

Thomas A. Fleisher, M.D.

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Biosketch

Dr. Thomas A. Fleisher received his M.D. and pediatric training at University of Minnesota and went on for training in immunology at the National Institutes of Health in the laboratory of Dr. Thomas Waldmann. Following the NIH training and a brief faculty position at Walter Reed Army Medical Center, he was chosen to direct the Clinical Immunology Laboratory in the Department of Laboratory Medicine at NIH. In 1998, he was selected as chief of the Department of Laboratory Medicine, where he also continues to run the Immunology Service within the department.

Dr. Fleisher is an adjunct professor of pediatrics at Uniformed University of the Health Sciences, and serves as consultant to the Allergy Immunology Department at Walter Reed. He served as a member of the board of directors of the American Board of Allergy and Immunology from 1991-2000 and was elected chair of the board in 1996; he also was a member of the American Board of Pediatrics. He was on the executive committee of the Clinical Immunology Society from 2003-2006, having served as its president in 2005, and was a member of the board of directors of the American Academy of Allergy, Asthma and Immunology from 2003-2007. Currently, Dr. Fleisher is President of the Robert A. Good Immunology Society. He serves as a section editor for Clinical Immunology and is on the editorial board of Current Opinion in Allergy and Clinical Immunology, Clinical and Laboratory Immunology and Communications in Clinical Cytometry. Dr. Fleisher is an editor of Clinical Immunology: Principles and Practice, the third edition of which is currently in press. Dr. Fleisher has published more than 180 peer reviewed manuscripts, reviews and chapters.

His research interests focus on improving current assays and developing new diagnostic methods in laboratory immunology, particularly as they pertain to immune deficiency disorders. Dr. Fleisher is a member of a group of NIH medical scientists who described and characterized the autoimmune lymphoproliferative syndrome (ALPS).

Honors and Awards

Carl E. Arbesman Memorial Lectureship (AAAAI), 2008; Richard Farr Lecture (Colorado Allergy Society), 2003; Vida H. Gordon Lecture (Arkansas Children's Hospital), 2003; NIH Director's Award, 1998; Dees Symposium Lecture (Duke University Medical School), 1998, 2005; Carl E. Arbesman Memorial Lectureship (AAAAI), 1998; Best Doctors in America, 1994, 2003, 2007; Who's Who in America, 1993-present; Outstanding Service Medal, USPHS, 1992; Commendation Medal, USPHS, 1986

Peer Reviewed Publications (2006-2008, out of 128)

Rao VK, Carrasquillo JA, Dale JK, Bacharach SL, Whatley M, Dugan F, Tretler J, Fleisher T, Puck JM, Wilson W, Jaffe ES, Avila N, Chen CC, Straus SE. Fluorodeoxyglucose positron emission tomography (FDG-PET) for monitoring lymphadenopathy in autoimmune lymphoproliferative syndrome (ALPS). *Am J Hematol.* 81:81-85, 2006

Morris JC, Janik JE, White JD, Fleisher TA, Brown M, Tsudo M, Goldman CK, Bryant B, Petrus M, Top L, Lee CC, Gao W, Waldmann TA. Preclinical and phase I clinical trial of blockade of IL-15 using Mik- β I monoclonal antibody in T cell large granular leukemia. *Proc Nat Acad Sci.* 103: 401-406, 2006

Niemela JE, Hsu AP, Fleisher TA, Puck JM. Single nucleotide polymorphisms in the apoptosis receptor gene *TNFRSF6*. *Mol Cell Probes.* 20:21-26, 2006

Bleesing JJ, Souto-Carneiro MM, Savage WJ, Brown MR, Martinez C, Yavuz S, Brenner S, Siegel RM, Horwitz ME, Lipsky PE, Malech H, Fleisher TA. Patients with chronic granulomatous disease have a reduced peripheral blood memory B-cell compartment. *J Immunol.* 176:7096-7103, 2006.

Shand JC, Mansky PJ, Brown MV, Fleisher TA, Mackall CL. Adolescents and young adults successfully restore lymphocyte homeostasis after intensive T-cell depleting therapy for cancer. *Br J Haematol.* 135:270-71, 2006.

O'Mahony D, Morris JC, Quinn C, Gao W, Wilson WH, Gause B, Pittaluga S, Neelapu S, Brown M, Fleisher TA, Gulley JL, Schlom J, Nussenblatt R, Albert P, Davis TA, Lowry I, Petrus M, Waldmann TA, Janik JE. A pilot study of CTL-4 blockade after cancer vaccine failure in patients with advanced malignancy. *Clin Cancer Res.* 13: 958-964, 2007.

Illei GG, Yarboro CH, Kuroiwa T, Schlimgen R, Austin HA, Tisdale JF, Chitkara T, Fleisher T, Kippel JH, Balow JE, Boumpas DT. Long term effects of combination treatment with fludarabine and low-dose pulse cyclophosphamide in patients with lupus nephritis. *Rheumatology*. 42:952-956, 2007.

Olivier JB, Bidere N, Niemela JE, Zheng L, Sakai K, Nix CP, Danner RL, Barb J, Munson PJ, Puck JM, Dale J, Straus SE, Fleisher TA, Lenard MJ. NRAS mutation causes a human autoimmune lymphoproliferative syndrome. *Proc Nat Acad Sci (USA)*. 104: 8953-8958, 2007.

Rao VK, Dowdell KC, Dale JK, Dugan F, Pesnicak L, Bi LL, Hoffmann V, Penzak S, Avila NA, Fleisher TA, Puck JM, Straus SE. Pyrimethamine treatment does not ameliorate lymphoproliferation or autoimmune disease in MRL/lpr-/- mice or in patients with autoimmune lymphoproliferative syndrome. *Am J Hematol*. 82:1049-1055, 2007.

Uzel G, Tng E, Rosenzweig SD, Hsu AP, Shaw JP, Horwitz ME, Linton GF, Anderson SM, Kirby MR, Oliveira JB, Brown MR, Fleisehr TA, Law SK, Holland SM. Reversion mutations in patients with leukocyte adhesion deficiency type I (LAD-I). *Blood*. 111:211-219, 2008.

Sportès C, Hakim FT, Memon SA, Zhang H, Chua KS, Brown MR, Fleisher TA, Krumlauf MC, Babb RR, Chow CK, Fry TJ, Engels J, Buffet R, Morre M, Amato RJ, Venzon DJ, Korngold R, Pecora A, Gress RE, Mackall CL. Administration of rhIL-7 in humans increases in vivo TCR repertoire diversity by preferential expansion of naive T cell subsets. *J Exp Med*, 205:1701-1712, 2008.

Elenkov IJ, Kvetnansky R, Hashiramoto A, Bakalov VK, Link AA, Zachman L, Crane M, Jezova D, Rovensky J, Dimitrov MA, Gold PW, Bonini S, Fleisher T, Chrousos GP, Wilder RL. Low- versus high baseline epinephrine output shapes opposite innate cytokine profiles: presence of Lewis and Fischer-like neurohormonal immune phenotypes in humans? *J Immunol*, 181:1737-1745, 2008.

Reviews (2006-2008, out of 27)

Fleisher TA. Back to basics: primary immune deficiencies: windows into the immune system. *Pediatr Rev* 27:363-372, 2006.

Fleisher TA. Evaluation of suspected immunodeficiency. *Adv Expt Med Biol*. 601:291-300, 2007.

Fleisher TA. The autoimmune lymphoproliferative syndrome: an experiment of nature involving lymphocyte apoptosis. *Immunol Res*. 40:87-92, 2008.

Book Chapters (2006-2008, out of 30)

Oliveira JB, Stetler-Stevenson M, Brown M, Fleisher TA. Flow cytometry. In Young N, Gerson S, High K, eds. *Clinical Hematology*, Elsevier, Philadelphia. Pp 1310-1325, 2006.

Oliveira JB and Fleisher TA. Flow cytometry. In Fleisher TA, Frew A, Rich RR, Schroeder H, Shearer WT, Weyand C eds. *Clinical Immunology: Principles and Practice* (3rd edition). Mosby Elsevier, London. Pp 1435-1446, 2008.

Fleisher TA. Evaluation of suspected immunodeficiency. Schlossberg D, ed. *Clinical Infectious Diseases*, Cambridge University Press, New York, NY. Pp. 587-592, 2008.

Chinen J, Fleisher T, Shearer WT. The immune system: an overview. In Adkinson NF Jr, Yunginger JW, Busse WW, Bochner BS, Holgate ST, Simmons FER. *Middleton's allergy: principles and practice* (7th edition). Elsevier. Philadelphia. In press.

Fleisher TA. Basic principles and clinical applications of flow cytometry. In Rodgers G and Young NS, eds. *Bethesda Handbook of Clinical Hematology* 2nd edition. Lippincott Williams & Wilkins, Baltimore. In press.