

LEONARD D. SHULTZ, PH.D.

The Jackson Laboratory
Bar Harbor, ME 04609
Tel. 207-288-6405
Email: lenny.shultz@jax.org

Curriculum Vitae

BORN: April 16, 1945; Boston, MA

EDUCATION:

1967 B.A., Northeastern University
1972 Ph.D., University of Massachusetts

RESEARCH EXPERIENCE:

1967-1968 Research Assistant, Tufts University School of Medicine
1968-1970 Graduate Teaching Assistant, University of Massachusetts
1970-1971 Lecturer, University of Massachusetts
1971-1972 Predoctoral Trainee, University of Massachusetts, US Public Health Services
1972-1974 Postdoctoral Fellow, The Jackson Laboratory
1974-1976 Research Associate, The Jackson Laboratory
1976-1979 Assistant Professor, The Jackson Laboratory
1977-present Faculty, The Jackson Laboratory/Johns Hopkins Annual Course in Medical and Mammalian Genetics
1979-1991 Associate Professor, The Jackson Laboratory
1981 Cooperating Professor in Zoology, University of Maine, Orono
1984 Faculty of Bar Harbor Medical Symposium
1988-present Graduate Faculty Member, University of Maine
1991-1995 Member, Maine Legislative Committee/American Association on Cancer Research
1991-present Professor, The Jackson Laboratory
1995-present Research Professor, Dept. of Medicine, University of Massachusetts Medical School
1998-present Research Professor of Graduate School of Biomedical Sciences, University of Massachusetts Medical School
2006-2007 Assistant Clinical Professor, Department of Immunology, University of Connecticut, School of Medicine, Farmington
2008-present Adjunct Assistant Professor, Department of Immunology, University of Connecticut, School of Medicine, Farmington

RESEARCH INTERESTS:

Development and regulation of the immune system in normal and pathologic states:
Immunodeficiency; AIDS; Autoimmunity; Tumor immunology

SOCIETIES:

American Association of Immunologists
American Society for Microbiology
American Diabetes Association
American Association for the Advancement of Science
American Society for Hematology
International Association for Comparative Research on Leukemia and Related Diseases
International Organizing Committee for 6th International Workshop on Immune Deficient
Animals; Chairman, 7th International Workshop on Immune Deficient Animals
Advisory Board of the 1st International Workshop on "Humanized Mice", Member

EDITORIAL BOARD:

1990-present In Vivo
2003-present Experimental Biology and Medicine
2004-present Stem Cell

MANUSCRIPT AND GRANT REVIEWS:

The Journal of Immunology
Proceedings of the National Academy of Sciences, USA
The American Journal of Pathology
The Journal of Gerontology
The Journal of Nutrition
Nature
Science
Nature Genetics
Experimental Hematology
Medical Research Council of Canada
March of Dimes
US-Israel Bi-National Science Foundation
National Science Foundation
National Institutes of Health
The Arthritis Foundation
Swiss National Fund for Scientific Research
The Israel Science Foundation

PUBLICATIONS:

1. Shultz LD, Wilder MS. 1971. Cytotoxicity of rabbit blood for *Listeria monocytogenes*. *Infect Immun* 4: 703-708.
2. Shultz LD, Wilder MS. 1973. Fate of *Listeria monocytogenes* in normal rabbit serum. *Infect Immun* 7: 289-297.
3. Green MC, Shultz LD. 1975. Motheaten, an immunodeficient mutant of the mouse. I. Genetics and pathology. *J Hered* 66: 250-258.
4. Green MC, Shultz LD, Nedzi LA. 1975. Abnormal nuclear morphology of leukocytes in the mouse mutant ichthyosis. *Transplantation* 20: 172-175.
5. Shultz LD, Bailey DW. 1975. Genetic control of contact sensitivity in mice: Effect of H-2 and non-H-2 loci. *Immunogenetics* 1:570-583.

6. Shultz LD, Green MC. 1976. Motheaten, an immunodeficient mutant of the mouse. II. Depressed immune competence and elevated serum immunoglobulins. *J Immunol* 116: 936-943.
7. Shultz LD, Heiniger HJ, Eicher EM. 1978. Immunopathology of streaker mice, a remutation to nude in the AKR/J strain. In: *Comparative and Developmental Aspects of Immunity and Disease*, Gershwin ME, Cooper EL (eds). New York, Pergamon Press, pp. 211-222.
8. Shultz LD, Sidman CL, Unanue ER. 1978. Immunologic dysfunction in "motheaten" mice: Immunodeficiency, autoimmunity and hyperimmunoglobulinemia in a short-lived mutant. In: *Animal Models of Comparative and Developmental Aspects of Immunity and Disease*, Gershwin ME, Cooper EL (eds). New York, Pergamon Press, pp. 260-269.
9. Shultz LD, Zurier RB. 1978. "Motheaten": A single gene model for stem cell dysfunction and early onset autoimmunity. In: *Genetic Control of Autoimmune Disease*, Rose NR, Bigazzi P, Warner N (eds). New York, Elsevier, pp. 229-240.
10. Sidman CL, Shultz LD, Unanue ER. 1978. The mouse mutant "motheaten." II. Functional studies of the immune system. *J Immunol* 121: 2399-2404.
11. Sidman CL, Shultz LD, Unanue ER. 1978. The mouse mutant "motheaten". I. Development of lymphocyte populations. *J Immunol* 121: 2392-2398.
12. Bedigian HG, Shultz LD, Meier H. 1979. Expression of endogenous murine leukaemia viruses in AKR/J streaker mice. *Nature* 279: 434-436.
13. Shultz LD. 1979. Mutant mouse genes affecting development of the immune system. In: *Inbred and Genetically Defined Strains of Laboratory Animals*, Altman PL, Katz DD (eds). Baltimore, MD, Federation of American Societies for Experimental Biology, pp. 67-70.
14. Clark EA, Shultz LD, Pollack SB. 1981. Mutations in mice that influence natural killer (NK) cell activity. *Immunogenetics* 12: 601-613.
15. Grzanna R, Shultz LD. 1982. The contribution of mast cells to the histamine content of the central nervous system: a regional analysis. *Life Sci* 30: 1959-1964.
16. Johnson DA, Shultz LD, Bedigian HG. 1982. Immunodeficiency and reticulum cell sarcoma in mice segregating for HRS/J and SJL/J genes. *Leuk Res* 6: 711-720.
17. Shultz LD, Bedigian HG, Heiniger HJ, Eicher EM. 1982. The congenitally athymic streaker mouse. In: *Proceedings of the Third International Workshop on Nude Mice*, Reed ND (ed). New York, Fischer Verlag, pp. 33-39.
18. Shultz LD, Sweet HO, Davisson MT, Coman DR. 1982. 'Wasted', a new mutant of the mouse with abnormalities characteristic to ataxia telangiectasia. *Nature* 297: 402-404.
19. Leiter EH, Beamer WG, Shultz LD. 1983. The effect of immunosuppression on streptozotocin-induced diabetes in C57BL/KsJ mice. *Diabetes* 32: 148-155.
20. Shultz LD, Bailey CL, Coman DR. 1983. Hematopoietic stem cell function in motheaten mice. *Exp Hematol* 11: 667-680.
21. Shultz LD, Bedigian HG, Carlson GA, Coman DR. 1983. Effect of congenital athymia on expression of preleukemic cells. In: *Leukemia Reviews International, Advances in Comparative Leukemia Research*, Yohn DS (ed). New York, Marcel Dekker, pp. 225-226.
22. Nordeen SK, Schaefer VG, Edgell MH, Hutchison CA, 3rd, Shultz LD, Swift M. 1984. Evaluations of wasted mouse fibroblasts and SV-40 transformed human fibroblasts as models of ataxia telangiectasia in vitro. *Mutat Res* 140: 219-222.
23. Shultz LD, Bailey CL, Carlson GA, Coman DR, Evans R, Outzen HC. 1984. Potential of "viable motheaten" mice for the growth of tumor xenografts. In: *Immune-Deficient Animals*, Sordat B (ed). Basel, Karger, pp. 224-229.
24. Shultz LD, Coman DR, Bailey CL, Beamer WG, Sidman CL. 1984. "Viable motheaten," a new allele at the motheaten locus. I. Pathology. *Am J Pathol* 116: 179-192.
25. Sidman CL, Marshall JD, Masiello NC, Roths JB, Shultz LD. 1984. Novel B-cell maturation factor from spontaneously autoimmune viable motheaten mice. *Proc Natl Acad Sci U S A* 81: 7199-7202.

26. Sidman CL, Marshall JD, Shultz LD, Gray PW, Johnson HM. 1984. Gamma-interferon is one of several direct B cell-maturing lymphokines. *Nature* 309: 801-804.
27. Gershwin ME, Shultz L. 1985. Mechanisms of genetically determined immune dysfunction. *Immun Today* 6: 36-37.
28. Outzen HC, Corrow D, Shultz LD. 1985. Attenuation of exogenous murine mammary tumor virus virulence in the C3H/HeJ mouse substrain bearing the Lps mutation. *J Natl Cancer Inst* 75: 917-923.
29. Sidman CL, Shultz LD, Evans R. 1985. A serum-derived molecule from autoimmune viable motheaten mice potentiates the action of a B cell maturation factor. *J Immunol* 135: 870-872.
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34. Leiter EH, Prochazka M, Coleman DL, Serreze DV, Shultz LD. 1986. Genetic factors predisposing to diabetes susceptibility in mice. In: *Immunology in Diabetes*, Mollnar GD, Jaworski MA (eds). New York, Elsevier, pp. 28-38.
35. Sidman CL, Shultz LD, Hardy RR, Hayakawa K, Herzenberg LA. 1986. Production of immunoglobulin isotypes by Ly-1+ B cells in viable motheaten and normal mice. *Science* 232: 1423-1425.
36. Tezuka H, Inoue T, Noguti T, Kada T, Shultz LD. 1986. Evaluation of the mouse mutant "wasted" as an animal model for ataxia telangiectasia. I. Age-dependent and tissue-specific effects. *Mutat Res* 161: 83-90.
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41. Shultz LD. 1987. Pleiotropic mutations causing abnormalities in the murine immune system and the skin. *Curr Probl Dermatol* 17: 236-250.
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53. Bosma GC, Davisson MT, Ruetsch NR, Sweet HO, Shultz LD, Bosma MJ. 1989. The mouse mutation severe combined immune deficiency (scid) is on chromosome 16. *Immunogenetics* 29: 54-57.
54. Haar JL, Popp JD, Shultz LD. 1989. Defective in vitro migratory capacity of bone marrow cells from viable motheaten mice in response to normal thymus culture supernatants. *Exp Hematol* 17: 21-24.
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62. Walzer PD, Kim CK, Linke MJ, Pogue CL, Huerkamp MJ, Chrisp CE, Lerro AV, Wixson SK, Hall E, Shultz LD. 1989. Outbreaks of *Pneumocystis carinii* pneumonia in colonies of immunodeficient mice. *Infect Immun* 57: 62-70.
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65. Serreze DV, Leiter EH, Shultz LD. 1990. Transplantation analysis of B cell destruction in (NOD x CBA)F1 mouse bone marrow chimeras. *Diabetologia* 33: 84-92.
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67. Sprecher E, Becker Y, Kraal G, Hall E, Shultz LD. 1990. Effect of genetically determined immunodeficiency on epidermal dendritic cell populations in C57BL/6J mice. *Arch Dermatol Res* 282: 188-193.
68. Sundberg JP, Beamer WG, Shultz LD, Dunstan RW. 1990. Inherited mouse mutations as models of human adnexal, cornification, and papulosquamous dermatoses. *J Invest Dermatol* 95: 62S-63S.
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71. Croitoru K, Stead RH, Bienenstock J, Shultz LD, Ernst PB. 1991. T cell receptor expression is not required for the localization and differentiation of intraepithelial lymphocytes. *Immunol Res* 10: 293-295.
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76. McCune JM, Kaneshima H, Krowka J, Namikawa R, Outzen H, Peault B, Rabin L, Shih C, Yee E, Lieberman M, Weissman IL, Shultz LD. 1991. The SCID-hu mouse: A small animal model for HIV infection and pathogenesis. *Ann Rev Immunol* 9:399-429.
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