

## Peter D. Aplan

### Bibliography– June 2014

#### Original Articles:

1. Begley CG, **Aplan PD**, Davey MP, Nakahara K, Tchorz K, Kurtzberg J, Hershfield MS, Haynes BF, Cohen DI, Waldmann TA and Kirsch IR: Chromosomal translocation in a human leukemic stem cell line disrupts the T-cell antigen receptor delta chain diversity region and results in a previously unreported fusion transcript. *Proc Nat Acad Sci, USA* 86:2031-2035, 1989.
2. Begley CG, **Aplan PD**, Davey MP, deVillartay JP, Cohen DI, Waldmann TA and Kirsch IR: Demonstration of delta-rec pseudo J-alpha rearrangement with deletion of the delta locus in a human stem cell leukemia. *J Exp Med* 170:339-342, 1989.
3. Begley CG, **Aplan PD**, Denning SM, Haynes BF, Waldmann TA and Kirsch IR: The gene SCL is expressed during early hematopoiesis and encodes a differentiation-related DNA-binding motif. *Proc Natl Acad Sci, USA* 86:10128-10132, 1989.
4. **Aplan PD**, Begley CG, Bertness V, Nussmeier M, Ezquerra A, Coligan J and Kirsch IR: The SCL gene is formed from a transcriptionally complex locus. *Mol Cell Biol* 10:6426-6435, 1990.
5. **Aplan PD**, Lombardi DP, Ginsberg AM, Cossman J, Bertness VL and Kirsch IR: Disruption of the human SCL locus by "illegitimate V-(D)-J recombinase activity. *Science* 250:1426-1429, 1990.
6. Begley CG, Visvader J, Green AR, **Aplan PD**, Metcalf D, Kirsch IR and Gough NM: Molecular cloning and chromosomal localisation of the murine SCL gene. *Proc Natl Acad Sci, USA* 88:869-873, 1991.
7. **Aplan PD**, Lombardi DP and Kirsch IR: Structural characterization of SIL, a gene frequently disrupted in T-cell acute lymphoblastic leukemia. *Mol Cell Biol* 11:5462-5469, 1991.
8. **Aplan PD**, Lombardi DP, Reaman GH, Sather H, Hammond GD and Kirsch IR: Involvement of the putative hematopoietic transcription factor SCL in T-cell acute lymphoblastic leukemia. *Blood* 79:1327-1333, 1992.

9. **Aplan PD**, Nakahara K, Orkin SH and Kirsch IR: The SCL gene product: A positive regulator of erythroid differentiation. *EMBO J* 11:4073-4082, 1992.
10. **Aplan PD**, Raimondi SC and Kirsch IR: Disruption of the SCL gene by a t(1;3) translocation in a patient with T-cell acute lymphoblastic leukemia. *J Exp Med* 176:1303-1310, 1992.
11. Bhatia K, Spangler G, Advani S, Kamel A, Hamdy N, Iyer RS, **Aplan PD** and Magrath IT: Molecular characterization of SCL rearrangements in T-cell ALL from developing countries. *Int J Oncol* 2:725-733, 1993.
12. Chervinsky DS, Grossi M, Kakati S, Block AM and **Aplan PD**: Concurrent presence of inv(14)(q11q32) and t(4;11)(q21;q23) in pre-B acute lymphoblastic leukemia (ALL). *Genes, Chromosomes, and Cancer*. 12:229-236, 1995.
13. **Aplan PD**, Johnson BE, Russell E, Chervinsky DS and Kirsch IR: Cloning and characterization of TCTA, a gene located at the site of a t(1;3) translocation. *Cancer Research* 55:1917-1921, 1995.
14. Chervinsky DS, Sait SJ, Nowak NJ, Shows TB and **Aplan PD**: Complex *MLL* rearrangement in a patient with T-cell acute lymphoblastic leukemia. *Genes, Chromosomes & Cancer* 14:76-84, 1995.
15. Stock W, Westbrook CA, Sher DA, Dodge R, Sobol RE, Wurster-Hill D, Davey FR, Larson RA, Le Beau MM, **Aplan PD**, Frankel SR, Stewart CC and Bloomfield CD: Low incidence of Tall gene rearrangements in adult acute lymphoblastic leukemia: A Cancer and Leukemia Group B study (8762). *Clinical Cancer Research* 1:459-463, 1995.
16. Colazzo-Garcia N, Scherer P and **Aplan PD**: Cloning and characterization of a murine *SIL* gene. *Genomics* 30:506-513, 1995.
17. **Aplan PD**, Chervinsky DS, Stanulla M and Burhans WC: Site-specific DNA cleavage within the *MLL* breakpoint cluster region induced by topoisomerase II inhibitors. *Blood* 87:2649-2658, 1996.
18. Strout MP, Mrozek K, Heinonen K, Sait SNJ, Shows TB and **Aplan PD**: The ML-1 cell line lacks a germline *MLL* locus. *Genes, Chromosomes & Cancer* 16:204-210, 1996.

19. Stanulla M, Wang J, Chervinsky DS and **Aplan PD**: Topoisomerase II inhibitors induce DNA double strand breaks at a fragile site within the AML1 locus. *Leukemia* 11:490-496, 1997.
20. **Aplan PD**, Jones CA, Chervinsky DS, Zhao XF, Ellsworth MK, Wu C, McGuire EA, Gross KW: An *scl* gene product lacking the transactivation domain induces bony abnormalities and cooperates with *lmo1* to generate T-cell malignancies in transgenic mice. *EMBO J* 16:2408-2419, 1997.
21. Stanulla M, Wang J, Chervinsky DS, Thandla S, **Aplan PD**: DNA cleavage within the *MLL* breakpoint cluster region is a specific event which occurs as part of higher order chromatin fragmentation during the initial stages of apoptosis. *Mol Cell Biol* 17:4070-4079, 1997.
22. Izraeli S, Colaizzo-Anas T, Bertness VL, Mani K, **Aplan PD**, Kirsch IR: SIL is an immediate-early (primary response) gene displaying a biphasic pattern of expression in early phases of the cell cycle. *Cell Growth Diff* 8:1171-1179, 1997.
23. Zhao XF, Colaizzo-Anas T, **Aplan PD**: The mammalian homologue of *Mago Nashi* encodes a serum-inducible leucine zipper protein. *Genomics* 47:319-322, 1998.
24. Sood R, Steward CC, **Aplan PD**, Ward P, Murai H, Barcos M, Baer MR. Neutropenia associated with T-cell large granular lymphocyte leukemia: Long term response to cyclosporine therapy despite persistence of abnormal cells. *Blood* 91:3372-3378, 1998.
25. Stanulla M, Schunemann HJ, Thandla S, Brecher ML, **Aplan PD**: Pseudo-rearrangement of the *MLL* gene at chromosome 11q23: A cautionary note on genotype analysis of leukemia patients. *J Clin Pathol:Mol Pathol* 51:85-89, 1998.
26. Felix CA, Megonigal MD, Chervinsky DS, Leonard D, Tsuchida N, Kakati S, Block AM, Fisher J, Grossi M, Salhany KI, Jani-Sait SN, **Aplan PD**. Association of germline p53 mutation with *MLL* segmental jumping translocation in treatment-related leukemia. *Blood* 91:4451-4456, 1998.
27. Zhao X-F and **Aplan PD**. SCL binds the human homologue of DRG *in vivo*. *Biochim Biophys Acta* 1448:109-114, 1998.
28. Raza-Egilmez SZ, Jani-Sait SN, Grossi M, Higgins MJ, Shows TB, **Aplan PD**. NUP98-HOXD13 gene fusion in therapy-related acute myelogenous leukemia (t-AML). *Cancer Research* 58:4269-4273, 1998.

29. Thandla SP, Ploski JE, Raza-Egilmez SZ, Chhalliyil P, Block AM, deJong PJ, **Aplan PD**. ETV-6-AML1 translocation breakpoints cluster near a purine/pyrimidine repeat region in the ETV6 gene. *Blood* 93:293-299, 1999.
30. Zhao X-F and **Aplan PD**. The hematopoietic transcription factor SCL binds the p44 subunit of TFIIF. *J Biol Chem* 274:1388-1393, 1999.
31. Chervinsky DS, Zhao XF, Lam DH, Ellsworth MK, Gross KW, **Aplan PD**. Disordered T-cell development and T-cell malignancies in SCL/LMO1 double transgenic mice: parallels with E2A deficient mice. *Mol Cell Biol* 19:5025-5035, 1999.
32. Ahuja HG, Felix CA, and **Aplan PD**. The t(11;20)(p15;q11) chromosomal translocation associated with therapy-related myelodysplastic syndrome (t-MDS) results in a *NUP98-TOPI* fusion. *Blood* 94: 3258-3261, 1999.
33. Thandla S, Alashari M, Green DM, and **Aplan PD**. Therapy-related T cell lymphoblastic lymphoma with t(11;19) translocation and MLL gene rearrangement. *Leukemia* 13:2116-2118, 1999.
34. Zhao XF and **Aplan PD**. MAGOH interacts with a novel RNA-binding protein. *Genomics* 63:145-148, 2000
35. Wang JJ, Jani-Sait SN, Escalon EA, Carroll AJ, deJong PJ, Kirsch IR, and **Aplan PD**. The t(14;21)(q11.2;q22) chromosomal translocation associated with T-cell acute lymphoblastic leukemia activates the BHLHB1 gene. *Proc Natl Acad Sci* 97:3497-3502, 2000.
36. Herblot S, Steff A-M, Hugo P, **Aplan PD**, and Hoang T. SCL collaborates with LMO1 to alter thymocyte differentiation: Inhibition of the pre-TCR alpha chain gene expression and HEB function. *Nature Immunology* 1:138-144, 2000.
37. Ahuja HG, Felix CA, **Aplan PD**. A potential role for DNA topoisomerase II poisons in the generation of t(11;20)(p15;q11) translocations *Genes, Chromosomes, & Cancer* 29:96-105, 2000.
38. Schünemann HJ, Stanulla M, Trevisan M, **Aplan PD**, Freudenheim JL, and Muti P. Short-term storage of blood samples and DNA isolation in serum separator tubes for application

in epidemiological studies and clinical research. *Annals of Epidemiology* 10: 538 – 544, 2000.

39. Ahuja HG, Hong J, **Aplan PD**, Tcheurekdjian L, Forman SJ, and Slovak ML. t(9;11)(p22;p15) in acute myeloid leukemia results in a fusion between NUP98 and the gene encoding transcriptional coactivators p52 and p75-lens epithelium-derived growth factor. *Cancer Research* 60:6227-9, 2000.
40. Chervinsky DS, Lam DH, Zhao X-F, Melman MP, and **Aplan PD**. Development and characterization of T-cell leukemia cell lines established from *SCL/LMO1* double transgenic mice. *Leukemia* 15:141-147, 2001.
41. Ploski JE and **Aplan PD**. Characterization of DNA fragmentation events caused by genotoxic and non-genotoxic apoptotic stimuli. *Mutat. Res.* 473:169-180, 2001.
42. Jaju RJ, Fidler C, Haas OA, Strickson AJ, Watkins F, Clark K, Cross NCP, Cheung JF, **Aplan PD**, Kearney L, Boulwood J, and Wainscoat JS. A novel gene, NSD1, is fused to NUP98 in the t(5;11)(q35;p15.5) in de novo childhood acute myeloid leukemia. *Blood* 98:1264-1267, 2001.
43. Chervinsky DS, Lam DH, Melman MP, Gross, KW, and **Aplan PD**. *scid* thymocytes with TCR $\beta$  gene rearrangements are targets for the oncogenic effect of *SCL* and *LMO1* transgenes. *Cancer Res.* 61:6382-6387, 2001.
44. Stanulla MS, Chhalliyil P, Wang JJ, Jani-Sait SN, and **Aplan PD**. Mechanisms of *MLL* gene rearrangement: site-specific DNA cleavage within the breakpoint cluster region is independent of chromosomal context. *Human Mol Genet.* 10:2481-2491, 2001.
45. Herblot S, **Aplan PD**, and Hoang T. Gradient of E2A activity in B-cell development. *Mol Cell Biol.* 22:886-900, 2002.
46. Ramage JG, Vallera DA, Black JH, **Aplan PD**, Kees UR, and Frankel AE. The diphtheria toxin/urokinase fusion protein (DTAT) is selectively toxic to CD87 expressing leukemic cells. *Leuk Res.* 27:79-84, 2003.
47. Colaizzo-Anas T and **Aplan PD**. Cloning and characterization of a SIL promoter. *Biochim Biophys Acta.* 1625:207-13, 2003.

48. Buske C, Pineault N, Feuring-Buske M, Abramovich C, **Aplan PD**, Hogge DE, and Humphries RK. Induction of acute myeloid leukemia in mice by the human leukemia-specific fusion gene NUP98-HOXD13 in concert with Meis1. *Blood* 101:4529-4538, 2003.
49. Deveney R, Chervinsky DS, Jani-Sait SN, Grossi M and **Aplan PD**. Insertion of *MLL* sequences into chromosome 5q31 results in an *MLL-AF5Q31* fusion and is a rare but recurrent abnormality associated with infant leukemia. *Genes Chromosomes and Cancer* 37:326-331, 2003.
50. Levantini E, Giorgetti A, Cerisoli F, Traggiari E, Guidi A, Martin R, Acampora D, **Aplan PD**, Keller G, Simeone A, Iscove NN, Hoang T, and Magli MC. Unexpected role of the brain morphogenetic gene *Otx1* in hematopoiesis. *PNAS* 100:10299-10303, 2003.
51. Lin YW, Perkins J, Zhang ZH, and **Aplan PD**. Distinct mechanisms lead to HPRT gene mutations in leukemic cells *Genes, Chromosomes, and Cancer* 39:311-323, 2004.
52. Gurevich RM, **Aplan PD**, and Humphries RK. The *NUP98-Topoisomerase I* AML-associated fusion gene has potent leukemogenic activities independent of an engineered catalytic site mutation. *Blood* 104:1127-1136, 2004.
53. Wolfraim LA, Fernandez TM, Mamura M, Fuller WL, Cole D, Byfields S, Felici A, Flanders KC, Walz TM, Roberts AB, **Aplan PD**, Balis F, and Letterio JJ. Loss of Smad3 expression linked to T cell leukemogenesis. *N. Engl. J. Med.* 351:552-9, 2004
54. Lin YW, Slape CI, Zhang Z, and **Aplan PD**. *NUP98-HOXD13* transgenic mice develop a highly penetrant, severe myelodysplastic syndrome that progresses to acute leukemia. *Blood* 106:287-295, 2005.
55. Varga T, and **Aplan PD**. Chromosomal aberrations induced by double strand DNA breaks. *DNA Repair* 4:1038-1046, 2005.
56. Lin YW, Deveney R, Barbara M, Iscove N, Nimer SD, Slape C, and **Aplan PD**. *OLIG2 (BHLHB1)*, a bHLH transcription factor, contributes to leukemogenesis in concert with *LMO1*. *Cancer Res.* 65:7151-7158, 2005.
57. Fiorentino S, Chopin M, Dastot E, Boissel N, Legrès L, Janin A, **Aplan P**, Sigaux F and Regnault A. Disruption of T cell regulatory pathways is necessary for immunotherapeutic cure of T cell acute lymphoblastic leukemia in mice. *Eur Cytokine Netw.* 16:300-8, 2006.

58. Lin YW, Nichols RA, Letterio JJ, and **Aplan PD**. *Notch1* mutations are important for leukemic transformation in murine models of precursor-T leukemia/lymphoma *Blood* 107:2540-2544, 2006.
59. Oliansky DM, Rizzo JD, **Aplan PD**, Arceci RJ, Leone L, Ravindranath Y, Sanders JE, Smith FO 3rd, Wilmot F, McCarthy PL Jr, and Hahn T. The role of cytotoxic therapy with hematopoietic stem cell transplantation in the therapy of acute myeloid leukemia in children: an evidence-based review. *Biol Blood Marrow Transplant*.13:1-25, 2007.
60. Cheng Y, Zhang Z, Slape C, and **Aplan PD**. Cre-loxP mediated recombination between the *SIL* and *SCL* genes leads to a block in T-cell development at the CD4-CD8- to CD4+CD8+ transition. *Neoplasia* 9:315-321, 2007.
61. Slape C, Chung Y, Soloway PD, Tessarollo L, and **Aplan PD**. Mouse embryonic stem cells that express a *NUP98-HOXD13* fusion protein are impaired in their ability to differentiate and can be complemented by *BCR-ABL*. *Leukemia* 21:1239-1248, 2007.
62. Lin YW and **Aplan PD**. Gene expression profiling of precursor T-cell lymphoblastic leukemia/lymphoma identifies oncogenic pathways that are potential therapeutic targets. *Leukemia* 21:1276-1284, 2007.
63. Slape C, Hartung H, Lin YW, Bies J, Wolff L and **Aplan PD**. Retroviral insertional mutagenesis identifies genes that collaborate with *NUP98-HOXD13* during leukemic transformation. *Cancer Research* 67:5148-5155, 2007.
64. Caudell D, Zhang Z, Chung Y, and **Aplan PD**. Expression of a *CALM-AF10* fusion gene leads to *Hoxa* cluster overexpression and acute leukemia in transgenic mice. *Cancer Research* 67:8022-31, 2007.
65. Fasseu M, **Aplan PD**, Chopin M, Boissel N, Bories J, von Boehmer H, Sigaux F and Regnault A. p16INK4A tumor suppressor gene expression and CD3 $\epsilon$  deficiency but not preTCR deficiency inhibit T-lineage leukemogenesis. *Blood* 110:2610-9, 2007.
66. Erez A, Chaussepied M, Castiel A, Colaizzo-Anas T, **Aplan PD**, Ginsberg D, and Izraeli S. The Mitotic Checkpoint Gene, *SIL* is Regulated by E2F1. *Int J Cancer* 123:1721-5, 2008.

67. Slape C, Lin YW, Hartung H, Zhang Z, Wolff L, and **Aplan PD**. NUP98-HOX translocations lead to myelodysplastic syndrome in mice and men. *J. Natl. Canc. Inst.* 39:64-8, 2008.
68. Choi, CW, Chung YJ, Slape, C, and **Aplan PD**. Impaired differentiation and apoptosis of hematopoietic precursors in a mouse model of myelodysplastic syndrome. *Haematologica* 93:1394-7, 2008.
69. Chung YJ, Choi CW, Slape C, Fry T, and **Aplan PD**. Transfer of a myelodysplastic syndrome by a long-term repopulating stem cell. *Proc. Natl. Acad. Sci. USA* 105:14088-93, 2008.
70. Slape C, Liu LY, Beachy SH, and **Aplan PD**. Leukemic transformation in mice expressing a NUP98-HOXD13 transgene is accompanied by spontaneous mutations in *Nras*, *Kras*, and *Cbl*. *Blood* 112:2017-9, 2008.
71. Hillion J, Dhara S, Sumter TF, Mukherjee M, Di Cello F, Belton A, Turkson J, Jaganathan S, Cheng L, Ye Z, Jove R, **Aplan P**, Lin YW, Wertzler K, Reeves R, Elbahlouh O, Kowalski J, Bhattacharya R, Resar LM. The high-mobility group A1a/signal transducer and activator of transcription-3 axis: an Achilles heel for hematopoietic malignancies? *Cancer Res.* 68:10121-7, 2008.
72. Stumpo DJ, Broxmeyer HE, Ward T, Cooper S, Hangoc G, Chung YJ, Shelley WC, Richfield EK, Ray MK, Yoder MC, **Aplan PD**, and Blackshear PJ. Targeted disruption of *Zfp3612*, encoding a CCCH tandem zinc finger RNA-binding protein, results in defective hematopoiesis. *Blood*:114:2401-10, 2009.
73. Choi CW, Chung YC, Slape C, and **Aplan PD**. A NUP98-HOXD13 fusion gene associated with myelodysplastic syndrome impairs differentiation of T and B lymphocytes. *J Immunol* 183:6227-35, 2009.
74. Cheng Y, Zhang Z, Keenan B, Roschke AV, Nakahara K, and **Aplan PD**. Efficient repair of DNA double-strand breaks in malignant cells with structural instability. *Mutat Res* 683:115-122, 2010.
75. Lin YW, Beharry ZW, Hill EG, Song JH, Wang W, Xia Z, Zhang Z, **Aplan PD**, Aster JC, Smith CD, and Kraft AS. A small molecule inhibitor of Pim protein kinases blocks the growth of precursor T-cell lymphoblastic leukemia/lymphoma. *Blood* 115:824-33, 2010



76. Caudell D, Harper DP, Novak RL, Pierce RM, Slape C, Wolff L, and **Aplan PD**. Retroviral insertional mutagenesis identifies Zeb2 activation as a novel leukemogenic collaborating event in CALM-AF10 transgenic mice. *Blood* 115:1194-1203, 2010.
77. Tremblay M, Tremblay CS, Herblot S, **Aplan PD**, Hebert J, Perreault C, and Hoang T. Modeling T-cell acute lymphoblastic leukemia induced by the SCL and LMO1 oncogenes. *Genes Dev* 24:1093-1105, 2010.
78. Estécio MRH, Gallegos J, Vallot C, Castoro RJ, Chung W, Maegawa S, Oki Y, Kondo Y, Jelinek J, Shen L, Hartung H, **Aplan PD**, Czerniak BA, Liang S, and Issa JP. Genome Architecture Marked by Retrotransposons Modulates Predisposition to DNA Methylation in Cancer. *Genome Res* 20: 1369-1382, 2010.
79. De Keersmaecker K, Real PJ, Gatta GD, Palomero T, Sulism ML, Barnes K, Castillo M, Sole X, Hadler M, Lenz J, **Aplan PD**, Kelliher M, Kee B, Pandolfi PP, Kappes D, Gounari F, Paietta E, Racevskis J, Wiernik P, Rowe J, Soulier J, Avran D, Cavé H, Dastugue N, Raimondi S, Meijerink J, Cordon-Cardo C, Califano A, and Ferrando AA. The TLX1 oncogene drives aneuploidy in T-cell transformation. *Nat Med* 16:1321-1327, 2010.
80. Gill JA, Lowe L, Nguyen J, Liu PP, Blake T, Venkatesh B, and **Aplan PD**. Enforced expression of SV40 large T antigen leads to testicular germ cell tumors in zebrafish. *Zebrafish* 7:333-41, 2010.
81. Castiel A, Danieli MM, David A, Moshkovitz S, **Aplan PD**, Kirsch IR, Brandeis M, Kramer A and Izraeli S. The Stil protein regulates centrosome integrity and mitosis through suppression of Chfr. *J Cell Sci* 124: 532-539, 2011.
82. Landry JW, Banerjee S, Taylor B, **Aplan PD**, Singer A, and Wu C. Chromatin remodeling complex NURF regulates thymocyte maturation. *Genes Dev* 25:275-286, 2011.
83. Gough SM, Slape CI, and **Aplan PD**. NUP98 gene fusions and hematopoietic malignancies: common themes and new biological insights. *Blood* 118:6247-6257, 2011.
84. Greenblatt S, Li L, Slape C, Nguyen B, Novak R, Duffield A, Huso D, Desiderio S, Borowitz MJ, **Aplan P**, and Small D. Knock-in of a FLT3/ITD mutation cooperates with a NUP98-HOXD13 fusion to generate acute myeloid leukemia in a mouse model. *Blood* 119:2883-2994, 2012.

85. Beachy SH, Onozawa M, Chung YJ, Slape C, Bilke S, Francis P, Pineda M, Walker RL, Meltzer P, and **Aplan PD**. Enforced expression of Lin28b leads to impaired T cell development, release of inflammatory cytokines and peripheral T cell lymphoma. *Blood* 120:1048-1059, 2012.
86. Gough SM, Chung YJ, and **Aplan PD**. Depletion of cytotoxic T-cells does not protect NUP98-HOXD13 mice from myelodysplastic syndrome but reveals a tumor immunosurveillance effect. *PLoS One* 7:e36876, 2012.
87. Slape CI, Saw J, Jowett JBM, **Aplan PD**, Strasser A, Jane SM, and Curtis DJ. Inhibition of apoptosis by BCL-2 prevents leukemic transformation of a murine myelodysplastic syndrome. *Blood* 120:2475-83, 2012.
88. Novak RL, Harper DP, Caudell D, Slape C, Beachy SH, and **Aplan PD**. Gene expression profiling and candidate gene re-sequencing identifies pathways and mutations important for malignant transformation caused by leukemogenic fusion genes. *Exp Hematol.* 40:1016-27, 2012. (*Highlight article*).
89. Xu H, Menendez S, Bae N, **Aplan PD**, Deblasio TR, and Nimer SD. Loss of p53 accelerates the complications of myelodysplastic syndrome (MDS) in a NUP98-HOXD13 driven mouse model. *Blood* 120:3089-97, 2012.
90. Metais J-Y, Winkler T, Geyer JT, Calado RT, **Aplan PD**, Eckhaus MA, and Dunbar CE. BCL2A1a over-expression in hematopoietic progenitors decreases apoptosis and results in hematopoietic transformation in mice. *PLoS One* 7:e48267, 2012.
91. Baily EJ, Duffield AS, Greenblatt SM, **Aplan PD**, and Small D. Effect of FLT3 ligand on survival and disease phenotype in murine models harboring a FLT3 internal tandem duplication mutation. *Comp Med.* 63:218-26, 2013.
92. Beachy SH, Onozawa M, Silverman D, Chung YJ, Martinez-Rivera M, and **Aplan PD**. Isolated Hoxa9 overexpression predisposes to the development of lymphoid but not myeloid leukemia. *Exp Hematol.* 41:518-29, 2013. (*Highlight article*).
93. Lacombe J, Krosel G, Martin R, Herblot S, Tremblay M, **Aplan PD**, Lemieux S, and Hoang T. Genetic interaction between Kit and Scl. *Blood* 122:1150-61, 2013.
94. Goldberg L, Tijssen, MR, Birger Y, Hannah RL, Kinston SJ, Schütte J, Beck D, Knezevic K, Schiby G, Jacob-Hirsch J, Biran A, Kloog Y, Marcucci G, Bloomfield CD, **Aplan PD**,

- Pimanda JE, Göttgens B, and Izraeli S. Genome-scale expression and transcription factor binding profiles reveal therapeutic targets in transgenic ERG myeloid leukemia. *Blood*. 122:2694-703, 2013.
95. Saw J, Curtis DJ, Hussey DJ, Dobrovic A, **Aplan PD**, and Slape CI. The fusion partner specifies the oncogenic potential of NUP98 fusion proteins. *Leuk Res*. 37:1668-73, 2013.
96. Chung YJ, Robert C, Gough SM, Rassool FV, and **Aplan PD**. Oxidative stress leads to increased mutation frequency in a murine model of myelodysplastic syndrome. *Leuk Res*. 38:95-102, 2014.
97. Maegawa S, Gough SM, Watanabe-Okochi N, Lu Y, Zhang N, Castoro RJ, Estecio MR, Jelinek J, Liang S, Kitamura T, **Aplan PD**, Issa JP. Age-related epigenetic drift in the pathogenesis of MDS and AML. *Genome Res*. 24:580-91, 2014.
98. Humeniuk R, Koller R, Bies J, **Aplan PD**, and Wolff L. Loss of p15Ink4b accelerates development of myeloid neoplasms in Nup98-HoxD13 transgenic mice. *Stem Cells*. 32:1361-6, 2014.
99. Gough SM, Lee F, Walker RL, Yang F, Zhu Y, Pineda M, Onozawa M, Chung YJ, Bilke S, Wagner EK, Denu JM, Ning Y, Meltzer PS, and **Aplan PD**. NUP98-PHF23 is a chromatin modifying oncoprotein that causes a wide array of leukemias sensitive to inhibition of PHD domain histone reader function. *Cancer Discov*. 4:564-77, 2014
100. Onozawa M, Zhang Z, Kim YJ, Goldberg L, Varga T, Bergsagel PL, Kuehl WM, and **Aplan PD**. Repair of DNA double strand breaks by templated nucleotide sequence insertions derived from distant regions of the genome leads to germline polymorphisms. *Proc. Natl. Acad. Sci. USA* 111:7729-34, 2014.
101. Santos SA, Faryabi RB, Ergen A, Malhowski A, Onozawa M, Lee J-E, Callen E, Chen H-T, Wong N, Finkel N, Ge K, **Aplan PD**, Armstrong SA, and Nussenzweig A. DNA-damage induced differentiation of leukemic cells as an anti-cancer barrier. (*Nature*, in press)

### **Invited Reviews and Chapters:**

1. Begley CG, **Aplan PD**, Waldmann TA and Kirsch IR: A novel gene, **SCL**, identified by a chromosomal translocation in a human stem cell leukemia. In: Clark SC and Golde DW (eds), **Hematopoiesis**. New York: Alan R Liss, 1990, pp 197-206.

2. Kirsch IR, **Aplan PD**, Begley CG, Bertness V, Lipkowitz S, Nakahara K, Nussmeier M, Felix CA, Reynolds L, Seibel NL, Stern M-H and Tchorz K: Abnormal antigen receptor formation in normal, ataxia-telangiectasia, and malignant lymphocytes. In: Steilein JW, Ahmad F and Bialy H (eds). **Advances in Gene Technology: The Molecular Biology of Immune Diseases and the Immune Response.** London: Oxford University Press, 1990, pp 22-24.
3. **Aplan PD** and Kirsch IR: Lymphoid malignancies that disrupt homeobox and "HLH" genes. In: Kirsch IR (ed). **The Causes and Consequences of Chromosomal Aberrations.** Boca Raton: CRC Press, 1993, pp 99-109.
4. Schichman SA, **Aplan PD**, Neri A, Fracchiolla NS, Virgilio L and Croce CM: Molecular pathogenesis of T-cell lymphomas. In Magrath IT (ed). **The Non-Hodgkin's Lymphomas.** 2nd Edition. London: Edward Arnold, 1996.
5. Thandla S and **Aplan PD**: Molecular biology of ALL. *Sem Oncol* 24:45-56, 1997.
6. **Aplan PD**. Mechanisms of Leukemogenesis: Chromosomal Translocations. *Hematology* 1999, pp 77-82.
7. **Aplan PD** and Stanulla M: Mechanisms of chromosomal translocation breakpoints. In Büchner, T., Hiddemann, W., Wörmann, B., Schellong, G., Ritter, J., Creutzig, U. (Eds.). **Acute Leukemias VIII, Prognostic Factors and Treatment Strategies.** Springer; New York; 2001, pp 3-10.
8. Lam DH and **Aplan PD**: *NUP98* gene fusions in hematologic malignancies. *Leukemia* 15:1689-1695, 2001.
9. **Aplan PD**: The rhythm of blood. *Blood* 102:3861, 2003.
10. Lin YW and **Aplan PD**. Leukemic Transformation. *Cancer Biology and Therapy* 3:13-20, 2004.
11. Slape CI and **Aplan PD**. The role of *NUP98* gene fusions in hematologic malignancy. *Leuk Lymphoma* 45:1341-50, 2004.
12. **Aplan PD**: T-ALL: Smoking guns and genes of interest. *Blood* 103:1568-1569, 2004.

13. **Aplan PD.** Adults are not simply big children. *Blood* 103:2437-2438, 2004.
14. **Aplan PD** You break it, you fix it. *Blood* 105:1843-1844, 2005.
15. Look AT and **Aplan PD.** Molecular Basis of Childhood Cancer. In Pizzo, P and Poplack DG (eds.) **Principles and Practice of Pediatric Oncology**, 5<sup>th</sup> Edition, 2006.
16. **Aplan PD.** Causes of oncogenic chromosomal translocation. *Trends Genet.* 22:46-55, 2006.
17. **Aplan PD.** Chromosomal translocations involving the *MLL* gene: molecular mechanisms. *DNA Repair* 5:1265-1272, 2006.
18. Lin, YW and **Aplan PD.** Animal models of T-cell lymphoma. *Haematologica Reports* 2:79-82, 2006.
19. Caudell, D and **Aplan PD.** The role of CALM-AF10 gene fusion in acute leukemia. *Leukemia.* 22:678-85, 2008.
20. Slape, C and **Aplan PD.** Retroviral Insertional Mutagenesis. In Schwab, M (ed) **Encyclopedia of Cancer**, 2<sup>nd</sup> Edition, 2008.
21. Harper, DP and **Aplan PD.** Chromosomal rearrangements leading to *MLL* gene fusions: clinical and biological aspects. *Cancer Research* 68:10024-27, 2008.
22. Mrózek K, Harper DP, **Aplan PD.** Cytogenetics and molecular genetics of acute lymphoblastic leukemia. *Hematol Oncol Clin North Am.* 23:991-1010, 2009.
23. Beachy SH and **Aplan PD.** Mouse models of myelodysplastic syndromes. *Hematol Oncol Clin North Am.* 24:361-375, 2010.
24. **Aplan PD** and Khan J. Molecular and Genetic Basis of Childhood Cancer. In Pizzo, P and Poplack DG (eds.) **Principles and Practice of Pediatric Oncology**, 6<sup>th</sup> Edition, 2010.
25. Gough SM, Slape CI, **Aplan PD.** NUP98 gene fusions and hematopoietic malignancies: common themes and new biologic insights. *Blood* 118:6247-6257, 2011.

26. Onozawa M, **Aplan PD**. Illegitimate V(D)J recombination involving nonantigen receptor loci in lymphoid malignancy. *Genes Chromosomes Cancer* 51:525-535, 2012.
27. Levens D, **Aplan PD**. Notching up MYC gives a LIC. *Cell Stem Cell*. 13:8-9, 2013.
28. **Aplan PD**, Shern J, and Khan J. Molecular and Genetic Basis of Childhood Cancer. In Pizzo, P and Poplack DG (eds.) **Principles and Practice of Pediatric Oncology**, 7<sup>th</sup> Edition, in press.