LEONARD M. MILSTONE, M.D.

Born: October 19, 1944 in Newark, New Jersey

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Education: Hopkins Grammar School, New Haven, Connecticut 1962

 Yale College, New Haven, Connecticut B.A., Chemistry, 1966

 Yale University School of Medicine, New Haven, Connecticut M.D., 1970

 Training: University of Oregon Medical School Hospitals, Portland, Oregon

 Intern, medicine 1970‑1971

 Resident, dermatology 1971‑1972

 National Institute Child Health and Human Development - USPHS

 Laboratory Molecular Genetics, Bethesda, Maryland

 Research Associate, with Joram Piatigorsky 1972‑1975

 Yale‑New Haven Hospital

 Resident, Dermatology 1975‑1977

 University of Chicago, sabbatical with Elaine Fuchs 1995

Academic Appointments:

 Yale University School of Medicine, Department of Dermatology

 Assistant Professor 1977‑1984

 Associate Professor 1984‑1993

 Professor 1993-2007

 Professor Emeritus 2007-present

 Research Scientist 2007-present

 Hospital Appointments:

 Yale‑New Haven Hospital

 Attending Physician 1978‑present

 VA Medical Center, West Haven, Connecticut

 Staff Physician 1984-2007

 Chief, Dermatology Service 1988‑2003

Board Certification and Licensure:

 National Board of Medical Examiners 1971

 American Board of Dermatology 1978

 State of Connecticut (19995) 1978‑present

Professional Honors:

 Anna Fuller Faculty Award 1977‑1980

 NIADD ‑ Clinical Investigator Award 1977‑1980

 VA ‑ Clinical Investigator Award 1981‑1984

 Dozor Visiting Professor ‑ Ben Gurion University, Beersheva, Israel 1990

 Distinguished Service Award, Foundation for Ichthyosis and Related

 Skin Types 1995

Editorial Experience:

 Yale Journal of Biology and Medicine, Assoc. Editor 1981-1983 Annals of New York Academy of Sciences, Symposium on Endocrine,

 Metabolic and Immunologic Functions of Keratinocytes

 Editor and Symposium Chair 1988

 Methods in Enzymology, Vol. 190, Retinoids, Editorial Board 1990

 Journal of Investigative Dermatology, Associate Editor 1992-2007

 Journal of Dermatologic Science, Editorial Board 2003-present

Current Research Interests:

 Keratinocyte biology

 - gene targeting in keratinocytes

 - ichthyosis

 - dermatoremediation of iron overload

 Clinical effects of retinoids on skin and bones

Committees:

 **Yale University**

 Ezra Stiles College, Fellow 1984-present

 Health Professional Advisory Board 1996

 **Yale Medical School**

 Curriculum Committee 1985-1990

 Director for Medical Studies, Dermatology 1985-1990

 Hull Award Scientific Review Committee 1989-1995

 Term Appointments and Promotions Committee 1997-2000

 **VA Medical Center**

 Clinical Executive Board 1988-2003

 Tumor Board 1991-1998

 Research and Development Committee 1984-1995

 Chair 1993-1995

 **Society for Investigative Dermatology**

 Public Relations Committee 1989-1992

 Program Committee 1996-2001

 Chair 2001

 Strategic Planning Committee 2003-present

 **American Academy of Dermatology**

 Government Medicine Task Force 1994-1998

 Consensus Conference on Safe and Optimal Use of Isotretinoin 2002

 **Dermatology Foundation**

Medical and Scientific Committee 2001-2004

 **Foundation for Ichthyosis and Related Skin Types (F.I.R.S.T.)**

 Medical Advisory Board 1982-present

 Chair 1989-2016

 Board of Directors 1997-2006

 Vice President 2000-2006

 **National Registry for Ichthyosis and Related Disorders**

 Advisory Committee 1994-present

 **Pachyonychia Congenita Project**

 Medical and Scientific Advisory Board 2004-present

Societies (current):

 American Academy of Dermatology

 American Association for the Advancement of Science

 American Dermatological Association

 American Society for Human Genetics

 Sigma Xi

 Society for Investigative Dermatology

 Society for Molecular Medicine

 Society for Pediatric Dermatology

U.S. Patents:

 Milstone,L.M. and Schwartz, P.M. Compositions and Methods for Treating

 Cutaneous Hyperproliferative Disorders. Issued September 7, 1993.

 Patent Number 5,242,921.

 Milstone, L.M. and Schwartz, P.M. Method for the Treatment of Hyperproliferative Disorders. Issued July 5, 1994. Patent Number 5,326,764.

Invited Lectureships (selected):

 Department of Dermatology, University of Oregon Medical School 7/81

 Department of Dermatology, University of Washington 7/81

 Cutaneous Biology Foundation, Salishan, Oregon 10/82

 Department of Dermatology, University of Pennsylvania 1/83

 McArdle Laboratories, University of Wisconsin 9/83

 Department of Dermatology, Northwestern University Medical School 11/83

 Department of Dermatology, Columbia University 1/85

 Gordon Research Conference on Keratinization and 8/85

 Epithelial Differentiation - Tilton, N.H.

 Society for Pediatric Dermatology. Annual Meeting, Salishan, Or. 8/88

 Department of Pathology and Oral Biology, SUNY ‑ Stony Brook 2/89

 Howard Fox Guest Lecturer, New York University 10/90

 Department of Dermatology

 Japanese Keratinization Study Group - Tokyo, Osaka, Kyoto, Hakone, Japan 7/92

 F.I.R.S.T. - National Family Conference every other year 1984-present

 Center for the study of emerging diseases - Jerusalem, Israel 5/99

 International Symposium on Nutritional Aspects of Osteoporosis - Lausanne, Switz. 5/00

 Department of Dermatology, SUNY Downstate, Brooklyn, NY 2/01

 Department of Dermatology, Thomas Jefferson University 4/01

 Housatonic Museum of Art, Bridgeport, CT 2/03

 Japanese Dermatological Association, Matsuyama, Japan 10/03

 F.I.R.S.T. – National Family Conference, Kansas City, MO 7/04

 Pachyonychia Congenita Project - National Family Conference, Niagara Falls, Ont. 8/05

 Netzwerk Für Ichthyose – Symposium, Muenster, Germany 10/05

 Moss Lectures, University of Wisconsin 8/07

 Ottawa Dermatological Society 4/14

**TEACHING**

Yale University School of Medicine

Cell Biology Clinical Correlation (1st year) 1 lecture 1991-1994, 1998-1999, 2008

Skin Function and Physiology (in “Molecules to Systems”, 1st year) 2002-2011

Introduction to Dermatology (2nd year) 1 lecture 1985-1990

Dermatology elective - 1 clinic per week per session 1981-1999

 - 1 lecture per session 1981-2004

Residents’ journal club supervisor 1988-present

Seminars in Molecular Medicine (Investigative Medicine Program) 1 lecture 2000-2002

Yale-College

 College Seminar Program - CSES/PC 350a

 Genetic Engineering: The science, practice and ethics

 of moving genes to improve nature Fall term 1998,1999

Yale Institute for Social and Policy Studies

 Workshop on Genetically Engineered Plants, 2001-present

 Founder and chair 2001-2002

**GOVERNMENT REVIEW PANELS**

Special Emphasis Panels

 NICHHD - 4/98

 NIAMS - 7/99; 10/02; 11/06; 12/06; 3/07; 7/07; 3/08; 7/08; 3/09; 5/10;

 11/10

 CSR - 3/02; 7/02

 NCATS 10/14

NIH-GMA-1 10/02

**FOUNDATION SCIENTIFIC REVIEW PANELS**

Psoriasis Foundation 2000-2003

Dermatology Foundation 2001-2004

F.I.R.S.T. (chair) 2007-present

European Research Projects on Rare Diseases 2007; 2009

Francaise Myopathies 2007,

Telethon (Italian Genetic Disease Research Found.) 2006

German Federal Ministry for Education and Research 2014

**BIBLIOGRAPHY**

Original Articles:

 1. Chen HR, Galston AW, Milstone LM. Conversion of isatin to isatate as related to growth promotion in Avena coleoptile and Pisum stem sections. Plant Physiol 41:1485‑1488, 1966.

 2. Milstone LM, Waksman BH. Release of virus inhibitor from tuberculin‑sensitized peritoneal

 cells stimulated by antigen. J Immunol 105:1068‑1071, 1970.

 3. Piatigorsky J, Rothchild SS, Milstone LM. Differentiation of lens fibers in explanted embryonic chick lens epithelia. Develop Biol 34:334‑345, 1973.

 4. Milstone LM, Piatigorsky J. Rates of protein synthesis in explanted embryonic lens epithelia: differential stimulation of δ‑crystallin synthesis. Develop Biol 43:91‑100, 1975.

 5. Milstone LM, Zelenka P, Piatigorsky J. δ‑Crystallin mRNA in chick lens cells: mRNA accumulates during differential stimulation of δ‑crystallin synthesis in cultured cells. Develop Biol 48:197‑204, 1976.

 6. Milstone LM, Piatigorsky J. δ‑Crystallin gene expression in embryonic chick lens epithelia cultured in the presence of insulin. Exp Cell Res 105:9‑14, 1977.

 7. Milstone LM, McGuire J. Different polypeptides form the intermediate filaments in bovine hoof and esophageal epithelium and in aortic endothelium. J Cell Biol 88:312‑316, 1981.

 8. Milstone LM. Isolation and characterization of two polypeptides that form intermediate

 filaments in bovine esophageal epithelium. J Cell Biol 88:317‑ 322, 1981.

 9. McGuire J, Fedarko N, Johanssen E, LaVigne JF, Lyons G, Milstone LM, Osber M. The influence of retinoids on cultivated human keratinocytes. J Amer Acad Dermatol 6:630‑639, 1982.

10. Milstone LM, McGuire J, LaVigne JF. Retinoic acid causes premature desquamation of cells from confluent cultures of stratified squamous epithelia. J Invest Dermatol 79:253‑260, 1982.

11. Milstone LM, McGuire J, Ablow RC. Premature epiphyseal closure in a child receiving oral

 13‑cis retinoic acid. J Amer Acad Dermatol 7:663‑666, 1982.

12. Milstone LM. Population dynamics in cultures of stratified squamous epithelia. J Invest Dermatol 81:69‑74s, 1983.

13. Canellakis ZN, Milstone LM, Marsh LL, Young PR, Bondy PK. GABA from putrescine is bound in macromolecular form in keratinocytes. Life Sci 33:599‑603, 1983.

14. Milstone LM, Braverman IM, Lucky P, Fleckman P. Classification and therapy of Atrophie

 Blanche. Arch Dermatol 119:963‑969, 1983.

15. Stewart AF, Battaglini J, Milstone LM. Hypocalcemia‑induced pustular psoriasis of von Zumbusch: new experience with an old syndrome. Ann Int Med 100:677‑680, 1984.

16. Milstone LM, LaVigne JF. 2,3,7,8 tetrachlorodibenzo‑p‑dioxin induces hyperplasia in confluent cultures of human keratinocytes. J Invest Dermatol 82:532‑534, 1984.

17. Stenn K, Milstone LM. Epidermal cell confluence and implications for a two‑step mechanism of wound closure. J Invest Dermatol 83:445‑447, 1984.

18. Milstone LM, LaVigne JF. Heterogeneity of basal keratinocytes: non‑random distribution of thymidine‑labeled basal cells in confluent cultures is not a technical artifact. J Invest Dermatol 84:504‑507, 1985.

19. Merendino JJ, Insogna KL, Milstone LM, Broadus AE, Stewart AF. A parathyroid

 hormone‑like protein from cultured human keratinocytes. Science 231:388‑390, 1986.

20. Wu TL, Insogna KL, Hough LM, Milstone LM, Stewart AF. Skin‑derived fibroblasts respond to human parathyroid hormone‑like adenylate cyclase‑stimulating proteins. J Clin Endocrin Metab 65:105‑109, 1987.

21. Milstone LM. Calcium modulates growth of human keratinocytes in confluent cultures. Epithelia 1:129‑140, 1987.

22. Schwartz PM, Milstone LM. Thymidine phosphorylase in human epidermal keratinocytes. Biochem Pharm 37:353‑355, 1988.

23. Mangin M, Webb AC, Dreyer B, Posillico JT, Ikeda K, Weir EC, Stewart AF, Bander NH , Milstone L, Barton DE, Franke U, Broadus AE. Identification of a cDNA encoding a parathyroid hormone‑like peptide from a human tumor associated with humoral hypercalcemia of malignancy. Proc Natl Acad Sci 85:597‑60l, 1988.

24. Schwartz PM, Kugelman LC, Coifman H, Hough LM, Milstone LM. Human keratinocytes catabolize thymidine. J Invest Dermatol 90:8‑12, 1988.

25. Leffell DJ, Stetz ML, Milstone L, Deckelbaum LI. *In vivo* fluorescence of human skin: a potential marker of photoaging. Arch Derm 124:1514‑1518, 1988.

26. Mangin M, Ikeda K, Dreyer B, Milstone L, Broadus AE. Two distinct tumor‑derived, parathyroid hormone‑like peptides result from alternative ribonucleic acid splicing. Molec Endocrinol 2:1049‑1055, 1988.

27. Milstone LM. Effector functions of epidermal keratinocytes. Annals of NY Acad of Sci 548:1‑3, 1989.

28. Insogna KL, Stewart AF, Ikeda K, Milstone LM. Characterization of a parathyroid

 hormone‑like peptide secreted by human keratinocytes. Annals of NY Acad of Sci 548:146‑159, 1989.

29. Schwartz PM, Reuveni H, Milstone LM. Local and systemic implications of thymidine

 catabolism by human keratinocytes. Annals of NY Acad of Sci 548:115‑124, 1989.

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31. Schwartz PM, Milstone LM. Dipyridamole potentiates the growth‑inhibitory action of methotrexate and 5‑fluorouracil in human keratinocytes *in vitro*. J Invest Dermatol 93:523‑527, 1989.

32. Hotez P, Haggerty J, Hawdon J, Milstone L, Gamble HR, Schad G, Richards F. Infective *Ancylostoma* hookworm larval metalloproteases and their possible functions in tissue invasion and ecdysis. Infection and Immunity 58:3883‑3892, 1990.

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34. Stewart AF, Wu TL, Insogna KL, Milstone LM, Burtis WJ. Immunoaffinity purification of

 parathyroid hormone‑related protein from bovine milk and human keratinocyte‑conditioned medium. J Bone & Mineral Research 6:305-311, 1991.

35. Wu TL, Soifer NE, Burtis WJ, Milstone LM, Stewart AF. Glycosylation of parathyroid

 hormone-related peptide secreted by human epidermal keratinocytes. J Clin Endocrin Metab

 73:1002-1007, 1991.

36. Reuveni H, Bull CO, Landry ML, Milstone LM, Schwartz PM. Antiviral activity of 5-iodo- 2′-deoxyuridine and related drugs in human keratinocytes infected *in vitro* with herpes simplex virus, Type 1. Skin Pharmacol 4:291-297, 1991.

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 199:25-28, 1991.

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39. Orloff JJ, Ganz MB, Ribaudo AE, Burtis WJ, Reiss M, Milstone LM, Stewart AF. Analysis

 of PTHrP binding and signal transduction mechanisms in benign and malignant squamous cells. Am J Physiol 262:599-607, 1992.

40. Hotez PF, Narasimham S, Haggerty J, Milstone L, Bhopale V, Schad GA, Richards FF. A hyaluronidase from infective *Ancylostoma* hookworm larvae and its possible function as a virulence factor in tissue invasion and in cutaneous larva migrans. Inf Immun 60:1018-1023, 1992.

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 Broadus AE, Philbrick WM, Stewart AF. Parathyroid hormone-related protein: evidence for secretion of a novel mid-region fragment by three different cell types. J Biol Chem 267:18236-18243, 1992.

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45. Kugelman LC, Ganguly S, Haggerty JG, Weissman SM, Milstone LM. The core protein of epican, a heparan sulfate proteoglycan on keratinocytes, is an alternative form of CD44. J Invest Dermatol 99:887-891, 1992.

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 129:648, 1993.

47. Petty EM, Spiesel SZ, Seashore M, Braverman IM, Smith LT, Byers PH, Milstone LM. Dermatosparaxis in humans: a case report and description of the newly recognized phenotype. Arch Dermatol 129:1310-1315, 1993.

48. Haggerty JG, Bretton RH, Milstone LM. Response of stratified cultures of human

 keratinocytes to disruption of proteoglycan synthesis by p-nitrophenyl-ß-D-xylopyranoside. J Cell Physiol 158:39-46, 1994.

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51. Schwartz PM, Barnett S, Milstone LM. Keratinocytes differentiate in response to inhibitors of deoxyribonucleotide synthesis. J Dermatol Sci 9:129-135, 1995.

52. Herbold KW, Zhou J, Haggerty JG, Milstone LM. CD44 expression on epidermal

 melanocytes. J Invest Dermatol, 106:1230-1235, 1996.

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 localization of the thymidine phosphorylase/platelet-derived endothelial cell growth factor in skin and epidermal tumors. J Cutan Pathol 26:287-294, 1999.

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 receiving isotretinoin for cystic acne. Arch Dermatol 135:961-966, 1999.

56. Gruen AB, Zhou J, Morton KA, Milstone LM. Photodegraded nifedipine stimulates uptake

 and retention of iron in human epidermal keratinocytes. J Invest Dermatol 116:774-777, 2001.

57. Cserhalmi-Friedman PB, Milstone LM, Christiano AM. Diagnosis of autosomal recessive

 lamellar ichthyosis with mutations in the TGM1 gene. Brit J Dermatol 144:726-730, 2001.

58. Connors JB, Rahil AK, Smith FJD, McLean WHI, Milstone LM. Delayed-onset

 pachyonychia congenita associated with a novel mutation in the central 2B domain of keratin

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 2004.

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 Milstone LM, van Steensel MAM, Munro CS, O’Toole EA, Celebi JT, Kansky A, Lane EB.

 Clinical and pathological features of pachyonychia congenita. J Invest Dermatol Symp Proc

 10:3-17, 2005.

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 keratin. J Invest Dermatol Symp Proc 10:47-61, 2005.

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 of systemic iron overload. J Invest Dermatol 125:1200-1205, 2005.

64. Milstone LM, Adams BD, Zhou J, Bruegel-Sanchez V, Shofner J. Stratum-specific

 expression of human transferrin receptor increases iron in mouse epidermis. J Invest Dermatol

 126:648-652, 2006.

65. Demerjian M, Crumrine D, Milstone LM, Williams ML, Elias PM. Barrier dysfunction and

 pathogenesis of neutral lipid storage disease with ichthyosis (Chanarin-Dorfman syndrome). J

 Invest Dermatol 6: 2032-2038, 2006

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 McLean WHI, Kaspar RL. Single Nucleotide-Specific SiRNA Targeting in a Dominant

 Negative Skin Model. J Invest Dermatol 128:594-605, 2008

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 DR, McLean WHI, Kaspar RL. Therapeutic siRNAs for dominant skin disorders including

 pachyonychia congenita. J Dermatol Sci 51:151-157, 2008

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 Hansen CD, Eliason MJ, Srivatsa GS, Kornbrust DJ, Smith FJD, McLean WHI, Milstone

 LM, Kaspar RL. First-in human Mutation-targeted siRNA Phase Ib Trial of an Inherited

 Skin Disorder. Molec Therapy 18:442-446, 2010

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 Williams ML, Nopper AJ, Bree A, Milstone LM, Lifton RP. Mitotic recombination in

 patients with ichthyosis causes reversion of dominant mutations in *KRT10*.

 Science, 330: 94-97, 2010

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 McLean WH, Hull PR, Smith FJ. A large multinational study in pachyonychia congenita. J

 Invest Dermatol 131: 1018-1024, 2011.

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 Contag CH, Leake D, Milstone LM, Kaspar RL. Development of quantitative molecular

 clinical endpoints for siRNA in clinical trials. J Invest Dermatol 131:1029-1036, 2011.

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 Hu R-H, Liang Y, Kirkiles-Smith N, Prauznitz MR, Milstone LM, Contag CH, Kaspar RL.

 Visualization of plasmid delivery to keratinocytes in mouse and human epidermis. Sci

 Reports 1:158 1-9, 2011

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 stores of iron. J Dermatol Sci 67: 9-13, 2012

74. Lara MF, González-González E, Speaker TJ, Hickerson RP, Leake D, Milstone LM, Contag

 CH, Kaspar RL. Inhibition of CD44 gene expression in human skin models using self-

 delivery siRNA administered by dissolvable microneedle arrays. Molec Ther 23:816-823,

 2012

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 of oral retinoids in the treatment of pachyonychia congenita. Journal of the American Academy

 of Dermatology 66:e193-199, 2012

76. Milstone LM, Miller K, Haberman M, Dickens J. Incidence of moderate to severe ichthyosis

 in the United States. Arch Dermatol 148:1080-1081, 2012

77. Rogers FA, Hu R-H, Milstone LM. Local delivery of gene-modifying triplex-forming

 molecules to epidermis. J Invest Dermatol 133:685-691, 2013

78. Wilson NJ, O’Toole E, Milstone LM, Hansen CD, Shepherd AA, Al-Asadi E, Schwartz ME,

 McLean WHI, Sprecher E, Smith FJD. The molecular genetic analysis of the expanding

 pachyonychia congenital case collection. Brit J Dermatol 171:3430355, 2014

79. Choate KA, Lu, Y, Zhou J, Elias PM, Zaidi S, Paller AS, Farhi A, Nelson-Williams C,

 Crumrine D, Milstone LM, Lifton RA. Frequent somatic reversion of KRT1 mutations in

 ichthyosis with confetti. J Clin Invest 125:1703-1707, 2015

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 Flores MA, Speaker TJ, Vermeulen, A, Bravo AA, Bruckner AL, Milstone LM, Schwartz

 ME, Rice RH, Kaspar RL. Gene expression profiling in pachyonychia congenital skin.

 J Dermatol Sci 77:156-175, 2015

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 for a calcium-regulated protein interaction network by profilaggrin in human epidermis.

 J Invest Dermatol 135:1801-1809, 2015

82. Marin E, Jozsef L, Di Lorenzo A, Held K, Luciano A, Melendez J, Milstone L, Velazquez H,

 Sessa W. The protein acyl transferase ZDHHC21 modulates α1 adrenergic receptor function

 and regulates hemodynamics Arterioscl Thromb Vasc Biol, 36:370-379, 2016

83. Bunick CG, Milstone LM. The x-ray crystal structure of the keratin 1–keratin 10 helix 2B

 heterodimer reveals molecular surface properties and biochemical insights into human skin

 disease, J Invest Dermatol, in press

84. DeKlotz CK, Schwartz ME, Milstone LM. Nail Removal in Pachyonychia Congenita:

 Patient reported survey outcomes. J Amer Acad Dermatol, in press

Case reports, editorials, letters:

 1. Milstone LM. Changing concepts of keratin. Amer J Dermatopath 2:161‑163, 1980.

 2. Milstone LM. Backpacker's phlebitis. Phys and Sportsmedicine 12:12, 1984.

 3. Milstone LM. Prescribing retinoids: The art and the science. Arch Dermatol 122:761‑763, 1986.

 4. Milstone LM. Skin potions. Arch Dermatol 123:1087‑1088, 1987.

 5. Milstone LM, Atillasoy EJ, Burtis WJ. Do all epidermal keratinocytes contain parathyroid hormone related protein (PTHrP)? J Invest Dermatol 97:1086-1087, 1991.

 6. Milstone LM, Insogna KL. The effects of isotretinoin on the axial skeleton and the retinoid effect - in Reply. Arch Dermatol 128:1650, 1992.

 7. Goldman GD, Milstone LM. Generalized linear porokeratosis treated with Etretinate. Arch Dermatol 131:496-497, 1995.

 8. Goldman GD, Milstone LM, Shapiro PE. Histologic findings in acute HIV exanthem. J Cutan Pathol 22:371-373, 1995.

 9. Duncan KO, Imaeda S, Milstone LM. Pneumocystis carinii pneumonia complicating methotrexate treatment of pityriasis rubra pilaris. J Amer Acad Dermatol, 39:276-278, 1998.

10. Milstone LM, Braverman IM. PURPLE (oops! atrophie blanche) revisited. Arch Dermatol, 134: 1634, 1998.

11. Jansen DA, Asgari MM, Atillasoy ES, Milstone LM. Clinical and in vitro responses of

 bilayered skin construct (Graftskin) to meshing. Arch Dermatol 138:843-844, 2002

12. Milstone AM, Milstone LM. Is retinoid-induced osteopenia reversible? Arch Dermatol 138:1516-1517, 2002

13. Milstone LM, Insogna KL, Leachman, SA. Accutane and bone mineral density [comment].

 J Am Acad Dermatol. 53:181, 2005.

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15. Milstone LM and Milstone EB. Aaron Lerner Remembered. J Invest Dermatol 127:2092-2094, 2007

16. Milstone LM, Scaly skin and bath pH; Rediscovering baking soda. J Am Acad Dermatol 62:885-886, 2010

17. Milstone LM, Rizzo WB, Pickford JR. Meeting Report from Frontiers in Ichthyosis Research J Invest Dermatol 131:279-282, 2011

18. Ko CJ, Milstone LM, Choi J, McNiff JM. Pityriasis rubra pilaris: the clinical context of acantholysis and other histologic features. Int J Dermatol 50: 1480-1485, 2011

19. Milstone LM, Waksman BH. Interferon-γ release assay. Arch Dermatol 148:133-134, 2012

20. Craiglow BG, Choate KA, Milstone LM. Topical Tazarotene for the treatment of ectropion in ichthyosis. JAMA Dermatology 149(5):598-600, 2013

21. Milstone LM, Choate KA. Improving outcomes for harlequin ichthyosis. J Amer Acad

 Dermatol 69(5):808-809, 2013

22. Zambrano H, Montalvan M, Cabezas J, Lu Y, Yang CS, Milstone LM, Choate KA.

 Mutations in TGM1 in Ecuadorians with autosomal recessive congenital ichthyosis. Int J

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