

CURRICULUM VITAE

NAME: Soo Young L. Yang
OFFICE ADDRESS: Histogenetics LLC
300 Executive Blvd
Ossining, New York 10562
Tel: 914-762-0300
Fax: 914-762-4441
Email: syy@histogenetics.com

CERTIFICATE:

1994-Present Laboratory Director (New York State) for Histocompatibility
1984-1994 Laboratory Director (New York State) for Histocompatibility

EDUCATION:

1976-1981 Biochemistry, PhD, New York University, New York, New York,
1970-1972 Chemistry, MS, Minnesota State University, Winona, Minnesota
1969-1970 Psychology, Minnesota State University, Winona, Minnesota
1959-1963 Education, BA, Ewha Womans University, Seoul, Korea

POSTDOCTORAL TRAINING:

1982-1984 Instructor in Pathology, Division of Immunogenetics Dana-Farber
Cancer Institute and Harvard Medical School Boston, MA
1981-1982 Research Associate, Human Immunogenetics
Sloan-Kettering Cancer Center, New York, NY

POSITIONS AND APPOINTMENTS:

2001-Present Founder and Chairman, Histogenetics LLC, Ossining, NY 10562
1999-2001 Professor, Dept. of Medicine, New York Medical College,
Hawthorne, NY 10532
1996-1999 Member, Memorial Sloan-Kettering Cancer Center
Professor, Immunology Program, Cornell Graduate School of
Medical Sciences, New York, NY
Attending Immunologist, Memorial Hospital for Cancer and Allied
Disease, New York, NY
Head, Laboratory of Biochemical Immunogenetics, Sloan-Kettering
Institute for Cancer Research, New York, NY

1996-1998	Director, Clinical Histocompatibility Laboratory, Memorial Hospital for Cancer and Allied Disease, New York, NY
1984-1996	Associate Director and Head, Clinical Histocompatibility Testing Laboratory, Memorial Hospital for Cancer and Allied Disease, New York, NY
1989-1996	Associate Member, Immunology Program, Sloan-Kettering Institute Associate Professor in Immunology, Immunology Program Cornell Graduate School of Medical Sciences, New York, NY Associate Attending Immunologist, Memorial Hospital for Cancer and Allied Disease, New York, NY Head, Laboratory of Biochemical Immunogenetics, Sloan-Kettering Institute for Cancer Research, New York, NY
1984-1989	Assistant Member, Immunology Program Sloan-Kettering Institute, New York, NY 10021
1984-1984	Assistant Professor in Pathology, Division of Immunogenetics Dana-Farber Cancer Institute and Harvard Medical School Boston, MA

OTHER PROFESSIONAL AND MAJOR VISITING APPOINTMENTS:

2001-2004	Member, Histocompatibility Committee, NMDP, Minneapolis
1992-1995	Consultant, American Red Cross, HLA Laboratory, Rockville, MD
1983-1984	Investigator, Center for Blood Research, Boston, MA
1983-1984	Consultant, Northeast Regional Red Cross Blood Services Boston, MA

MEMBERSHIPS, OFFICES AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES:

1976-Present	American Society for Histocompatibility and Immunogenetics
1987-Present	The American Association for Immunologists
1988-present	American Association for the Advancement of Science
1991-present	European Foundation for Immunogenetics
1996-Present	American Society of Hematology
1984-1987	Chairperson of the HLA Class I Biochemistry Component and Organizing Member for the 10th International Histocompatibility Workshop.
1985-1991	Co-Chairperson of the Biochemistry Component for the 11th International Histocompatibility Workshop

HONORS:

1984	Young Investigator Award, American Society for Histocompatibility and Immunogenetics.
2014	Women in Technology Award for Outstanding contribution in Science Innovation & Technology, Access Advocacy Westchester County Association Action.

PATENTS:

Methods and Reagents for Typing HLA Class I Genes.
Patent US serial # 08\577,081. WO: W97/23645.

PUBLICATIONS (Peer reviewed papers)

1. Ballow M, Shira JE, Harden L, Yang SY, and Day NK. Complete absence of the third component of complement in man. *J. Clin. Inv.* 56: 703-710, 1975.
2. O'Neill GJ, Yang SY, Tegoli Jr, Berger R, and Dupont B. Chido and Rodgers blood groups are distinct antigenic component of human complement C4. *Nature (London)* 272: 668-670, 1978.
3. O'Neill GJ, Yang SY, and Dupont B. Two HLA-linked loci controlling the fourth component of human complement. *Proc. Natl. Acad. Sci. USA* 75: 5165-5169, 1978.
4. Yang SY, Levine LS, Zachman M, New MI, Prader A, Oberfield SE, O'Neill GJ, Pollack MS, and Dupont B. Mapping of the 21-hydroxylase deficiency gene within the HLA linkage group. *Transplant Proc.* 10: 753-755, 1978.
5. Levine LS, Zachman M, New MI., Prader, A., Pollack, M.S., Yang, S.Y., Oberfield, S., and Dupont B. Gene mapping of the 21-hydroxylase deficiency gene within the HLA linkage group. *N Engl J Med* 299: 911-915, 1978.
6. O'Neill GJ, Yang SY, and Dupont B. Chido and Rodgers blood groups: Relationship to C4 and HLA. *Transplant Proc* 10: 749-752, 1978.
7. Pollack MS, Yang SY, O'Neill GJ, O'Reilly RD, Grossbard E, Kapoor N, Good RA, and Dupont B. Bone marrow transplantation using typing glyoxalase I as a tool in histocompatibility testing. *Transplantation* 28: 156-158, 1979.
8. O'Neill GJ, Pollack MS, Yang SY, Levine LS, New MI, and Dupont B. Gene frequencies genetic disequilibrium for the HLA-linked genes, Bf, C2, C4S, C4F, 21-hydroxylase deficiency and GLO-1. *Transplant Proc* 11: 1713-1715, 1979.
9. Yang SY, Coleman PS, Ochs H, and Dupont B. Inheritance and genetic linkage of Transcobalamin II. *Human Genet* 57: 307-311, 1981.
10. O'Neill GJ, Minitier P, Yang SY, Dupont B, and Pollack MS. The BF locus and HLA: Rare alleles of BF coding for functionally active and in active Bf products. *Human Immunol* 5: 239-243, 1982.
11. Yang SY, Coleman PS, and Dupont B. The biochemical and genetic basis for the microheterogeneity of human R-type vitamin B12 binding proteins. *Blood* 59: 747-755, 1982.
12. Morishima Y, Kobayashi M, Yang SY, Collins NH, Hoffman MK, and Dupont B. Functional characteristics of human T lymphocytes and their quantitative expression of a T cell antigen defined by monoclonal antibody 4A. *J Immunol* 129: 1091-1098, 1982.
13. Gazit E, Gothelf Y, Gil R, Orgard S, Pitman T, Watson A., Yang SY, and Yunis EJ. Alloantibodies to PHA-activated lymphocytes detect human Qa-like antigens. *J Immunol* 132(1): 165-169, 1984.

14. Yang SY, Morishima Y, Collins NH, Alton T, Pollack MS, Yunis EJ, and Dupont B. Comparison of one dimensional IEF patterns for serologically detectable HLA-A and B allotypes. *Immunogenetics* 19: 217-231, 1984.
15. Orgard S, Yang SY, Gazit E, Relias V, Zaiger R, Lysin S, and Yunis EJ. Expression of Extra class I major histocompatibility antigens on T-cell acute lymphoblastic leukemia (ALL) lymphoblasts. *Human Immunology* 12: 133-141, 1985.
16. Yang SY, Chang A, Olivero R, Relias V, and Yunis EJ. IEF patterns of HLA-B13 antigens from Orientals and Caucasians. *Immunogenetics* 21: 125-134, 1985.
17. Brenner MB, Mclean J, Yang SY, Van der Poel .1.1, Pious D, and Strominger J. Clonal lymphocyte recognition of the fine structure of the HLA-A2 molecule. *J Immunol* 135: 384-390, 1985.
18. Safai B, Johnson KG, Myskowsky PL, Koziner B, Yang SY, Cunningham-Rundles S, Godbold JH, and Dupont B. The natural history of Kaposi's sarcoma in the Acquired Immunodeficiency Syndrome. *Ann Intern Med* 103: 744-750, 1985.
19. Yang SY, Chouaib S, and Dupont B. A common pathway for T-lymphocyte activation. *J Immunol* 137: 1097-1100, 1986.
20. Eynon EE, Yang SY, Cronin CR, Alosco SM, Alper CA, and Yunis EJ. Characterization of HLA Bw73 by serology and one-dimensional isoelectric focusing patterns. *Human Immunol.* 16: 356-363, 1986.
21. Kosinski S, Hammerling U, and Yang SY, Human monoclonal antibody to an HLA-DRw53 (MT3-like) epitope on class II antigens. *Tissue Antigens* 28: 150-162, 1986.
22. Kosinski S, Yang SY, Ferrara GB, and Hammerling UA. Human monoclonal antibody recognizing a determinant shared by a group of HLA-B locus antigens associated with HLA-Bw6. *Immunogenetics* 26: 120-122, 1987.
23. Kosinski S, Ferrara GB, Yang SY, and Hammerling UA. Human monoclonal antibody against HLA-A25. *Tissue Antigens* 29: 177-183, 1987.
24. Dupont, B., Flomenberg, N., and Yang, S.Y. Alloantigens stimulating graft versus host disease. *Transplant. Proc.* 19:48-51, 1987.
25. Yang SY, Rhee S, Welte K, and Dupont.B. Differential in vitro activation of CD8-CD4+ and CD4-CD8+ T lymphocytes by combinations of anti-CD2 and anti-CD2 and anti-CD3 antibodies. *J Immunol* 140: 2115-2120, 1988.
26. Mizuno S, Trapani JA, On HT, Dupont B, and Yang SY. Isolation and nucleotide sequence of a cDNA clone encoding a novel HLA class I gene. *J Immunol* 140:4024-4030, 1988.
27. Kosinski S, Yang SY, Ferrara GB, and Hammerling UA. Supertypic HLA class II determinant shared by DR1 and DRw9 and cross reactive with DR2, defined by human monoclonal antibody. *Hum Immunol* 21: 221-231, 1988.
28. Turco MC, DeFelice M, Corbo L, Giarrasso PC, Yang SY, Ferrone S, and Venuta S. Differential modulation of anti HLA class I monoclonal antibodies of T cell proliferation induced via CD2 and CD3 pathway. *J Immunol* 141: 2275-2281, 1988.

29. Yang SY., Denning SM, Mizuno S, Dupont B, and Haynes BF. A novel activation pathway for mature thymocytes: Co-stimulation of CD2 [T,p50] and CD28 [T,p44] induces autocrine IL 2-IL 2 receptor mediated cell proliferation. *J Exp Med* 168: 1457-1468, 1988.
30. Trapani JA, Mizuno S, Kang SH, Yang SY, and Dupont B. Molecular mapping of a new public HLA class I epitope shared by all HLA-B and HLA-C antigens and defined by a monoclonal antibody. *Immunogenetics* 29: 25-30, 1989.
31. Kato K, Dupont B, and Yang SY. Localization of nucleotide sequence which determines Mongoloid subtype of HLA-B13. *Immunogenetics* 29: 117-120, 1989.
32. Mizuno S, Kang S, Lee H, Trapani JA, and Yang SY. Isolation and expression of a cDNA clone encoding HLA-Cw6 antigen: Unique characteristics of HLA-C encoded gene products. *Immunogenetics* 29: 25-32, 1989.
33. Keever CA, Flomenberg N, Small T, Brochstein J, Collins N, Yang SY, Insel R, Dupont B, and O'Reilly R. Loss of tolerance associated with disappearance of B cells in a patient sequentially transplanted with paternal and maternal bone marrow for the treatment of severe combined immunodeficiency disease. *Hum Immunol* 26: 27-38, 1989.
34. Kato K, Trapani JA, Alloppeno J, Dupont B, and Yang SY. Molecular analysis of the serologically defined HLA-Aw19 antigens: A genetically distinct family of HLA-A antigens comprising A29, A31, A32 and Aw33, but not A30. *J Immunol* 143: 3371-3378, 1989.
35. Hammerling GJ, Chamberlin JW, Dill O, Yang SY, Dupont B, Weissman S, and Hammerling U. Self-tolerance to HLA in HLA-transgenic mice, focuses antibody responses to allelic differences and evokes antibodies of narrow specificity. *Proc Natl Acad Sci USA* 87: 235-239, 1990.
36. Speiser PW, Laforgia L, Kato K, Pareira J, Khan R, Yang SY, Whorwood C, White PC, Elias S, Schriock E, Simpson JL, Tasimi M, Najjar J, May S, Mills G, Crawford C, and New M. First trimester prenatal treatment and molecular genetic diagnosis of congenital adrenal hyperplasia (21-hydroxylase deficiency). *J Clin Endocri and Metabol* 70: 838-848, 1990.
37. Kernan NA, Bordignon C, Heller G, Cunningham I, Castro-Malaspina H, Shank B, Flomenberg N, Burns J, Yang SY, Black P, Collins NH, and O'Reilly R. Graft failure following T cell depleted HLA identical marrow transplants for leukemia I: Analysis of risk factors and results of secondary transplants. *Blood* 74: 2227-2236, 1990.
38. Jin Z and Yang SY. Activation of CD8+ T cells by HLA class II-deficient B-LCLs derived from patients with bare lymphocyte Syndrome. *Tissue Antigens* 35: 136-143, 1990.
39. Kulova L., Yang SY, and Dupont B. Identification of the anti-CD3-unresponsive subpopulation of CD4+, CD45RA+ peripheral T lymphocytes. *J Immunol* 145: 2035-2043, 1990.
40. Tahara T, Yang SY, Khan R, Abish S, Hammerling G, and Hammerling U. HLA-antibody responses in HLA-class I transgenic mice. *Immunogenetics* 32: 351-360, 1990.
41. Levine S, Chen YX, Agocha B, Alloppenna J, Welt K, Armstrong D, Yang S.Y., and Evans, R.L. Differential modulation of the CD2 and CD3 T cell activation pathways by a monoclonal antibody to Leu-13. *Cell Immunology* 132: 366-376, 1991.