BIOGRAPHICAL SKETCH

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NAME	POSITION TITLE
Wanguo Liu, Ph.D.	
eRA COMMONS USER NAME Wliu12	Associate Professor of Genetics

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Yunnan Agricultural University, Kunming, China	B. S.	1978	Veterinary
Yunnan University, Kunming, China	M. S.	1982	Cell Biology & Genetics
Wayne State Univ. School of Medicine, Detroit, MI	Ph.D.	1993	Mol. Biol. & Hum. Genet.

A. Positions and Honors.

Professional Experience

1982-1987 Lecturer, Department of Biology, Yunnan University, Kunming, China
1987-1989 Visiting Scientist/Res. Associate, Department of Biology, University of Toledo, Toledo, OH
1993-1996 Postdoctoral Fellow, Howard Hughes Medical Institute, Stanford University, Stanford, CA
1996-1999 Professional Associate in Research, Director of the Gene Identification Lab, Mayo Clinic
1999-2006 Assistant Professor & Senior Associate Consultant, Department of Laboratory Medicine & Pathology, Mayo Clinic Medical School, Mayo Foundation, Rochester, MN
2006-2007 Associate Professor, Department of Lab. Med. & Pathol, Mayo Foundation, Rochester, MN
2007- Associate Professor, Department of Genetics, Stanley S Scott Cancer Center, Louisiana State University Health Sciences Center, New Orleans, LA 70112

B. Selected peer-reviewed publications (28 from a total of 71)

1. **Liu W.,** Piechocki M., Shridhar V., Lyles G, Song Z., Nakamura Y., Drabkin H., Vance J., Smith D.I. The isolation of a contig of overlapping yeast artificial chromosome (YAC) clones extending for 2.5 Mbs in the vicinity of the von Hippel-Lindau disease gene. *Hum Mol Genet* 1993; 2(8):1177-1182.
2. Swaroop A, Yang-Fang TL, **Liu W,** Gieser L, Barrow LL, Chen K, Agarwal N, MH, Smith D.I. Molecular characterization of a novel human gene, SEC13R, related to the yeast secretory pathway gene SEC13, and mapping to a conserved linkage group on human chromosome 3p24-p25 and mouse chromosome 6. *Hum Mol Genet* 1994; 2(8):1281-86.
3. **Liu W.,** Qian C., Comeau K, Francke U. Mutant FBN1 monomers lacking EGF-like domains disrupt microfibril assembly and cause severe Marfan syndrome. *Hum Mol Genet* 1996; 5:1581-1587.
4. **Liu W.,** Qian C., Francke U. Silent mutation causes exon skipping of FBN1 gene in Marfan syndrome. *Nat Genet* 1997; 16:328-329.
5. **Liu W.,** James C.D, Frederick L., Alderete, B.E. and Jenkins, R.B. PTEN/MMAC1 mutations and EGFR amplification in Glioblastomas. *Cancer Res.* 1997; 57:5254-5257.
6. Jenkins R.B., Qian J., Lee H.K., Huang H., Hirasawa K., Bostwick D.G., Proffitt J., Wilber K., Lieber M.M., **Liu W.** and Smith D.I. A molecular cytogenetic analysis of 7q31 in prostate cancer. *Cancer Res.* 1998; 58:759-766.
7. **Liu W.,** Smith, D. I., Thibodeau, S., and James, C. D. Denaturing high performance liquid chromatography (DHPLC) used in the detection of germline and somatic mutations. *Nucleic Acid Res.* 1998; 26:1396-1400.
8. Mai, M., Yokomizo, A., Qian, C., Yang, P., Tindall, D. J., Smith, D. I. and **Liu W.** Activation of *p73* silent allele in lung cancer. *Cancer Res.* 1998; 58:2347-2349.
9. Yokomizo A., Tindall D.J., Drabkin H., Gemmill R., Franklin W., Yang P., Sugio K., Smith D.I. and **Liu W.** PTEN/MMAC1 mutations identified in small cell, but not in non-small cell lung cancers. *Oncogene* 1998; 17: 475-479.
10. Mai, M., Qian, C., Yokomizo, A., Tindall, D., Bostwick, D., Polychronakos, C., Smith, D. I. and **Liu W.** Loss of imprinting and allele switching expression of *p73* in renal cell carcinoma. *Oncogene* 1998; 1:1739-41.

11. Yokomizo A., Mai M., Tindall DJ., Cheng L., Bostwick DG., Naito S., Smith DI., and **Liu W.** Overexpression of the wild type p73 gene in invasive bladder cancer. *Oncogene* 1999, 18:1629-33.
12. Schrijver I., **Liu W (co-first author).,** Brenn T., Furthmayr H and Francke U. Cysteine Substitutions in EGF-like Domains of Fibrillin-1: Distinct Effects on Biochemical and Clinical Phenotypes. *Am J Hum Genet* 1999, 65:1007-1020.
13. Vockley J., Anderson BD., Willard J., Seelan S., Smith DI., and **Liu W.** An Unusually High Frequency of Abnormal Splicing of IVD RNA in Isovaleric Acidemia, Including Exon Skipping Caused by Missense Mutation in the IVD Gene. *Am J Hum Genet* 2000, 66:356-367.
14. Krishnadath KK, Wang KK, Taniguchi K, Sebo TJ, Buttar NS, Anderson MA, Lutzke LS, **Liu W.** Persistent genetic abnormalities in Barrett's esophagus after photodynamic therapy. *Gastroenterology* 2000, 119(3):624-30.
15. **Liu W,** Dong X, Mai M, Seelan RS, Taniguchi K, krishnadath KK, Halling KC, Cunningham JM, Qian C, Christensen E, Roche PC, Smith DI and Thibodeau SN. Mutations in *AXIN2* cause colorectal cancer with defective mismatch repair by activating β-catenin-Tcf signaling. *Nat Genet* 2000, 26:146-147.
16. Irwin M, Marin MC, Phillips AC, Seelan RS, Smith DI, **Liu W,** Vousden KH and Kaelin WG. Role for the p53 homolog p73 in E2F1-induced Apoptosis. *Nature* 2000, 407:645-648.
17. Taniguchi K, Dong X, Qian C, Aderca, IN, Murphy LM, Nagorney DM, Burgart LJ, Roche PC, Smith DI, Ross JA, Roberts LR, and **Liu W.** Mutation spectrum of beta-catenin, AXIN1, and AXIN2 in Hepatocellular Carcinomas and Hepatoblastomas. *Oncogene,* 2002, 21(31):4863-71.
18. Schrijver I., **Liu W (co-first author),** Odom R., Brenn T., furthmayr H., and Francke U. Premature Termination Mutations in *FBN1*: Distinct Effects on Differential Allelic Expression, Protein and Clinical Phenotypes. *Am J Hum Genet* 2002, 71(2):223-37.
19. Dong X, Wang L, Taniguchi K, Wang X, Cunningham JM, McDonnell SK, Qian C, Marks AF, Slager SL, Peterson BJ, Smith DI, Cheville JC, Blute ML, Jacobsen SJ, Schaid DJ, Tindall DJ, Thibodeau SN & **Liu W.** Mutations in *CHEK2* Associated with Prostate Cancer Risk. *Am J Hum Genet* 2003, 72:270-280.
20. Zheng L, Wang F, Neumann RM, Chville JC, Tindall DJ, and **Liu W.** Mutually exclusive mutations of *CHEK2* and *TP53* implicated in primary prostate tumors and cancer cell lines. *Hum Mut* 2006, 27(10):1062-63.
21. Wang X, Taniguchi K, Seelan RS, Wang L, McDonnell SK, Qian C, Pan K, Lu Y, Shridhar V, Couch FJ, Tindall DJ, Cooney KA, Isaacs WB, Jacobsen SJ, Schaid DJ, Thibodeau SN, and **Liu W.** Germline *p53AIP1* Mutations Disrupting DNA Damage-induced Apoptosis are Associated with Sporadic Prostate Cancer. *Cancer Res* 2006, 66(21):10302-10307.
22. Lee H, Kim D, Dan HC, Wu El, Gritsko TM, Cao C, Nicosia SV, Golemis EA, **Liu W,** Coppola D, Drem SS, Testa JR, and Cheng JQ. Identification and characterization of putative tumor suppressor NGB, a GTP-binding protein that interacts with the neurofibromatosis 2 protein. *Mol Cell Biol.* 2007, 27:2103-19.
23. Wang X, Szabo C, Qian C, Amadio PG, Thibodeau SN, Cerhan JR, Petersen GM, **Liu W,** Couch FJ. Mutational analysis of thirty-two double-strand DNA break repair genes in breast and pancreatic cancers. *Cancer Res.* 2008 68(4):971-5.
24. Wang L, Oberg AL, Asmann YW, Sicotte H, McDonnell SK, Riska SM, **Liu W,** Steer CJ, Subramanian S, Cunningham JM, Cerhan JR, Thibodeau SN. Genome-wide Transcriptional Profiling Reveals MicroRNA-correlated Genes and Biological Processes in Human Lymphoblastoid Cell Lines. *PLoS One* 2009, 11:4(6) e5878.
25. Guo J, Cagatay T, Zhou G, Chan CC, Blythe S, Suyama K, Zheng L, Pan K, Qian C, Hamelin R, Thibodeau SN, Klein PS, Wharton KA, and **Liu W.** Mutations in the human naked cuticle homolog NKD1 found in colorectal cancer alter Wnt/Dvl/beta-catenin signaling. *PLoS One* 2009, 24;4(11):e7982.
26. Zhang J, Zhao D, Park HP, Wang H, Wang L, Dyer RB, **Liu W**, Thibodeau SN, McNiven MA, Tindall DJ, Molina JR, and Fei P. FAVL Elevation Disrupts Fanconi Anemia Pathway Signaling and Promotes Genomic Instability and Tumor Growth. *J Clin Invest* 2010, 120(5):1524-34.
27. Li Y, Bavarva JH, Qian C, Thibodeau SN, Golemis EA, and **Liu W.** HEF1, a Novel Target of Wnt Signaling, Promotes Colonic Cell Migration and Cancer Progression. *Oncogene* 2010, 30(23):2633-43.
28. Guo J, Zheng L, Liu WY, Wang X, Wang Z, French AJ, Kang D, Thibodeau SN, and **Liu W**. A Truncating Mutation of *TFAM* Results in Mitochondrial DNA Depletion and Apoptotic Resistance in Most Microsatellite Unstable Colorectal Cancer. *Cancer Res* 2011, 71(8):2978-87.

C. Ongoing Research Support

2007 - 2012 NIH/NCI - R01CA115555 (PI: Liu W)
DNA Damage-Response Defects in Prostate Cancer Risk

2009 - 2011 NIH/NCI - 3RO1CA115555-03S1 (PI: Liu W)
ARRA Administrate supplement award for training postdoctoral fellows - Analyzing DNA damage-signaling defects in prostate cancer patients by Next Generation Sequencing

2009 - 2013 ACS - RSG-09-169-01-CSM (PI: Iwakuma T, Co-I: Liu W)
Dissecting the roles of MTBP in osteosarcoma metastasis

2009 - 2014 NIH - RFA-RR-08-007 (PI: Deininger P, Co-I; Liu W)
Mentoring a Cancer Genetics Program in Louisiana - Centers of Biomedical Research Excellence (COBRE)