Matthews, H.J. Ramos and J.D. Farrar.** Univ. of Texas Southwestern Med. Ctr.
- 43.8 Helminth secretory product ribonuclease T2 is a Th2- inducing agent. **D. Jankovic, S. Steinfeld, J.F. Andersen and A. Sher.** NIAID, NIH.

Room A201/202 Innate Immunity Against Pathogens — Chairs: M. KRONENBERG; Z. TIAN

- 44.1 Inhibition of dendritic cell IL-12 production by *Giardia lamblia*. **J.D.T. Kamda and S.M. Singer.** Georgetown Univ.
- 44.2 Differential secretion of IL-12 and IL-18 based on intracellular localization of *Listeria monocytogenes*. **K.D. Meeks, A.N. Sieve, J.B. Balch and R.E. Berg.** Univ. of North Texas Hlth. Sci. Ctr.
- 44.3 Sensing and recognition of bacteria by NKT cells. **M. Kronenberg, Y. Kinjo, E. Tupin and N. Nagarajan.** La Jolla Inst. for Allergy and Immunol.
- 44.4 MyD88-mediated signals induce in vivo production of the bactericidal lectin RegIII γ and protect against intestinal *Listeria monocytogenes* infection. **K. Brandl, G. Pliatas, R.P. DeMatteo, L.V. Hooper and E.G. Pamer.** Mem. Sloan-Kettering Cancer Ctr. and Univ. of Texas Southwestern Med. Ctr.
- 44.5 TLR2/1-induced IL-15 triggers a vitamin D3-dependent antimicrobial activity against *Mycobacterium tuberculosis* in human macrophages. **S.R. Krutzik, J.A. Robles, M. Hewison, K. Corcoran, D. Montoya, P.T. Liu, J. Adams and R.L. Modlin.** UCLA and Cedars- Sinai Med. Ctr.
- 44.6 Trafficking of dendritic cell subsets to the lung controls viral replication and pathology in human paramyxovirus infections. **A. Guerrero-Plata, A. Casola and R.P. Garofalo.** Univ. of Texas Med. Branch.
- 44.7 Inhibition of Toll-like receptor and Fc receptor responses in macrophages by TREM-2 and DAP12. **J.A. Hamerman, J.R. Jarjoura, N.K. Tchao, M.B. Humphrey, M.C. Nakamura, C.A. Lowell, W.E. Seaman and L.L. Lanier.** Benaroya Res. Inst., Seattle, UCSF and VA Med. Ctr., Oklahoma City and San Francisco.
- 44.8 Mast cells play a critical role in host defenses against *Yersinia pestis*. **D.M. O'Bryant, M.L. Nilles and D.S. Bradley.** Univ. of North Dakota Sch. of Med. and Hlth. Sci.

TUESDAY, MAY 22, 2007 — 8:00 AM

Room B212/213 Genetic and Epigenetic Regulation of the Immune System II — Chairs: G.J. KERSH; B. BLOMBERG

- 35.44 Identification a novel NF- κ B regulator by tandem affinity purification combined with mass spectrometry. **F. Wan, L. Zheng, D.E. Anderson, L.T. Lam, V. Hegde, W.A. Deutsch, L.M. Staudt and M.J. Lenardo.** NIAID, NIDDK and NCI, NIH and LSU Syst.
- 35.22 The forkhead transcription factor Foxq1 enhances NF- κ B activity and is critical for robust T-cell activation and autoimmunity. **M.R. Gubbels Bupp and S.L. Peng.** Roche Palo Alto.
- 35.37 Genetic control of variegated KIR gene expression: polymorphisms of the bi-directional KIR3DL1 promoter are associated with

- distinct frequencies of gene expression. **S.K. Anderson, V. Pascal, M.P. Martin, M. Carrington and H. Li.** NCI-Frederick and SAIC-Frederick Inc.
- 35.25** Regulation of MHC class II transcription by the 19S proteasomal ATPase S8. **K.P. Bhat, J.D. Turner and S.F. Greer.** Georgia State Univ.
- 35.23** The transcription factor GATA-3 regulates IL-4 responses in B cells. **D. Aud, S-Y. Pai, I-C. Ho and S.L. Peng.** Roche Palo Alto, Children's Hosp. Boston, Dana- Farber Cancer Inst. and Brigham and Women's Hosp.
- 35.34** Ets-1 is a negative regulator of Th17 differentiation. **J. Moisan, R. Grenningloh, E. Bettelli, M. Oukka and IC. Ho.** Brigham and Women's Hosp., Harvard Med. Sch.
- 35.41** Negative regulation of RORgt by direct binding to Egr3. **G.J. Kersh and H. Xi.** Emory Univ. and Genentech Inc.
- 35.32** New sequence of strategies to define gene transcriptional territories in lymphocytes: the perforin example. **M.G. Lichtenheld, J.C. Zúñiga-Pflücker, A. Rao and M.E. Pipkin.** Univ. of Miami Miller Sch. of Med., Univ. of Toronto and Harvard Med. Sch.

TUESDAY, MAY 22, 2007 — 10:15 AM

Room B212/213 MHC Structure, Function and Ligands — Chairs: J. SOLHEIM; P.E. JENSEN

- 93.2** Viral and self HLA class I peptides mark the surface of influenza infected cells. **A.R. Wahl, F. Schafer, W. Bardet, R. Buchli, M. Samikkannu, A. Fleshman, M. Gonzalez, G. Air and W. Hildebrand.** Univ. of Oklahoma Hlth. Sci. Ctr.
- 93.10** Analysis of interactions in a soluble tapasin/HLA-B*0801 complex provides a mechanism for peptide selection. **M. Bouvier and M. Chen.** Univ. of Connecticut Sch. of Pharm.
- 93.11** Similarities and differences in tapasin interaction with disparate murine MHC class I allotypes. **L.C. Groening, X. Wang, A. Tuli, B.D. Ormsbee, M.M. McIlhaney and J.C. Solheim.** Univ. of Nebraska Med. Ctr.
- 93.12** Tapasin functions to assemble MHC class I subunits but does not affect their lifetime on the cell surface. **M.W. Everett and M. Edidin.** Johns Hopkins Univ.
- 93.18** X-ray crystallographic structures of murine cytomegalovirus MHC-I-like molecules reveal distinct modes of exploitation of the MHC-I fold. **J. Mans, C.T. Tiemessen, H. Robinson, A. Balbo, P. Schuck, K. Natarajan and D.H. Margulies.** Univ. of Witwatersrand, South Africa, NIAID and OD, NIH and Brookhaven Natl. Lab., NY.
- 93.1** MR1, a novel class Ib molecule, utilizes the endocytic pathway to activate mucosal-associated invariant T cells. **S. Huang, B. Thompson, A. Sant and T.H. Hansen.** Washington Univ. Sch. of Med. and Univ. of Rochester.
- 93.24** The double mutation of DRBW61A/N82A changed the MHC II-peptide complex stability and DM catalytic activity. **Z. Zhou, X. He, X. Chen and P.E. Jensen.** Univ. of Utah.
- 93.13** Essential role of heat shock protein 90 in direct and cross-presentation. **M. Garg, M.K. Callahan and P.K. Srivastava.** Univ. of Connecticut Hlth. Ctr.