

CURRICULUM VITAE

A: Personal Details:

May 2016

Name: Tsvee Lapidot
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Home Page: <http://www.weizmann.ac.il/immunology/Lapidot/>
Citizenship: Israeli
Marital Status: Married + three children

B. Education: 1990-1994. Post-Doc. Hospital for Sick Children, University of Toronto, Canada.
Title: Functional, Preclinical Immune Deficient Mice Models for Normal and Leukemic Human Stem Cell Transplantation.
Supervisor: Prof. John Dick

1985-1990. Ph.D. Weizmann Institute, Rehovot.
Title: T cell -Depleted Bone Marrow Transplantation in Mice: Mechanisms of Allograft Rejection and Enhancement.
Supervisor: Prof. Yair Reisner.

1983-1985. M.Sc. Weizmann Institute, Rehovot.
Title: The Role of Auto-Immune T Cells in Rheumatoid Arthritis.
Supervisor: Prof. Irun Cohen.

1980-1983. B.Sc. The Hebrew University, Jerusalem.

C. Employment:

2006 - Present, Professor, Department of Immunology, Weizmann Institute.
2001 - 2006. Associate Professor, Department of Immunology, Weizmann Institute.
1994 - 2001. Senior Scientist. Department of Immunology, Weizmann Institute.

D. Other Appointments:

Past and Present Memberships:

Editorial Board of: Cell Stem Cell, Blood. Stem Cells. Exp. Hem.
Stem Cell Reviews. Stem Cells and Development.

The scientific board of:
The American Society of Hematology (ASH) annual meeting. Scientific committee on cytokines

and abstract review panels.

The International Society of Stem Cell Research (ISSCR) annual meeting, abstract review panels.

The annual meeting of the International Society of Experimental Hematology (ISEH) Abstract review panels.

The European hematology Association (EHA) and Bone Marrow Transplantation (EBMT) annual meeting abstract review panels.

The European Science Foundation and ERC grant review panels, on stem cells.

The Israel Science Foundation (ISF) grant review panels.

The Israeli Stem Cell Society abstract review panels.

The organizing committees of International Stem Cell Symposia in Israel and the 2016 EHA meeting in Copenhagen.

Teaching experience:

I have taught multiple courses on stem cell biology and hematopoiesis at the Weizmann Institute.

E. International recognition:

Fellowships and Awards:

August 1990-1992. European Molecular Biology Organization (EMBO) Long-Term Fellowship.

July 1992-1994. National Cancer Institute of Canada Post-doctoral Fellowship (NCIC).

July 1992. K.M Hunter Award for First overall Ranked Fellowship (NCIC). Canada.

June 1993. Andrew Sass Kortsak Award for Scientific Achievements on Normal and Leukemic Human Stem Cells, The Hospital for Sick Children (HSC). Toronto, Canada.

October 1994-1997. The Alon Fellowship for Top Ranked Young Israeli Scientists. The Israeli Government.

September 1994-1999. A Research Career Development Award (RCDA) for Young Israeli Scientists. Israel Cancer Research Fund (ICRF).

December 95. The L. Naftali Science Foundation for Biology and Medicine Award for young Israeli scientists.

May 1999. The M. Levinson Award in Biology for Research on regulation of Human Stem Cell Migration and Development. The Weizmann Institute.

May 2002. The James Heineman Research Award in Life Sciences for outstanding achievements on Regulation of Normal and Leukemic Human Stem Cells. The Minna-James-Heineman Foundation. Munich, Germany.

April 2006-present. The Edith Arnoff Stein Professorial Chair in Stem Cell Research.

July 2008, McCulloch & Till Lecture and Award. In recognition of exceptional scientific contributions to the field of hematology and stem cells. 37th International Society of Experimental Hematology (ISEH) annual meeting, Boston. U.S.A. This lectureship is in honor of two outstanding stem cell researchers which laid the foundation for our understanding of blood forming stem cell development.

December 2010, The Ham-Wasserman Lecture Award, In recognition of major contributions to our understanding of regulation of human blood forming stem cell homing and mobilization. 52nd

American Society of Hematology (ASH) annual meeting, Orlando FL. U.S.A. This lectureship is in honor of two distinguished hematologists, both past ASH presidents. This lecture opens the annual ASH meeting and is delivered by an individual from outside of the United States.

March 2013: Honorary Fellow of the British Royal Collage of Pathologists. London, England.

June 2013: Andrew Sass Kortsak 25th Anniversary Award for Best Overall Scientific Achievements, The Hospital for Sick Children (HSC). Toronto, Canada.

March 2014: The Ernest and Bonnie Beutler Research Program Award of Excellence in Genomic Medicine. Rambam Hospital and the Technion. Haifa, Israel.

May 2014-present: Head Weizmanns Helen and Martin Kimmel Stem cell Institute.

Review of Grants and Manuscripts:

Scientific grants and scholarship stature for academic promotion from Europe, North America, Asia and Australia were reviewed.

Review of manuscripts in the fields of human and murine hematopoietic stem cell biology, both normal and leukemic. The roles of, cytokines, proteolytic enzymes, adhesion molecules and chemokines, in particular CXCL12/CXCR4 interactions in stem cell BM homing, retention, development and mobilization, were reviewed.

Multiple requests for manuscript review were received from major journals, including: Cell, Nature, Science, Nature Medicine, Nature Immunology, Immunity, Cell Stem Cell, etc.

Refereed articles:

1. Holoshitz J, Drucker I, Yaretzky A, Van Eden W, Klajman A, **Lapidot T**, Frenkel A, Cohen I. (1986). T lymphocytes of rheumatoid arthritis patients show augmented reactivity to a fraction of mycobacteria cross-reactive with cartilage. **Lancet** ii: 305-309.
2. Schwartz E, **Lapidot T**, Gozes D, Singer TS, Reisner Y. (1987). Abrogation of bone marrow allograft resistance in mice by increased total body irradiation correlates with eradication of host clonable T cells and alloreactive cytotoxic precursors. **J Immunol** 138: 460-465.
3. **Lapidot T**, Singer TS, Reisner Y. (1988). Transient engraftment of T cell depleted allogeneic bone marrow in mice improves survival rate following lethal irradiation. **Bone Marrow Transplant** 3: 157-164.
4. **Lapidot T**, Singer TS, Schwartz E, Reisner Y. (1988). Booster irradiation to the spleen following total body irradiation: a new immunosuppressive approach for allogeneic bone marrow transplantation. **J Immunol** 141: 2619-2624.
5. **Lapidot T**, Terenzi A, Singer TS, Salomon O, Reisner Y. (1989). Enhancement by dimethyl myleran of donor type chimerism in murine recipients of bone marrow allografts. **Blood** 73: 2025-2032.
6. **Lapidot T**, Lubin I, Faktorowich Y, Erlich P, Reisner, Y. (1990). Enhancement of bone marrow allografts from "nude" mice into mismatched recipients by T cells void of graft versus host activity. **Proc Natl Acad Sci USA** 87: 4595-4599.
7. Salomon O, **Lapidot T**, Terenzi A, Lubin I, Rabi I, Reisner, Y. (1990). Induction of donor-type chimerism in murine recipients of bone marrow allografts by different radiation regimens currently used in treatment of leukemia patients. **Blood** 76: 1872-1878.
8. Terenzi A, Lubin I, **Lapidot T**, Salomon O, Faktorowich Y, Rabi I, Martelli MF, Reisner Y. (1990). Enhancement of T cell depleted bone marrow allografts in mice by Thiotepa. **Transplantation** 50: 717-720.
9. Lubin I, Faktorowich Y, **Lapidot T**, Gan Y, Eshhar Z, Gazit E, Levite M, Reisner Y. (1991). Engraftment and development of human T and B cells in mice after bone marrow transplantation. **Science** 252: 427-431.
10. **Lapidot T**, Faktorowich Y, Lubin I, Reisner Y. (1992). Enhancement of T cell depleted bone marrow allografts in the absence of Graft Versus Host Disease is mediated by CD8⁺ CD4⁻ and not by CD8⁻ CD4⁺ thymocytes. **Blood** 80: 2406-2411.
11. Faktorowich Y, **Lapidot T**, Lubin I, Reisner Y. (1993). Enhancement of BM allografting from C57BL/6 'nude' mice into C3H/HEJ recipients by tolerized T cells from (C57BL/6 -> C3H) and (C3H/HEJ -> C57BL/6) chimeras. **Bone Marrow Transplan** 12: 15 -20.
12. Weiss L, Lubin I, Factorowich I, **Lapidot T**, Reich S, Reisner Y, Slavin S. (1994). Effective Graft Versus Leukemia effects independent of Graft Versus Host Disease after T cell depleted allogeneic bone marrow transplantation in a murine model of B cell Leukemia/Lymphoma. **J Immunol** 153: 2562-2567.
13. Kamel-Reid S, Letarte M, Doedens M, Greaves A, Murdoch B, Grunberger T, **Lapidot T**, Thorner P, Freedman M, Philips R, Dick J. (1991). Bone marrow from children in relapse with

Pre-B acute lymphoblastic leukemia proliferates and disseminates rapidly in SCID mice. **Blood** 78: 2973-2981.

14. **Lapidot T**, Pflumio F, Doedens M, Murdoch B, Williams D, Dick J. (1992). Cytokine stimulation of multilineage hematopoiesis from immature human cells engrafted in SCID mice. **Science** 255: 1137-1141.

15. Pflumio F, **Lapidot T**, Murdoch B, Patterson B, Dick J. (1993). Engraftment of human lymphoid cells into newborn SCID mice leads to Graft versus Host disease. **Int Immunol** 12: 1509-1522.

16. **Lapidot T**, Sirard C, Vormoor J, Hoang T, Cortes J, Minden M, Paterson B, Caliguri M, and Dick J. (1994). A cell initiating human acute myeloid leukemia after transplantation into SCID mice. **Nature** 367: 645-648.

17. Vormoor J, **Lapidot T**, Pflumio F, Risdon G, Broxmyer H, Dick J, (1994). Immature human cord blood cells give rise to multi lineage progenitors in SCID mice. **Blood** 83: 2489 -2497.

18. Larochelle A, Vormoor J, **Lapidot T**, Sher G, Furukawa T, Li Q, Schultz L, Olivieri N, Stamatoyannopoulos G, Dick J. (1995). Engraftment of immune- deficient mice with primitive hematopoietic cells from β -Thalassemia and sickle cell anemia patients: implications for evaluating human gene therapy protocols. **Hum Mol Genet** 4: 163-172.

19. **Lapidot T**, Sirard C, Vormoor J, Cashman J, Doedens M, Murdoch B, Jamal N, Messner H, Addey L, Minden M, Laraya P, Keating A, Eaves A, Lansdorp P, Eaves C, Dick J. (1996). Normal and leukemic SCID-repopulating cells (SRC) coexist in the bone marrow and peripheral blood from CML patients in chronic phase while leukemic SRC are detected in blast crisis. **Blood** 87: 1539-1548.

20. Meydan N, Grunberger T, Dadi H, Shahar M, Arpaia E, **Lapidot T**, Leader S, Freedman M, Cohen A, Gazit A, Levitzki A, Roifman C. (1996). Inhibition of Acute Lymphoblastic Leukemia by a JAK-2 Inhibitor. **Nature** 379: 645-648.

21. **Lapidot T**, Grunberger T, Vormoor J, Estrov Z, Kollet O, Bunin N, Zaizov R, Williams D, Freedman M. (1996). Identification of Human Juvenile Chronic Myelogenous Leukemia Stem Cells Capable of Initiating the Disease in Primary and Secondary Transplanted SCID Mice. **Blood** 88: 2655-2664.

22. Larochelle A, Vormoor J, Haneberg H, Wang J, Bhatia M, **Lapidot T**, Moritz T, Murdoch B, Xiao X, Kato I, Williams D, Dick J. (1996). Identification of primitive human hematopoietic cells capable of repopulating NOD/SCID mouse bone marrow: Implications for gene therapy. **Nature Medicine** 2: 1329-1337.

23. Haran-Ghera N, Krautghamer R, **Lapidot T**, Peled A, Domingues M, Stanley E.R. (1997). Increased circulating CSF-1 in SJL/J mice with radiation induced AML is associated with autocrine regulation of AML cells by CSF-1. **Blood** 89: 2537-2545.

24. Cashman J, **Lapidot T**, Wang J, Doedens M, Schultz L, Lansdorp P, Dick J, Eaves C. (1997). Kinetic evidence of the regeneration of multi-lineage hematopoiesis from primitive cells in normal human bone marrow transplanted into immunodeficient mice. **Blood** 89:4307-4316.

25. Ariel A, HersHKovitz R, Cahalon L, Williams D, Akiyama S, Yamada K, Chen C, Alon R, **Lapidot T**, Lider O. (1997). Induction of T cell adhesion to extracellular matrix or endothelial cell ligands by soluble or matrix bound Interleukin-7. **Eur J Immunol** 27 :2562-2570.

26. Chebath J, Fischer D, Kumar A, **Lapidot T**, Kollet O, Rose-John S, Nagler A, Slavin S,

Revel M. (1997). IL-6 receptor, IL-6 fusion proteins with enhanced IL-6 type pleiotropic activities. **Eur Cytokine Netw** 8: 359-365.

27. Wang J.C.Y, **Lapidot T**, Cashman J.D, Doedens M, Addy L, Sutherland DR, Nayar R, Laraya P, Minden M, Keating A, Eaves AC, Eaves CJ, Dick J.E. (1998). High Level Engraftment of NOD/SCID Mice by Primitive Normal and Leukemic Hematopoietic Cells from Patients With Chronic Myeloid Leukemia in Chronic Phase. **Blood** 91: 2406-2414.

28. Varfolomeev E, Schuchmann M, Luria V, Chiannilkulchai N, Beckmann J, Mett I, Rebrikov D, Brodianski V, Kemper O, Kollet O, **Lapidot T**, Soffer D, Sobe T, Avraham K, Goncharov T, Holtmann H, Lonai P, Wallach D. (1998). Targeted disruption of the mouse caspase-8 gene ablates cell-death induction by the TNF receptors Fas/Apo1 and DR3 and is lethal prenatally. **Immunity** 9: 267-276.

29. Globerson A, Kollet O, Abel L, Fajerman I, Ballin A, Nagler A, Slavin S, Ben-Hur H, Hagay Z, Sharp A, **Lapidot T**. (1999) Differential effects of CD4⁺ and CD8⁺ cells on lymphocyte development from human cord blood cells in murine fetal thymus explants. **Exp Hematol** 27: 282-292.

30. Peled A, Petit I, Kollet O, Magid M, Ponomaryov T, Byk T, Nagler A, Ben-Hur H, Many A, Shultz L, Lider O, Alon R, Zipori D, **Lapidot T**. (1999). Dependence of Human Stem Cell Engraftment and Repopulation of NOD/SCID Mice on CXCR4. **Science** 283: 845-848.

31. Piacibello W, Sanavio F, Severino A, Dane A, Gammaitoni L, Fagioli F, Perissinotto E, Cavalloni G, Kollet O, **Lapidot T**, Aglietta M. (1999). Engraftment of Nonobese Diabetic Severe Combined Immunodeficient Mice of Human CD34⁺ Cord Blood Cells After Ex Vivo Expansion: Evidence for the Amplification and Self-Renewal of Repopulating Stem Cells. **Blood** 93:3736-3749.

32. Kollet O, Aviram R, Chebath J, Ben-Hur H, Nagler A, Schultz L, Revel M, & **Lapidot T**. (1999) The soluble IL-6 receptor/IL-6 fusion protein enhances maintenance and proliferation of human CD34⁺ CD38^{-low}/SCID repopulating cells (SRC) in vitro. **Blood** 94: 923-931.

33. Peled A, Grabovsky V, Habler L, Sandbank J, Arenzana-Seisdedos F, Petit I, Ben-Hur H, **Lapidot T**, & Alon R. (1999). The Chemokine SDF-1 Stimulates Integrin-Mediated Arrest of Immature Human CD34⁺ cells on Vascular Endothelium Under Shear Flow. **J Clinical Investigations** 104: 1199-1211.

34. Shultz LD, Lang PA, Christianson SW, Gott B, Lyons B, Umeda S, Leiter E, Hesselton R, Wagar EJ, Leif JH, Kollet O, **Lapidot T**, Greiner DL. (2000). NOD/LtSz-Rag-1null mice: An immunodeficient and radioresistant model for engraftment of human hematolymphoid cells, HIV infection, and adoptive transfer of NOD mouse diabetogenic T cells. **J Immunol** 164: 2496-2507.

35. Kollet O, Peled A, Byk T, Ben-Hur H, Greiner D, Schultz L, **Lapidot T**. (2000). B2 Microglobulin Deficient (B2m^{null}) NOD/SCID Mice are Excellent Recipients for Studying Human Stem Cell Function. **Blood** 95: 3102-3105.

36. Peled A, Kollet O, Ponomaryov T, Petit I, Franitza S, Grabovsky V, Magid M, Nagler A, Lider O, Alon R, Zipori D, **Lapidot T**. (2000). The chemokine SDF-1 activates the integrins LFA-1, VLA-4 and VLA-5 on immature human CD34⁺ cells: role in transendothelial/stromal migration and engraftment of NOD/SCID Mice. **Blood** 95: 3289-3296.

37. Kollet O, Moore J, Aviram R, Ben-Hur H, Liu B, Nagler A, Shultz L, Feldman M, **Lapidot T.** (2000). The plant lectin FRIL supports prolonged in vitro maintenance of quiescent human cord blood CD34⁺/CD38^{-low}/SCID repopulating cells. **Exp Hematol** 28:726-736.
38. Grabovsky V, Feigelson S, Chen C, Bliejs D, Peled A, Cinamon G, Baleux F, Arenzana-Seisdedos F, **Lapidot T**, Van-Kooyk Y, Lobb R, Alon R. (2000). Sub-second induction of $\alpha 4$ integrin clustering by immobilized chemokines stimulates leukocyte tethering and rolling on endothelial VCAM-1 under flow conditions. **J Experimental Medicine** 192: 495-506.
39. Ponomaryov T, Peled A, Petit I, Taichman R, Habler L, Sandbank J, Arenzana-Seisdedos F, Magerus A, Caruz A, Fujii N, Nagler A, Lahav M, Szyper-Kravitz M, Zipori D, **Lapidot T.** (2000). Induction of the Chemokine Stromal-Derived-Factor-1 Following DNA Damage Improves Human Stem Cell Function. **J Clinical Investigations** 106: 1331-1339.
40. Böldicke T, Tesar M, Griesel C, Rohde M, Gröne HJ, Waltenberger J, Kollet O, **Lapidot T**, Yaron A, Weich H. (2001). Single-chain antibodies recognizing the human vascular endothelial growth factor receptor-2 (VEGFR-2/flk-1) on the surface of primary endothelial cells and preselected CD34⁺ cells from cord blood. **Stem Cells**. 19: 24-36.
41. Kollet O, Spiegel A, Peled A, Petit I, Byk T, HersHKovitz R, Guetta E, Barkai G, Nagler A, **Lapidot T.** (2001). Rapid and efficient homing of human CD34⁺CD38^{-low}CXCR4⁺ stem and progenitor cells to the bone marrow and spleen of NOD/SCID and NOD/SCID/B2m^{null} mice. **Blood** 97: 3283-3291.
42. Franitza S, Kollet O, Brill A, Vaday GG, Petit I, **Lapidot T**, Alon R, Lider O. (2002). TGF-beta enhances SDF-1alpha-induced chemotaxis and homing of naive T cells by up-regulating CXCR4 expression and downstream cytoskeletal effector molecules. **Eur J Immunol** 32: 193-202.
43. Peled A, Hardan I, Trakhtenbrot L, Gur E, Magid M, Darash-Yahana M, Cohen N, Grabovsky V, Franitza S, Kollet O, Lider O, Alon R, Rechavi G, **Lapidot T.** (2002). Immature Leukemic CD34(+)CXCR4(+) Cells from CML Patients Have Lower Integrin-Dependent Migration and Adhesion in Response to the Chemokine SDF-1. **Stem Cells** 20: 259-266.
44. Petit I, Szyper-Kravitz M, Nagler A, Lahav M, Peled A, Habler L, Ponomaryov T, Teichman R, Arenzana-Seisdedos F, Fujii N, Sandbank J, Zipori D, **Lapidot T.** (2002). G-CSF induces stem cell mobilization by decreasing bone marrow SDF-1 and upregulating CXCR4. **Nature Immunology** 3: 687-694.
45. Kollet O, Petit I, Kahn J, Samira S, Dar A, Peled A, Deutsch V, Gunetti M, Piacibello W, Nagler A, **Lapidot T.** (2002). Human CD34⁺/CXCR4⁻ sorted cells harbor intracellular CXCR4, which can functionally be expressed and provide NOD/SCID repopulation. **Blood** 100: 2778-2786.
46. Gammaitonia L, Brunoa S, Sanavioa F, Gunettia M, Kollet O, iCavallonia G, Faldac M, Fagiolid F, **Lapidot T**, Aglietta M, Piacibelloa W. (2003). Ex vivo expansion of human adult stem cells capable of primary and secondary hemopoietic reconstitution. **Exp Hematol** 31: 261-270.
47. Rozovskaia T, Ravid-Amir O, Tillib S, Getz G, Feinstein E, Agrawal H, Nagler A, Rappaport E, Issaeva I, Matsuo Y, Kees U, **Lapidot T**, Lo Coco F, Foa R, Mazo A, Nakamura

T, Croce C, Cimino G, Domany E, Canaani E. (2003). Expression profiles of acute lymphoblastic and myeloblastic leukemias with ALL-1 rearrangements. **Proc Natl Acad Sci USA** 100: 7853-7858.

48. Kollet O, Shvitiel S, Chen Y, Suriawinata J, Thung S, Dabeva M, Kahn J, Spiegel A, Dar A, Samira S, Goichberg P, Kalinkovich A, Arenzana-Seisdedos F, Nagler A, Hardan I, Revel M, Shafritz D, **Lapidot T**. (2003). HGF, SDF-1 and MMP-9 are involved in stress-induced human CD34 + stem cell recruitment to the liver. **J Clinical Investigations** 112: 160-169.

49. Peller S, Frenkel J, **Lapidot T**, Kahn J, Rahimi-Levene N, Yona R, Nissim L, Goldfinger N, Sherman D, Rotter V. (2003). The onset of p53-dependent apoptosis plays a role in terminal differentiation of human normoblasts. **Oncogene** 22: 4648-4655.

50. Spiegel A, Kollet O, Peled A, Abel L, Nagler A, Bielorai B, Rechavi G, Vormoor J, **Lapidot T**. (2004). Unique SDF-1 induced activation of human precursor-B ALL cells due to altered CXCR4 expression and signaling. **Blood** 103: 2900-2907.

51. Kahn J, Byk T, Jansson L, Petit I, Shvitiel S, Nagler A, Hardan I, Deutsch V, Gazit Z, Gazit D, Karlsson S, **Lapidot T**. (2004). Overexpression of CXCR4 on human CD34⁺ progenitors increases their proliferation, migration, and NOD/SCID repopulation. **Blood** 103: 2942-2949.

52. Avigdor A, Goichberg P, Shvitiel S, Dar A, Peled A, Samira S, Kollet O, Hershovitz R, Alon R, Hradan I, Ben-Hur H, Naor D, Nagler A, **Lapidot T**. (2004). CD44 and hyaluronic acid cooperate with SDF-1 in the trafficking of human CD34 +stem/progenitor cells to the bone marrow. **Blood** 103: 2981-2989.

53. Tavor S, Petit I, Porozov S, Avigdor A, Dar A, Leider L, Shem-Tov N, Deutch V, Naparstek E, Nagler A, **Lapidot T**. (2004). CXCR4 regulates migration and development of human AML stem cells in transplanted NOD/SCID mice. **Cancer Research** 64: 2817-2824.

54. Hecht I, Hershkovits R, Shvitiel S, **Lapidot T**, Cohen I, Lider O, Cahalon L. (2004). Heparin-disaccharide affects T cells: inhibition of NF- κ B activation, cell migration, and modulation of intracellular signaling. **J Leukocyte Biology** 75: 1139-1146.

55. Bong Kang T, Ben-Moshe T, Varfolomeev E, Pewzner-Jung Y, Yogev N, Jurewicz A, Waisman A, Brenner O, Haffner R, Gustafsson E, Ramakrishnan P, **Lapidot T**, Wallach D. (2004). Caspase-8 Serves Both Apoptotic and Nonapoptotic Roles. **J Immunol** 173: 2976-2984.

56. Samira S, Ferrand C, Peled A, Nagler A, Tovbin Y, Ben-Hur H, Taylor N, Globerson A, **Lapidot T**. (2004) Tumor necrosis factor promotes human T-cell development in nonobese diabetic/severe combined immunodeficient mice. **Stem Cells** 22:1085-1100.

57. Petit I, Goichberg P, Spiegel A, Peled A, Brodie C, Seger R, Nagler A, Alon R, **Lapidot T**. (2005). Atypical PKC- ζ regulates SDF-1-mediated migration and development of human CD34+ progenitor cells. **J Clinical Investigations** 115: 168-176.

58. Zannettino A, Farrugia A, Kortessidis A, Manavis J, To LB, Martin S, Diamond P, Tamamura H, **Lapidot T**, Fujii N, Gronthos S. (2005). Elevated serum levels of SDF-1 are associated with increased osteoclast activity and osteolytic bone disease in multiple myeloma patients. **Cancer Research** 65: 1700-1709.

59. Kortessidis A, Zannettino A, Isenmann S, Shi S, **Lapidot T**, Gronthos S. (2005). Stromal Derived Factor-1 Promotes the Growth, Survival and Development of Human Bone Marrow Stromal Stem Cells. **Blood** 105: 3793-3801.
60. Byk T, Kahn J, Kollet O, Petit I, Samira S, Shivtiel S, Ben-Hur H, Peled A, Piacibello W, **Lapidot T**. (2005). Cycling G1 CD34⁺/CD38⁺ Cells Potentiate the Motility and Engraftment of Quiescent G0 CD34⁺/CD38^{-low} SCID Repopulating Cells. **Stem cells** 23: 561-574.
61. Tavor S, Petit I, Porozov S, Goichberg P, Avigdor A, Sagiv S, Nagler A, Naparstek E, **Lapidot T**. (2005). Motility, proliferation and egress to the circulation of human AML cells in transplanted NOD/SCID mice, are elastase dependent. **Blood**, 106: 2120-2127.
62. Zanin-Zhorov A, Tal G, Shivtiel S, Cohen M, **Lapidot T**, Nussbaum G, Margalit R, Cohen IR & Lider O. (2005). Heat shock protein 60 activates cytokine associated negative regulator suppressor of cytokine signaling 3 in T cells; Effects on signaling, chemotaxis and inflammation. **J Immunol**, 175: 276-285.
63. Dar A, Goichberg P, Shinder V, Kalinkovich A, Kollet O, Netzer N, Margalit R, Zsak M, Nagler A, Hardan I, Resnick I, Rot A, & **Lapidot T**. (2005). Chemokine receptor CXCR4-dependent internalization and resecretion of functional chemokine SDF-1 by bone marrow endothelial and stromal cells, **Nature Immunology**, 6, 10: 1038-46.
64. Goichberg P, Kalinkovich A, Borodovsky N, Tesio M, Petit I, Nagler A, Hardan I, & **Lapidot T**. (2006). cAMP induced PKC- ζ activation increases functional CXCR4 expression on human CD34⁺ hematopoietic progenitors. **Blood**, 107: 870-79.
65. Pick M, Perry C, **Lapidot T**, Guimaraes-Sternberg C, Naparstek E, Deutsch V & Soreq H. (2006). Stress-induced cholinergic signaling promotes inflammation-associated thrombopoiesis. **Blood**, 107:3397-406.
66. Kollet O, Dar A, Shivtiel S, Kalinkovich A, Lapid K, Sztainberg Y, Tesio M, Samstein R, Goichberg P, Spiegel A, Elson A & **Lapidot T**. (2006). Osteoclasts degrade endosteal components and promote mobilization of hematopoietic progenitor cells. **Nature Medicine**, 12, 6: 657-664.
67. Kalchenko V, Shivtiel S, Malina V, Lapid K, Haramati S, **Lapidot T**, Brill A & Harmelin A. (2006). Use of lipophilic near infra-red dye in whole body optical imaging of hematopoietic cell homing. **JBO letters**, 11(5): 1-3.
68. Kalinkovich A, Tavor S, Avigdor A, Kahn J, Brill A, Petit I, Goichberg P, Tesio M, Netzer N, Naparstek E, Hardan I, Nagler A, Resnick I, Tsimanis A & **Lapidot T**. (2006). Functional CXCR4 expressing microparticles and SDF-1 correlate with circulating AML cells. **Cancer research**, 66 (22) : 11013-1120.
69. Moskovitz N, Kalinkovich A, **Lapidot T** & Oren M. (2006). P53 represses SDF-1/CXCL12 expression in fibroblasts to decrease tumor cell migration and invasion. **Cancer Research**, 66 (22) : 10671-10676.
70. Gal H, Amariglio N, Trakhtenbrot L, Jacob-Hirsh J, Margalit O, Avigdor A, Nagler A, Tavor S, Ein-Dor L, **Lapidot T**, Domany E, Rechavi G & Givol D. (2006). Gene expression

profiles of AML derived stem cells; similarity to hematopoietic stem cells. **Leukemia**, 20: 2147-2154.

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