



CURRICULUM VITAE

Jianjun Shen, Ph.D.

PRESENT TITLE AND AFFILIATION

Primary Appointment

Professor, Department of Epigenetics and Molecular Carcinogenesis, Division of Basic Science Research, The University of Texas MD Anderson Cancer Center, Smithville, TX

Dual/Joint/Adjunct Appointment

Associate Member, MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences at Houston (GSBS), Houston, TX

CITIZENSHIP

United States

OFFICE ADDRESS

The University of Texas MD Anderson Cancer Center
1808 Park Road 1-C
P.O. Box 389
Unit Number: 116
Smithville, TX 78957
Phone: 512-237-9558
Fax: 512-237-2475
Email: jjanshen@mdanderson.org

EDUCATION

Degree-Granting Education

Southeast University, Nanjing, China, BS, 1983, Chemistry

Rutgers, The State University of New Jersey, Newark, NJ, MS, 1990, Chemistry

Rutgers, The State University of New Jersey, Newark, NJ, PHD, 1992, Chemistry

Postgraduate Training

Post-Doc, Department of Biochemistry, Duke University Medical Center, Durham, NC, 9/1992-5/1994

Fellowship in Clinical Molecular Genetics, Medical Genetics Training Program, Department of Pediatrics, Duke University Medical Center, Durham, NC, 6/1994-8/1998

Research Associate, Department of Pediatrics, Duke University Medical Center, Durham, NC, 6/1994-8/1998

EXPERIENCE/SERVICE

Academic Appointments

Instructor, Department of Chemistry, Xiamen University, Fujian, China 7/1983-7/1987

Assistant Professor, Department of Molecular Carcinogenesis, Division of Basic Science Research, The University of Texas MD Anderson Cancer Center, Smithville, TX, 11/2001-8/2006

Associate Professor, Department of Molecular Carcinogenesis, Division of Basic Science Research, The University of Texas MD Anderson Cancer Center, Smithville, TX, 9/2006-8/2013

Associate Member, MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences at Houston (GSBS), Houston, TX, 8/2011-present

Professor, Department of Epigenetics and Molecular Carcinogenesis, Division of Basic Science Research, The University of Texas MD Anderson Cancer Center, Smithville, TX, 9/2013-present

Other Appointments/Responsibilities

Assistant Director, Glycogen Storage Disease Genetic Testing Laboratory, Duke University Medical Center, Durham, NC, 7/1996-7/1998

Facility Core Director, Department of Epigenetics and Molecular Carcinogenesis, Division of Basic Science Research, The University of Texas MD Anderson Cancer Center, Smithville, TX, 8/1998-present

Consultantships

Austin Community College, Austin, Texas, Consultant, Provided consultation for the Biotechnology Program, 2001

Institutional Committee Activities

Shared Resources Committee, Member, 1998-2012

Steering Committee, Tournament for Cancer Research, Member, 1/2002-2005

Employee Opinion Survey Committee, Member, Smithville, TX, 4/2003-8/2004

NIEHS Center for Research for Environmental Disease, Internal Advisory Committee Member, 2006-2013

Research Faculty Progress Review Committees, Member and/or chair, 2007, 2010, 2012, 2014, 2015, 2016, and 2020

MD Anderson Faculty Senate, Member, 2012-2015

Institutional NGS LIMS Selection Committee, Member, 2013-2014

HONORS AND AWARDS

Postdoctoral Travel Award, Society for Inherited Metabolic Disorders, 1996

Travel Award, Southeastern Regional Genetics Group, 1997

Postdoctoral Travel Award, Society for Inherited Metabolic Disorders, 1998

Third Place Poster Presentation (Honorable mention), AACR Pancreatic Cancer, 2004

RESEARCH

Grants and Contracts

Funded

Principal Investigator, 30%, The University of Texas MD Anderson Cancer Center Science Park Next-Generation Sequencing Facility, RP170002, Cancer Prevention & Research Institute of Texas (CPRIT), 12/1/2016-11/30/2021, \$5,000,000 (\$1,592,105/year)

Completed

Co-Investigator, Epigenetic Regulation by CHD7 in Colon Cancer, 1R21CA215108-01, NIH/NCI, PI - Marcos Estecio, 4/1/2017-3/31/2019, \$275,000 (\$150,000/year)

Co-Investigator, 5%, Protein Array and Analysis Core, RP130432, Cancer Prevention & Research Institute of Texas (CPRIT), PI - Bedford, 8/1/2013-7/31/2018 (\$1,940,486/year)

Principal Investigator, 20%, The University of Texas MD Anderson Cancer Center Science Park Next-Generation Sequencing Facility, RP120348, Cancer Prevention & Research Institute of Texas (CPRIT), 12/1/2011-11/30/2016, \$5,995,917 (\$949,919/year)

Co-Investigator, 3%, Innovative Strategies for Breast Cancer Immunotherapy, BC113114, Department of Defense (DOD), PI - Feng Wang-Johanning, 7/20/2012-8/31/2016, \$3,006,490

Core Leader, 50%, Mechanisms and Prevention of Environmental Disease, 5 P30 ES07784, NIH/NIEHS, PI - D. Johnson, 4/1/2007-3/31/2013, \$527,478 (\$105,495/year)

Co-Investigator, 5%, Identification of common pathways in tumor promotion, 1R01 ES015718-02, NIH/NIEHS, PI - J. DiGiovanni, 8/1/2007-12/31/2010, \$1,399,520 (\$349,880/year)

Co-Investigator, 10%, The Role of COX-2 in Skin Carcinogenesis, 1R01 CA100140-01, NIH/NCI, PI - S. Fischer, 6/1/2003-5/31/2008, \$1,112,500 (\$222,500/year)

Co-Investigator, 5%, IκB Kinase α (IKKα): Role in Skin Carcinogenesis, CA102510-01, NIH/NCI, PI - Y. Hu, 7/15/2003-6/30/2008, \$1,112,500 (\$222,500/year)

Co-Investigator, 5%, Characterization of WWOX, the Cancer Gene Spanning FRA16D, 1R1 CA102444-01, NIH/NCI, PI - C.M. Aldaz, 9/1/2003-8/31/2008, \$1,112,500 (\$222,500/year)

Co-Investigator, 5%, Prevention of ER-negative Breast Cancer: Identification of biomarkers associated with successful chemoprevention, 1R01 CA101211-01, NIH/NCI, PI - Brown, 4/1/2003-3/31/2008, \$490,460 (\$98,092/year)

Collaborator, 5%, 15-LOX2 as an endogenous prostate tumor suppressor, RSG-03-163-01-MGO, American Cancer Society (ACS), PI - D.Tang, 6/1/2003-5/1/2007, \$656,000 (\$164,000/year)

Facility Core Director, 50%, Mechanisms and Prevention of Environmental Disease, 5 P30 ES07784-08, NIH, PI - J. DiGiovanni, 4/1/1996-3/31/2006, \$1,147,512 (\$286,878/year)

Principal Investigator, 20%, Identification of mouse skin proteins and establishment of a mouse skin proteomics database, Pilot Project, NIEHS Center for Research on Environmental Disease, 7/1/2004-6/30/2005, \$25,000

PUBLICATIONS

Peer-Reviewed Original Research Articles

1. Weeks JR, Hardin SE, **Shen J**, Lee JM, Greenleaf AL. Locus-specific variation in phosphorylation state of RNA polymerase II in vivo: correlations with gene activity and transcript processing. *Genes Dev* 7(12A):2329-44, 12/1993. PMID: 8253380.
2. **Shen J**, Bao Y, Liu HM, Lee P, Leonard JV, Chen YT. Mutations in exon 3 of the glycogen debranching enzyme gene are associated with glycogen storage disease type III that is differentially expressed in liver and muscle. *J Clin Invest* 98(2):352-7, 7/1996. PMCID: PMC507437.
3. McConkie-Rosell A, Wilson C, Piccoli DA, Boyle J, DeClue T, Kishnani P, **Shen J**, Boney A, Brown B, Chen YT. Clinical and laboratory findings in four patients with the non-progressive hepatic form of type IV glycogen storage disease. *J Inherit Metab Dis* 19(1):51-8, 1996. PMID: 8830177.
4. **Shen J**, Liu HM, Bao Y, Chen YT. Polymorphic markers of the glycogen debranching enzyme gene allowing linkage analysis in families with glycogen storage disease type III. *J Med Genet* 34(1):34-8, 1/1997. PMCID: PMC1050844.
5. Parvari R, Moses S, **Shen J**, Hershkovitz E, Lerner A, Chen YT. A single-base deletion in the 3'-coding region of glycogen-debranching enzyme is prevalent in glycogen storage disease type IIIA in a population of North African Jewish patients. *Eur J Hum Genet* 5(5):266-70, 9/1997. PMID: 9412782.
6. **Shen J**, Bao Y, Chen YT. A nonsense mutation due to a single base insertion in the 3'-coding region of glycogen debranching enzyme gene associated with a severe phenotype in a patient with glycogen storage disease type IIIa. *Hum Mutat* 9(1):37-40, 1997. PMID: 8990006.
7. **Shen J**, Liu HM, McConkie-Rosell A, Chen YT. Prenatal diagnosis and carrier detection for glycogen storage disease type III using polymorphic DNA markers. *Prenat Diagn* 18(1):61-4, 1/1998. PMID: 9483641.
8. Parvari R, **Shen J**, Hershkovitz E, Chen YT, Moses SW. Two new mutations in the 3' coding region of the glycogen debranching enzyme in a glycogen storage disease type IIIa Ashkenazi Jewish patient. *J Inherit Metab Dis* 21(2):141-8, 4/1998. PMID: 9584265.
9. Hadjigeorgiou GM, Comi GP, Bordoni A, **Shen J**, Chen YT, Salani S, Toscano A, Fortunato F, Lucchiari S, Bresolin N, Rodolico C, Piscaglia MG, Franceschina L, Papadimitriou A, Scarlato G. Novel donor splice site mutations of AGL gene in glycogen storage disease type IIIa. *J Inherit Metab Dis* 22(6):762-3, 8/1999. PMID: 10472540.

10. **Shen J**, Liu HM, McConkie-Rosell A, and Chen YT. Prenatal diagnosis for glycogen storage disease type IV, branching enzyme deficiency, using PCR-based DNA analysis. *Prenat Diagn* 19(9):837-9, 9/1999. PMID: 10521841.
11. Shaiu WL, Kishnani PS, **Shen J**, Liu HM, Chen YT. Genotype-phenotype correlation in two frequent mutations and mutation update in type III glycogen storage disease. *Mol Genet Metab* 69(1):16-23, 1/2000. PMID: 10655153.
12. **Shen J**, Matern D, Millington DS, Hillman S, Feezor MD, Bennett MJ, Qumsiyeh M, Kahler SG, Chen YT, Van Hove JL. Acylcarnitines in fibroblasts of patients with long-chain 3-hydroxyacyl-CoA dehydrogenase deficiency and other fatty acid oxidation disorders. *J Inherit Metab Dis* 23(1):27-44, 2/2000. PMID: 10682306.
13. Van Hove JL, Kahler SG, Feezor MD, Ramakrishna JP, Hart P, Treem WR, **Shen J**, Matern D, Millington DS. Acylcarnitines in plasma and blood spots of patients with long-chain 3-hydroxyacyl-coenzyme A dehydrogenase deficiency. *J Inherit Metab Dis* 23(6):571-82, 9/2000. PMID: 11032332.
14. Yan M, Qiang W, Liu N, **Shen J**, Lynn WS, Wong PK. The ataxia-telangiectasia gene product may modulate DNA turnover and control cell fate by regulating cellular redox in lymphocytes. *Faseb J* 15(7):1132-8, 5/2001. PMID: 11344081.
15. Li D, Zhang W, Zhu J, Chang P, Sahin A, Singletary E, Bondy M, Hazra T, Mitra S, Lau S, **Shen J**, DiGiovanni J. Oxidative DNA damage and 8-hydroxy-2-deoxyguanosine DNA glycosylase/apurinic lyase in human breast cancer. *Mol Carcinog* 31(4):214-23, 8/2001. PMID: 11536371.
16. Kiguchi K, Carbajal S, Chan K, Beltran L, Ruffino L, **Shen J**, Matsumoto T, Yoshimi N, DiGiovanni J. Constitutive expression of ErbB-2 in gallbladder epithelium results in development of adenocarcinoma. *Cancer Res* 61(19):6971-6, 10/2001. PMID: 11585718.
17. Xu H, **Shen J**, Walker CL, Kleymenova E. Tissue-specific expression and splicing of the rat polycystic kidney disease 1 gene. *DNA Seq* 12(5-6):361-6, 12/2001. PMID: 11913782.
18. Li D, Firozi PF, Zhang W, **Shen J**, DiGiovanni J, Lau S, Evans D, Friess H, Hassan M, Abbruzzese JL. DNA adducts, genetic polymorphisms and K-ras mutation in human pancreatic cancer. *Mutation Research* 513(1-2):37-48, 1/2002. PMID: 11719088.
19. Tang S, Bhatia B, Maldonado CJ, Yang P, Newman RA, Liu J, Chandra D, Traag J, Klein RD, Fischer SM, Chopra D, **Shen J**, Zhou HE, Chung LW, Tang DG. Evidence that arachidonate 15-lipoxygenase 2 is a negative cell cycle regulator in normal prostate epithelial cells. *Journal of Biological Chemistry* 277(18):16189-201, 5/2002. PMID: 11839751.
20. Vanzulli S, Efeyan A, Benavides F, Helguero LA, Peters G, Shen J, Conti CJ, Lanari C, Molinolo A. p21, p27 and p53 in estrogen and antiprogesterin-induced tumor regression of experimental mouse mammary ductal carcinoma. *Carcinogenesis* 23(5):749-57, 5/2002. PMID: 12016147.
21. Yan M, Kuang X, Qiang W, Shen J, Claypool K, Lynn WS, Wong PK. Prevention of thymic lymphoma development in atm^{-/-} mice by dexamethasone. *Cancer Res* 62(18):5153-7, 9/2002. PMID: 12234978.
22. Kochan KJ, Wright DA, Schroeder LJ, **Shen J**, Morizot DC. Genetic linkage maps of the West African clawed frog *Xenopus tropicalis*. *Dev Dyn* 226(1):99-102, 1/2003. PMID: 12508229.
23. Liu JW, **Shen J**, Tanzillo-Swartz A, Bhatia B, Maldonado CM, Person MD, Lau SS, Tang DG. Annexin II expression is reduced or lost in prostate cancer cells and its re-expression inhibits prostate cancer cell migration. *Oncogene* 22(10):1475-85, 3/2003. PMID: 12629510.
24. Lopes EC, Garcia M, Benavides F, **Shen J**, Conti CJ, Alvarez E, Hajos SE. Multidrug resistance modulators PSC 833 and CsA show differential capacity to induce apoptosis in lymphoid leukemia cell lines independently of their MDR phenotype. *Leukemia Research* 27(5):413-23, 5/2003. PMID: 12620293.
25. Yadav N, Lee J, Kim J, **Shen J**, Hu MC, Aldaz CM, Bedford MT. Specific protein methylation defects and gene expression perturbations in coactivator-associated arginine methyltransferase 1-deficient mice. *Proc Natl Acad Sci U S A* 100(11):6464-8, 5/2003. PMID: PMC164469.
26. Soliman AS, Vulimiri SV, Kleiner HE, **Shen J**, Eissa S, Morad M, Taha H, Lukmanji F, Li D, Johnston DA, Lo HH, Lau S, DiGiovanni J, Bondy ML. High levels of oxidative DNA damage

- in lymphocyte DNA of premenopausal breast cancer patients from Egypt. *Int J Environ Health Res* 14(2):121-34, 4/2004. PMID: 15203457.
27. Jia Z, Person MD, Dong J, **Shen J**, Hensley SC, Stevens JL, Monks TJ, Lau SS. Grp78 is essential for 11-deoxy-16,16-dimethyl PGE₂-mediated cytoprotection in renal epithelial cells. *Am J Physiol Renal Physiol* 287(6):F1113-22, 12/2004. PMID: 15226156.
 28. **Shen J**, Person MD, Zhu J, Abbruzzese JL, Li D. Protein expression profiles in pancreatic adenocarcinoma compared with normal pancreatic tissue and tissue affected by pancreatitis as detected by two-dimensional gel electrophoresis and mass spectrometry. *Cancer Res* 64(24):9018-26, 12/2004. PMID: 15604267.
 29. Cai SL, Tee AR, Short JD, Bergeron JM, Kim J, **Shen J**, Guo R, Johnson CL, Kiguchi K, Walker CL. Activity of TSC2 is inhibited by AKT-mediated phosphorylation and membrane partitioning. *J Cell Biol* 173(2):279-89, 4/2006. PMCID: PMC2063818.
 30. Person MD, **Shen J**, Traner A, Hensley SC, Lo HH, Abbruzzese JL, Li D. Protein fragment domains identified using 2D gel electrophoresis/MALDI-TOF. *J Biomol Tech* 17(2):145-56, 4/2006. PMCID: PMC2291776.
 31. Liu B, Park E, Zhu F, Bustos T, Liu J, **Shen J**, Fischer SM, Hu Y. A critical role for I kappaB kinase alpha in the development of human and mouse squamous cell carcinomas. *Proc Natl Acad Sci U S A* 103(46):17202-7, 11/2006. PMCID: PMC1859910.
 32. **Shen J**, Pavone A, Mikulec C, Hensley SC, Traner A, Chang TK, Person MD Fischer SM. Protein expression profiles in the epidermis of cyclooxygenase-2 transgenic mice by 2-dimensional gel electrophoresis and mass spectrometry. *J Proteome Res* 6(1):273-86, 1/2007. PMID: 17203971.
 33. **Shen J**, Riggs PK, Hensley SC, Schroeder LJ, Traner AR, Kochan KJ, Person MD, DiGiovanni J. Differential expression of multiple anti-apoptotic proteins in epidermis of IGF-1 transgenic mice as revealed by 2-dimensional gel electrophoresis/mass spectrometry analysis. *Mol Carcinog* 46(5):331-40, 5/2007. PMID: 17330866.
 34. Yan M, Kuang X, Scofield VL, **Shen J**, Lynn WS, Wong PK. The glucocorticoid receptor is increased in *Atm*^{-/-} thymocytes and in *Atm*^{-/-} thymic lymphoma cells, and its nuclear translocation counteracts c-myc expression. *Steroids* 72(5):415-21, 5/2007. PMID: 17418878.
 35. Zhu F, Xia X, Liu B, **Shen J**, Hu Y, Person M, Hu Y. IKKalpha shields 14-3-3sigma, a G(2)/M cell cycle checkpoint gene, from hypermethylation, preventing its silencing. *Mol Cell* 27(2):214-27, 7/2007. PMID: 17643371.
 36. Morrison AJ, Kim JA, Person MD, Highland J, Xiao J, Wehr TS, Hensley S, Bao Y, **Shen J**, Collins SR, Weissman JS, Delrow J, Krogan NJ, Haber JE, Shen X. Mec1/Tel1 phosphorylation of the INO80 chromatin remodeling complex influences DNA damage checkpoint responses. *Cell* 130(3):499-511, 8/2007. PMID: 17693258.
 37. Fan T, Li R, Todd NW, Qiu Q, Fang HB, Wang H, Shen J, Zhao RY, Caraway NP, Katz RL, Stass SA, Jiang F. Up-regulation of 14-3-3 ϵ in lung cancer and its implication as prognostic and therapeutic target. *Cancer Res* 67(16):7901-6, 8/2007. PMID: 17699796.
 38. Park E, Zhu F, Liu B, Xia X, **Shen J**, Bustos T, Fischer SM, Hu Y. Reduction in I kappaB kinase alpha expression promotes the development of skin papillomas and carcinomas. *Cancer Res* 67(19):9158-68, 10/2007. PMID: 17909021.
 39. Yan M, Shen J, Person MD, Kuang X, Lynn WS, Atlas D, Wong PK. Endoplasmic reticulum stress and unfolded protein response in *Atm*-deficient thymocytes and thymic lymphoma cells are attributable to oxidative stress. *Neoplasia* 10(2):160-7, 2/2008. PMCID: PMC2244691.
 40. Chan KS, Sano S, Kataoka K, Abel E, Carbajal S, Beltran L, Clifford J, Peavey M, **Shen J**, DiGiovanni J. Forced expression of a constitutively active form of Stat3 in mouse epidermis enhances malignant progression of skin tumors induced by two-stage carcinogenesis. *Oncogene* 27(8):1087-94, 2/2008. PMID: 17700521.
 41. Bhatia B, Multani AS, Patrawala L, Chen X, Calhoun-Davis T, Zhou J, Schroeder L, Schneider-Broussard R, **Shen J**, Pathak S, Chang S, Tang DG. Evidence that senescent human prostate epithelial cells enhance tumorigenicity: Cell fusion as a potential mechanism and inhibition by p16INK4a and hTERT. *Int J Cancer* 122(7):1483-95, 4/2008. PMID: 18059027.

42. Short JD, Houston KD, Dere R, Cai SL, Kim J, Johnson CL, Broaddus RR, **Shen J**, Miyamoto S, Tamanoi F, Kwiatkowski D, Mills GB, Walker CL. AMP-activated protein kinase signaling results in cytoplasmic sequestration of p27. *Cancer Res* 68(16):6496-506, 8/2008. PMID: PMC3011867.
43. Kuang X, **Shen J**, Wong PK, Yan M. Deregulation of mTOR signaling is involved in thymic lymphoma development in *Atm*^{-/-} mice. *Biochem Biophys Res Commun* 383(3):368-72, 6/2009. PMID: 19364503.
44. Alexander A, Cai SL, Kim J, Nanez A, Sahin M, MacLean KH, Inoki K, Guan KL, **Shen J**, Person MD, Kusewitt D, Mills GB, Kastan MB, Walker CL. ATM Signals to TSC2 in the cytoplasm to regulate mTORC1 in response to ROS. *Proc Natl Acad Sci U S A* 107(9):4153-8, 3/2010. e-Pub 2/2010. PMID: PMC2840158.
45. Short JD, Dere R, Houston KD, Cai SL, Kim J, Bergeron JM, Shen J, Liang J, Bedford MT, Mills GB, Walker CL. AMPK-Mediated Phosphorylation of Murine p27 at T197 Promotes Binding of 14-3-3 Proteins and Increases p27 Stability. *Mol Carcinog* 49(5):429-39, 5/2010. e-Pub 2/2010. PMID: PMC3818129.
46. Benavides F, Perez C, Blando J, Contreras O, Shen J, Coussens LM, Fischer SM, Kusewitt DF, DiGiovanni J, Conti CJ. Protective role of cathepsin L in mouse skin carcinogenesis. *Mol Carcinog* 51(4):352-61, 4/2012. e-Pub 5/2011. PMID: PMC3155742.
47. Jeter CR, Liu B, Liu X, Chen X, Liu C, Calhoun-Davis T, Repass J, Zaehres H, **Shen JJ**, Tang DG. NANOG promotes cancer stem cell characteristics and prostate cancer resistance to androgen deprivation. *Oncogene* 30(36):3833-45, 9/2011. e-Pub 4/2011. PMID: PMC3140601.
48. Blando J, Moore T, Hursting S, Jiang G, Saha A, Beltran L, Shen J, Repass J, Strom S, DiGiovanni J. Dietary energy balance modulates prostate cancer progression in hi-myc mice. *Cancer Prev Res (Phila)* 4(12):2002-14, 12/2011. e-Pub 9/2011. PMID: PMC4171652.
49. Yan L, Della Coletta L, Powell KL, **Shen J**, Thames H, Aldaz CM, MacLeod MC. Activation of the canonical Wnt/ β -catenin pathway in ATF3-induced mammary tumors. *PLoS One* 6(1):e16515, 2011. e-Pub 1/2011. PMID: PMC3031586.
50. Wang-Johanning F, Rycaj K, Plummer JB, Li M, Yin B, Frerich K, Garza JG, **Shen J**, Lin K, Yan P, Glynn SA, Dorsey TH, Hunt KK, Ambs S, Johanning GL. Immunotherapeutic potential of anti-human endogenous retrovirus-K envelope protein antibodies in targeting breast tumors. *J Natl Cancer Inst* 104(3):189-210, 2/2012. e-Pub 1/2012. PMID: PMC3274512.
51. **Shen J***, Abel EL, Riggs PK, Repass J, Hensley SC, Schroeder LJ, Temple A, Chau A, McClellan SA, Rho O, Kiguchi K, Ward MD, Semmes OJ, Person MD, Angel JM, DiGiovanni J*. Proteomic and pathway analyses reveal a network of inflammatory genes associated with differences in skin tumor promotion susceptibility in DBA/2 and C57BL/6 mice. *Carcinogenesis* 33(11):2208-19, 11/2012. e-Pub 7/2012. PMID: PMC3483013. (*Co-Corresponding author)
52. Xia X, Liu S, Xiao Z, Zhu F, Song NY, Zhou M, Liu B, **Shen J**, Nagashima K, Veenstra TD, Burkett S, Datla M, Willette-Brown J, Shen H, Hu Y. An IKK α -Nucleophosmin Axis Utilizes Inflammatory Signaling to Promote Genome Integrity. *Cell Rep* 5(5):1243-1255, 12/2013. e-Pub 11/2013. PMID: PMC4159076.
53. Liu B, Badeaux MD, Choy G, Chandra D, Shen I, Jeter CR, Rycaj K, Lee CF, Person MD, Liu C, Chen Y, **Shen J**, Jung SY, Qin J, Tang DG. Nanog1 in NTERA-2 and recombinant NanogP8 from somatic cancer cells adopt multiple protein conformations and migrate at multiple M.W species. *PLoS One* 9(3):e90615, 2014. e-Pub 3/2014. PMID: PMC3944193.
54. Simper MS, Rundhaug JE, Mikulec C, Bowen R, **Shen J**, Lu Y, Lin K, Surh I, Fischer SM. The tumor promoting activity of the EP4 receptor for prostaglandin E2 in murine skin. *Mol Oncol* 8(8):1626-39, 12/2014. e-Pub 7/2014. PMID: PMC4253556.
55. Liu X, Chen X, Rycaj K, Chao HP, Deng Q, Jeter C, Liu C, Honorio S, Li H, Davis T, Suraneni M, Laffin B, Qin J, Li Q, Yang T, Whitney P, **Shen J**, Huang J, Tang DG. Systematic dissection of phenotypic, functional, and tumorigenic heterogeneity of human prostate cancer cells. *Oncotarget* 6(27):23959-86, 9/2015. e-Pub 6/2015. PMID: PMC4695164.
56. Abba MC, Gong T, Lu Y, Lee J, Zhong Y, Lacunza E, Butti M, Takata Y, Gaddis S, **Shen J**, Estecio MR, Sahin AA, Aldaz CM. A Molecular Portrait of High-Grade Ductal Carcinoma In Situ. *Cancer Res* 75(18):3980-90, 9/2015. e-Pub 8/2015. PMID: PMC4768486.

57. Boswell W, Boswell M, Titus J, Savage M, Lu Y, **Shen J**, Walter RB. Sex-specific molecular genetic response to UVB exposure in *Xiphophorus maculatus* skin. *Comp Biochem Physiol C Toxicol Pharmacol* 178:76-85, 12/2015. e-Pub 8/2015. PMID: PMC4662892.
58. Kim J, Singh AK, Takata Y, Lin K, **Shen J**, Lu Y, Kerényi MA, Orkin SH, Chen T. LSD1 is essential for oocyte meiotic progression by regulating CDC25B expression in mice. *Nat Commun* 6:10116, 2015. e-Pub 12/2015. PMID: PMC4686821.
59. Li Y, Lu Y, Polak U, Lin K, **Shen J**, Farmer J, Seyer L, Bhalla AD, Rozwadowska N, Lynch DR, Butler JS, Napierala M. Expanded GAA repeats impede transcription elongation through the FXN gene and induce transcriptional silencing that is restricted to the FXN locus. *Hum Mol Genet* 24(24):6932-43, 12/2015. e-Pub 9/2015. PMID: PMC4654050.
60. Rossi EL, de Angel RE, Bowers LW, Khatib SA, Smith LA, Van Buren E, Bhardwaj P, Giri D, Estecio MR, Troester MA, Hair BY, Kirk EL, Gong T, **Shen J**, Dannenberg AJ, Hursting SD. Obesity-associated alterations in inflammation, epigenetics and mammary tumor growth persist in formerly obese mice. *Cancer Prev Res (Phila)* 9(5):339-48, 5/2016. e-Pub 2/2016. PMID: PMC4854773.
61. Zhang D, Park D, Zhong Y, Lu Y, Rycaj K, Gong S, Chen X, Liu X, Chao HP, Whitney P, Calhoun-Davis T, Takata Y, **Shen J**, Iyer VR, Tang DG. Stem cell and neurogenic gene-expression profiles link prostate basal cells to aggressive prostate cancer. *Nat Commun* 7:10798, 2016. e-Pub 2/2016. PMID: PMC4773505.
62. Chen X, Li Q, Liu X, Liu C, Liu R, Rycaj K, Zhang D, Liu B, Jeter C, Calhoun-Davis T, Lin K, Lu Y, Chao HP, **Shen J**, Tang DG. Defining a population of stem-like human prostate cancer cells that can generate and propagate castration-resistant prostate cancer (CRPC). *Clin Cancer Res* 22(17):4505-16, 9/2016. e-Pub 4/2016. PMID: PMC5010458.
63. Kim J, Zhao H, Dan J, Kim S, Hardikar S, Hollowell D, Lin K, Lu Y, Takata Y, **Shen J**, Chen T. Maternal Setdb1 Is Required for Meiotic Progression and Preimplantation Development in Mouse. *PLoS Genet* 12(4):e1005970, 4/2016. e-Pub 4/2016. PMID: PMC4829257.
64. Wang Q, Trevino LS, Wong RL, Medvedovic M, Chen J, Ho SM, **Shen J**, Foulds CE, Coarfa C, O'Malley BW, Shilatifard A, Walker CL. Reprogramming of the Epigenome by MLL1 Links Early-life Environmental Exposures to Prostate Cancer Risk. *Mol Endocrinol* 30(8):me20151310, 8/2016. e-Pub 5/2016. PMID: PMC4965842.
65. Chitsazzadeh V, Coarfa C, Drummond JA, Nguyen T, Joseph A, Chilukuri S, Charpiot E, Adelman CH, Ching G, Nguyen TN, Nicholas C, Thomas VD, Migden M, MacFarlane D, Thompson E, **Shen J**, Takata Y, McNiece K, Polansky MA, Abbas HA, Rajapakshe K, Gower A, Spira A, Covington KR, Xiao W, Gunaratne P, Pickering C, Frederick M, Myers JN, Shen L, Yao H, Su X, Rapini RP, Wheeler DA, Hawk ET, Flores ER, Tsai KY. Cross-species identification of genomic drivers of squamous cell carcinoma development across preneoplastic intermediates. *Nat Commun* 7:12601, 2016. e-Pub 8/2016. PMID: PMC5013636.
66. Zhou F, Li M, Wei Y, Lin K, Lu Y, **Shen J**, Johanning GL, Wang-Johanning F. Activation of HERV-K Env protein is essential for tumorigenesis and metastasis of breast cancer cells. *Oncotarget*. e-Pub 8/2016. PMID: PMC5356647.
67. Abba MC, Zhong Y, Lee J, Kil H, Lu Y, Takata Y, Simper MS, Gaddis S, **Shen J**, Aldaz CM. DMBA Induced Mouse Mammary Tumors Display High Incidence of Activating *Pik3ca*H1047 and Loss of Function *Pten* Mutations. *Oncotarget*. e-Pub 8/2016. PMID: PMC5325442.
68. Zhang D, Lin K, Lu Y, Rycaj K, Zhong Y, Chao HP, Calhoun-Davis T, **Shen J**, Tang DG. Developing a Novel Two-Dimensional Culture System to Enrich Human Prostate Luminal Progenitors That Can Function as a Cell of Origin for Prostate Cancer. *Stem Cells Transl Med*. e-Pub 9/2016. PMID: 27686757.
69. Liu C, Eng C, **Shen J**, Lu Y, Takata Y, Mehdizadeh A, Chang GJ, Rodriguez-Bigas MA, Li Y, Chang P, Mao Y, Hassan MM, Wang F, Li D. Serum exosomal miR-4772-3p is a predictor of tumor recurrence in stage II and III colon cancer. *Oncotarget* 7(46):76250-76260, 11/2016. e-Pub 10/2016. PMID: PMC5342811.
70. Jeter CR, Liu B, Lu Y, Chao HP, Zhang D, Liu X, Chen X, Li Q, Rycaj K, Calhoun-Davis T, Yan L, Hu Q, Wang J, **Shen J**, Liu S, Tang DG. NANOG reprograms prostate cancer cells to castration resistance via dynamically repressing and engaging the AR/FOXA1 signaling axis. *Cell Discov* 2:16041, 2016. e-Pub 11/2016. PMID: 27867534.

71. Liu C, Liu R, Zhang D, Deng Q, Liu B, Chao HP, Rycaj K, Takata Y, Lin K, Lu Y, Zhong Y, Krolewski J, **Shen J**, Tang DG. MicroRNA-141 suppresses prostate cancer stem cells and metastasis by targeting a cohort of pro-metastasis genes. *Nat Commun* 8:14270, 1/2017. e-Pub 1/2017. PMID: PMC5264244.
72. Mao Y, **Shen J**, Lu Y, Lin K, Wang H, Li Y, Chang P, Walker MG, Li D. RNA sequencing analyses reveal novel differentially expressed genes and pathways in pancreatic cancer. *Oncotarget*. e-Pub 3/2017. PMID: 28418924.
73. Liu B, Gong S, Li Q, Chen X, Moore J, Suraneni MV, Badeaux MD, Jeter CR, **Shen J**, Mehmood R, Fan Q, Tang DG. Transgenic overexpression of NanogP8 in the mouse prostate is insufficient to initiate tumorigenesis but weakly promotes tumor development in the Hi-Myc mouse model. *Oncotarget*. e-Pub 4/2017. PMID: 28477021.
74. Bae N, Viviano M, Su X, Lv J, Cheng D, Sagum C, Castellano S, Bai X, Johnson C, Khalil MI, **Shen J**, Chen K, Li H, Sbardella G, Bedford MT. Developing Spindlin1 small-molecule inhibitors by using protein microarrays. *Nat Chem Biol*. e-Pub 5/2017. PMID: 28504676.
75. Takata KI, Reh S, Yousefzadeh MJ, Zelazowski MJ, Bhetawal S, Trono D, Lowery MG, Sandoval M, Takata Y, Lu Y, Lin K, **Shen J**, Kusewitt DF, McBride KM, Cole F, Wood RD. Analysis of DNA polymerase γ function in meiotic recombination, immunoglobulin class-switching, and DNA damage tolerance. *PLoS Genet* 13(6):e1006818. e-Pub 6/2017. PMID: 28570559.
76. Li M, Radvanyi L, Yin B, Li J, Chivukula R, Lin K, Lu Y, **Shen J**, Chang DZ, Li D, Johanning GL, Wang-Johanning F. Down-regulation of human endogenous retrovirus type K (HERV-K) viral env RNA in pancreatic cancer cells decreases cell proliferation and tumor growth. *Clin Cancer Res* 23(19):5892-5911, 10/2017. e-Pub 7/2017. PMID: 28679769.
77. Boswell WT, Boswell M, Walter DJ, Navarro KL, Chang J, Lu Y, Savage MG, Shen J, Walter RB. Exposure to 4100K fluorescent light elicits sex specific transcriptional responses in *Xiphophorus maculatus* skin. *Comp Biochem Physiol C Toxicol Pharmacol* 208:96-104, 6/2018. e-Pub 9/2017. PMID: PMC5876067.
78. Wang L, Koutelou E, Hirsch C, McCarthy R, Schibler A, Lin K, Lu Y, Jeter C, Shen J, Barton MC, Dent SYR. GCN5 Regulates FGF Signaling and Activates Selective MYC Target Genes during Early Embryoid Body Differentiation. *Stem Cell Reports* 10(1):287-299, 1/2018. e-Pub 12/2017. PMID: PMC5768892.
79. Zhang D, Jeter C, Gong S, Tracz A, Lu Y, **Shen J**, Tang DG. Histone 2B-GFP Label-Retaining Prostate Luminal Cells Possess Progenitor Cell Properties and Are Intrinsically Resistant to Castration. *Stem Cell Reports* 10(1):228-242, 1/2018. e-Pub 12/2017. PMID: PMC5768933.
80. Mo Q, Nikolos F, Chen F, Tramel Z, Lee YC, Hayashi K, Xiao J, **Shen J**, Chan KS. Prognostic Power of a Tumor Differentiation Gene Signature for Bladder Urothelial Carcinomas. *J Natl Cancer Inst*. e-Pub 1/2018. PMID: 29342309.
81. Xi Y, Shi J, Li W, Tanaka K, Allton KL, Richardson D, Li J, Franco HL, Nagari A, Malladi VS, Coletta LD, Simper MS, Keyomarsi K, **Shen J**, Bedford MT, Shi X, Barton MC, Lee Kraus W, Li W, Dent SYR. Histone modification profiling in breast cancer cell lines highlights commonalities and differences among subtypes. *BMC Genomics* 19(1):150, 2/2018. e-Pub 2/2018. PMID: PMC5819162.
82. Bao J, Rousseaux S, **Shen J**, Lin K, Lu Y, Bedford MT. The arginine methyltransferase CARM1 represses p300•ACT•CREM τ activity and is required for spermiogenesis. *Nucleic Acids Res* 46(9):4327-4343, 5/2018. PMID: PMC5961101.
83. Gu T, Lin X, Cullen SM, Luo M, Jeong M, Estecio M, **Shen J**, Hardikar S, Sun D, Su J, Rux D, Guzman A, Lee M, Qi LS, Chen JJ, Kyba M, Huang Y, Chen T, Li W, Goodell MA. DNMT3A and TET1 cooperate to regulate promoter epigenetic landscapes in mouse embryonic stem cells. *Genome Biol* 19(1):88, 7/2018. e-Pub 7/2018. PMID: PMC6042404.
84. Veland N, Lu Y, Hardikar S, Gaddis S, Zeng Y, Liu B, Estecio MR, Takata Y, Lin K, Tomida MW, Shen J, Saha D, Gowher H, Zhao H, Chen T. DNMT3L facilitates DNA methylation partly by maintaining DNMT3A stability in mouse embryonic stem cells. *Nucleic Acids Res* 47(1):152-167, 1/2019. e-Pub 10/2018. PMID: PMC6326784.
85. Hussain T, Kil H, Hattiangady B, Lee J, Kodali M, Shuai B, Attaluri S, Takata Y, **Shen J**, Abba MC, Shetty AK, Aldaz CM. Wwox deletion leads to reduced GABA-ergic inhibitory

- interneuron numbers and activation of microglia and astrocytes in mouse hippocampus. *Neurobiol Dis* 121:163-176, 1/2019. e-Pub 10/2018. PMID: 30290271.
86. Cheng D, Vemulapalli V, Lu Y, **Shen J**, Aoyagi S, Fry CJ, Yang Y, Foulds CE, Stossi F, Treviño LS, Mancini MA, O'Malley BW, Walker CL, Boyer TG, Bedford MT. CARM1 methylates MED12 to regulate its RNA-binding ability. *Life Sci Alliance* 1(5):e201800117, 10/2018. e-Pub 9/2018. PMID: PMC6238599.
 87. Li Q, Deng Q, Chao HP, Liu X, Lu Y, Lin K, Liu B, Tang GW, Zhang D, Tracz A, Jeter C, Rycaj K, Calhoun-Davis T, Huang J, Rubin MA, Beltran H, **Shen J**, Chatta G, Puzanov I, Mohler JL, Wang J, Zhao R, Kirk J, Chen X, Tang DG. Linking prostate cancer cell AR heterogeneity to distinct castration and enzalutamide responses. *Nat Commun* 9(1):3600, 9/2018. e-Pub 9/2018. PMID: PMC6127155.
 88. Singarapu N, Ma K, Reeh KAG, **Shen J**, Lancaster JN, Yi S, Xie H, Orkin SH, Manley NR, Ehrlich LIR, Jiang N, Richie ER. Polycomb Repressive Complex 2 is essential for development and maintenance of a functional TEC compartment. *Sci Rep* 8(1):14335, 9/2018. e-Pub 9/2018. PMID: PMC6156232.
 89. Koutelou E, Wang L, Schibler AC, Chao HP, Kuang X, Lin K, Lu Y, **Shen J**, Jeter CR, Salinger A, Wilson M, Chen YC, Atanassov BS, Tang DG, Dent SYR. USP22 controls multiple signaling pathways that are essential for vasculature formation in the mouse placenta. *Development* 146(4), 2/2019. e-Pub 2/2019. PMID: PMC6398448.
 90. Lee YC, Kurtova AV, Xiao J, Nikolos F, Hayashi K, Tramei Z, Jain A, Chen F, Chokshi M, Lee C, Bao G, Zhang X, **Shen J**, Mo Q, Jung SY, Rowley D, Chan KS. Collagen-rich airway smooth muscle cells are a metastatic niche for tumor colonization in the lung. *Nat Commun* 10(1):2131, 5/2019. E-Pub 5/2019. PMID: PMC6513865.
 91. Gao G, Zhang L, Villarreal OD, He W, Su D, Bedford E, Moh P, **Shen J**, Shi X, Bedford MT, Xu H. PRMT1 loss sensitizes cells to PRMT5 inhibition. *Nucleic Acids Res* 47(10):5038-5048, 6/2019. PMID: PMC6547413.
 92. Ren R, Hardikar S, Horton JR, Lu Y, Zeng Y, Singh AK, Lin K, Coletta LD, **Shen J**, Lin Kong CS, Hashimoto H, Zhang X, Chen T, Cheng X. Structural basis of specific DNA binding by the transcription factor ZBTB24. *Nucleic Acids Res.* e-Pub 6/2019. PMID: 31226215.
 93. Chao HP, Chen Y, Takata Y, Tomida MW, Lin K, Kirk JS, Simper MS, Mikulec CD, Rundhaug JE, Fischer SM, Chen T, Tang DG, Lu Y*, **Shen J***. Systematic evaluation of RNA-Seq preparation protocol performance. *BMC Genomics* 20(1):571, 7/2019. e-Pub 7/2019. PMID: PMC6625085. (*Co-Corresponding author)
 94. Herbert ZT, Thimmapuram J, Xie S, Kershner JP, Kolling FW, Ringelberg CS, LeClerc A, Alekseyev YO, Fan J, Podnar JW, Stevenson HS, Sommerville G, Gupta S, Berkeley M, Koeman J, Perera A, Scott AR, Grenier JK, Malik J, Ashton JM, Pivarski KL, Wang X, Kuffel G, Mesa TE, Smith AT, **Shen J**, Takata Y, Volkert TL, Love JA, Zhang Y, Wang J, Xuei X, Adams M, Levine SS. Multisite evaluation of Next-Generation Methods for Small RNA Quantification. *J Biomol Tech* 2020 Jul;31(2):47-56. PMID: 31966025.
 95. Muradova E, Patel N, Sell B, Bittencourt BB, Ojeda SS, Adelman CH, Cen L, Cheng CH, **Shen J**, Davis CM, Ehli EA, Newberg JY, Cherpelis B, Black MA, Mann MB, Mitragotri S, Tsai KY. Non-invasive assessment of epidermal genomic marker of UV exposure in skin. *J Invest Dermatol* 2020 Jun 15:S0022-202X(20)31657-2 Online ahead of print. PMID: 32553564
 96. Hwang T, Reh S, Dunbayev Y, Zhong Y, Takata Y, **Shen J**, McBride K, Murnane J, Bhak J, Lee S, Wood R, Takata K. Defining the mutation signature of DNA polymerase θ in cancer genomes. *NAR Cancer* 2020 Sep;2(3):zcaa017. Epub 2020 Aug 27. PMID: 32885167.
 97. Kumar A, Zhong Y, Albrecht A, Sang PB, Maples A, Liu Z, Vinayachandran V, Reja R, Lee CF, Kumar A, Chen J, Xiao J, Park B, **Shen J**, Liu B, Person MD, Trybus KM, Zhang KYJ, Pugh BF, Kamm KE, Milewicz DM, Shen X, Kapoor P. Actin R256 mono-methylation is a conserved post-translational modification involved in transcription. *Cell Rep* 2020 Sep 29;32(13):108172. PMID 32997990.
 98. Farria AT, Plummer JB, Salinger AP, **Shen J**, Lin K, Lu Y, McBride KM, Dent SYR. Gcn5 transcriptional activation of Myc-induced genes promotes B-cell lymphomagenesis. *Cancer Res* 2020 Nov 9:canres.2379.2020. PMID: 33168647.

99. Shah V, Duncan A, Jiang S, Stratton S, Allton K, Yam C, Jain A, Lu Y, Cai S-R, Tu Y, Zhou X, Zhang X, Yang J, Carroll C, Kang Z, **Shen J**, Powell R, Guo L, Stephan C, Parker-Thornburg J, Lozano G, Behringer R, Gilcrease M, Davies P, Piwnica-Worms H, Chang J, Moulder S, Barton M. Mammary-specific expression of Trim24 establishes a mouse model of human metaplastic breast cancer and nominates c-Met and TRIM24 as therapeutic targets. Submitted to Nature Commun (NCOMMS-20-31817)
100. Andrews M, Wu C-J, Oba J, Karpinets T, Sloane R, Creasy C, Forget M-A, Yu X, Zhu H, Shong X, Mao X, Hoon D, Lu Y, Robertson G, Burton E, Wani K, Lazar A, Haydu L, Bustos M, **Shen J**, Chen Y, Patel K, Morgan M, Wargo J, Haymaker C, Grimm E, Hwu P, Zhang J, Gershenwald J, Davies M, Futreal A, Bernatchez C, Woodman S. Multi-modal molecular programs regulate melanoma cell state and clinical outcomes. Submitted to Nature Cancer (Paper #: NATCANCER-RS03733).
101. Yan L, Gaddis S, Coletta LD, Repass J, Powell KL, Simper M, Chen Y, Byrom M, Zhong Y, Lin K, Liu B, Lu Y, **Shen J***, MacLeod MC*. ATF3-induced mammary tumors exhibit molecular features of human basal-like breast cancer. Submitted to International Journal of Molecular Sciences (Manuscript ID: ijms-1120571) (*Co-Corresponding author)
102. Simper M, Coletta LD, Gaddis S, Walker M, Lin K, Estecio M, MacLeod M, Lu Y*, **Shen J***. Comparison of ChIP-Seq data prepared with different techniques and very low levels of input DNA. (Manuscript in preparation). (*Co-Corresponding authors)

Invited Articles

1. **Shen J**, Chen YT. Molecular characterization of glycogen storage disease type III. *Curr Mol Med* 2(2):167-75, 3/2002. PMID: 11949933.

Book Chapters

1. **Shen J**, Fischer SM. Molecular Profiling of the Epidermis: A Proteomics Approach. In: *Epidermal Cell*. 585. Humana Press, 225-252, 2010.

Abstracts

1. **Shen, J** and McCaslin, DR. Deoxycholate effects on bovine rhodopsin, implications for stability of the native structure. Third Symposium of the Protein Society, Seattle, WA:Abstract S147, 1989.
2. **Shen, J** and McCaslin, DR. Conformational studies on the phosphorylation site of rhodopsin. Joint meeting of ASBMB and Biophysical Society, Houston, TX:Abstract 3050, 1992.
3. **Shen, J**, Bao Y, Liu, M, Lee, P, Leonard, JV and Chen, YT. Mutations in exon 3 of the glycogen debranching enzyme gene are associated with glycogen storage disease type III that is differentially expressed in liver and muscle. Annual Meeting of American Society of Human Genetics, San Francisco, CA:Abstract 1646, 1996.
4. **Shen, J**, Bao, Y, Chen, YT. Mutations in patients with glycogen storage disease type IIIa and IIIb: mechanisms for tissue-specific expression of glycogen debranching enzyme gene. Annual Meeting of Society for Inherited Metabolic Disorders, Cuernavaca, Mexico:Oral Presentation, 1996.
5. **Shen, J**, Matern, D., Hillman, S, Qumsiyeh, M, Feezor, M, Kahler, S, Chen, YT, Millington, D and Van Hove, J. Acylcarnitines produced in vitro by cultured fibroblasts of fatty acid oxidation disorders. Annual Meeting of Society for Inherited Metabolic Disorders, Pacific Grove, CA:Oral Presentation, 1998.
6. Li D, Firozi PR, Zhang W, **Shen J**, DiGiovanni J, Lau S, Evans DB, Hassan M, Friess H, Abbruzzese JA. DNA adducts, genetic polymorphisms and K-ras mutation in human pancreatic cancer. 92nd Annual Meeting of American Association for Cancer Research, New Orleans, LA:Abstract 3567, 2001.
7. Vanzulli S, Efeyan F, Lanari C, Bevavides F, **Shen J**, Conti CJ, Molinolo A. p21 requirement for antiprogesterin-induced regression but not in estrogen-induced regression in murine mammary carcinomas expressing ER and PR. Gordon Research Conference on Hormonal Carcinogenesis, Meriden, NH, 2001.
8. Kochan KJ, Wright DA, **Shen J**, Schroeder LJ, Richie PG, Morizot DC. An AFLP linkage map of the West African clawed frog, *Xenopus tropicalis*. Texas Genetics Society, 2002.

9. Lopes EC, García M, Benavides F, **Shen J**, Alvarez E, Hajos S. Modulators of multidrug resistance PSC 833 and CsA show differential capacity to induce apoptosis in mouse leukemia cell lines, independently of its MDR phenotype. ASCO, 2002.
10. Riggs PK, Groppi K, Hensley S, **Shen J**, Person M, Lau S, DiGiovanni J. Putative calmodulin-like skin protein homolog (DD112) localized to mouse epidermis and associated with differentiation. 93rd Annual Meeting of American Association for Cancer Research, San Francisco, CA:Abstract #5100, 2002.
11. Liu J, **Shen J**, Tanzillo-Swartz A, Person M, Lau S, Tan, DG. Reduced or lost expression of Annexins I and II in prostate cancer cells. 93rd Annual Meeting of American Association for Cancer Research, San Francisco, CA:Abstract #2, 2002.
12. Vulimiri SV, **Shen J**, Gallegos M, Hensley SC, DiGiovanni J. Sensitivity of DNA repair-deficient mice to benzo[a]pyrene-induced skin carcinogenesis. 93rd Annual Meeting of American Association for Cancer Research, San Francisco, CA:Abstract #5009, 2002.
13. Fischer SM, Bol DK, Klein R, Pavone A, **Shen J**, Kiguchi K. The Yin/Yang of prostaglandins in skin tumor development. International Skin Carcinogenesis Conference, Japan, 2002.
14. Dong J, Person M, Hensley SC, **Shen J**, Lau SS, Monks TJ. Coordinated regulation of the cytoskeletal and nuclear stress response by reactive oxygen species. FASEB/ASPEC, 2003.
15. Jia Z, Person MD, **Shen J**, Hensley SC, Stevens JL, Monks TJ, Lau LL. Role of bip/grp78 in 11-deoxy-16,16-dimethyl prostaglandin E2 mediated cytoprotection in renal epithelial cells. Society of Toxicology, 2003.
16. Cai SL, Short JD, **Shen J**, Walker CL. Inactivation of the tumor suppressor tuberlin by phosphorylation and mislocalization to the cytosol. 94th Annual Meeting of American Association for Cancer Research, Orlando, FL:Abstract #3925, 2004.
17. Fischer SM, Pavone A, Mikulec C, Hensley SC, Traner A, **Shen J**. Over-expression of cyclooxygenase-2 (COX-2) in murine skin alters protein expression levels and post-translational modification. 94th Annual Meeting of American Association for Cancer Research, Orlando, FL:Abstract #2522, 2004.
18. **Shen J**, Person M, Zhu J, Abbruzzese JL, Li D. Protein expression profiles in normal pancreatic tissues, pancreatitis, and pancreatic adenocarcinomas as detected by proteomics. 94th Annual Meeting of American Association for Cancer Research, Orlando, FL:Abstract #3539, 2004.
19. **Shen J**, Person M, Zhu J, Abbruzzese JL, Li D. Protein expression profiles in normal pancreatic tissues, pancreatitis, and pancreatic adenocarcinomas as detected by proteomics. Pancreatic Cancer 2004 Advances and Challenges, San Francisco, CA:Abstract #83, 2004.
20. **Shen J**, Riggs PK, Person M, Ward M, Semmes OJ, Hensley SC, Schroeder L, Traner A, DiGiovanni J. Proteomic analysis of DBA/2 and C57BL/6 mice for identification of 12-O-tetradecanoylphorbol-13-acetate skin tumor promotion susceptibility genes. Molecular & Cellular Proteomics 3:S46 (Abstract #4.11), 2004.
21. Riggs PK, **Shen J**, Person M, Hensley SC, Schroeder L, DiGiovanni J. Proteomic analysis of transgenic mice with constitutive over-expression of insulin-like growth factor-1 targeted to epidermal basal cells. 94th Annual Meeting of American Association for Cancer Research, Orlando, FL:Abstract #4344, 2004.
22. **Shen J**, Riggs PK, Person M, Hensley SC, Schroeder L, DiGiovanni J. Proteomic analysis of transgenic mice with constitutive over-expression of insulin-like growth factor-1 targeted to epidermal basal cells. Cambridge Healthtech Institute's Beyond Genome 2004, 8th Annual Proteomics, San Francisco, CA:Abstract #115, 2004.
23. Cai SL, Short JD, Bergeron JM, Tee AR, **Shen J**, Manning BD, Walker CL. Functional interaction of TSC1 and TSC2 tumor suppressor gene products, hamartin and tuberlin. 96th Annual Meeting of AACR, Anaheim/Orange County, CA:Abstract # 2508, 2005.
24. Park E, Zhu F, Liu B, Person M, **Shen J**, Fischer SM, Hu Y. IKK alpha coordinates with RAS to switch well-differentiated papillomas to poorly differentiated malignant carcinomas in skin. 96th Annual Meeting of AACR, Anaheim/Orange County, CA:Abstract # 2619, 2005.
25. Zhu J, **Shen J**, Person MD, Abbruzzese JL, Li D. Protein expression profiles in pancreatic adenocarcinoma cell lines and pancreatic adenocarcinoma tissues detected by Western blot and immunohistochemistry. 96th Annual Meeting of AACR, Anaheim/Orange County, CA:Abstract # 3104, 2005.

26. **Shen J**, Riggs PK, Angel J, Ward M, Semmes OJ, Hensley SC, Schroeder L, Traner A, Kochan K, Person M, DiGiovanni J. Proteomic analysis of epidermal protein expression patterns following treatment with 12-O-tetradecanoylphorbol-13-acetate in skin tumor promotion sensitive (DBA/2) and resistant (C57BL/6) mice. 96th Annual Meeting of American Association for Cancer Research, Anaheim/Orange County, CA:Abstract # 2617, 2005.
27. Schneider-Broussard RM, Calhoun T, Person M, Taylor EE, Shmulevich I, Hensley S, Bhatia B, Tang S, Maldonado CJ, Ellis A, Zhang W, **Shen J**, Tang DG. Targeted expression of human 15-lipoxygenase-2 in mouse prostate leads to aging-associated degenerative alterations. 96th Annual Meeting of AACR, Anaheim/Orange County, CA:Abstract # 2828, 2005.
28. **Shen J**, Person MD, Hensley SC, Meade R, Chang TK, Abel EL, Angel J, DiGiovanni J. Comparative evaluation of two different 2-D techniques for the protein expression profiles of epidermis of skin tumor promotion-sensitive (DBA/2) and promotion-resistant (C57BL/6) mice. Advances in Proteomics for Cancer Research, a Special AACR Conference, Amelian Island, Florida, 2007.
29. Wong PK, **Shen J**, Yan M. ER stress and unfolded protein response in Atm^{-/-} thymocytes and thymic lymphoma cells. 98th Annual Meeting of AACR, Los Angeles, CA, 2007.
30. Yan M, Kuang X, **Shen J**, Scofield VL, Wong PKY. Reactive oxygen species in thymic lymphoma development in Atm gene deficient mice. The 14th Biennial Meeting of the Society for Free Radical Research International, Beijing, China, 2008.
31. **Shen J**, Yan L, Lin K, Byrom M, Repass J, MacLeod MC. Differential regulation of miRNAs in mouse mammary tumors induced by the oncogene ATF3. 100th Annual Meeting of AACR, Denver, CO (#583), 2009.
32. Yan M, Kuang X, **Shen J**, Wong PKY. Cross-talk between ROS and mTOR in Atm deficient thymocytes. International Workshop on Ataxia-telangiectasia, Redondo Beach, CA, 2010.
33. Yan L, Powell KL, Coletta LD, **Shen J**, MacLeod MC. Tcf7, a mediator of Wnt/ β -catenin signaling, is upregulated in mammary glands of BK5.ATF3 mice, without prior development of mammary tumors. 101st Annual Meeting of AACR, Washington, DC (#1241), 2010.
34. **Shen J**, Abel, E.L., Angel, J, Riggs, P.K., Repass, J., Hensley, S.C., Schroeder, L., Temple, A., Ward, M., Semmes, O.J., Person, M.D. and DiGiovanni, J. Proteomics analysis reveals a network of inflammatory genes associated with skin tumor promotion susceptibility in DBA/2 and C57BL/6 mice. 102 Annual Meeting of AACR, Orlando, FL (#2729), 4/2011.
35. **Shen J**, Abel, E.L., Angel, J, Riggs, P.K., Repass, J., Hensley, S.C., Schroeder, L., Temple, A., Chau A., McClellan S.A., Lin K., Ward, M., Semmes, O.J., Person, M.D. and DiGiovanni, J. Proteomic and pathway analyses reveal a network of inflammatory genes associated with skin tumor promotion susceptibility in DBA/2 and C57BL/6 mice. 12 International Congress of Human Genetics, Montreal, Canada (#1242T), 10/2011.
36. **Shen J**, Abel, E.L., Riggs, P.K., Repass, J., Hensley, S.C., Schroeder, L., Temple, A., Chau A., McClellan S.A., Ward, M., Semmes, O.J., Person, M.D., Angel, J and DiGiovanni, J. Identification of a network of inflammatory genes associated with differences in skin tumor promotion susceptibility. ABRF 2012 Annual Meeting, Orlando, FL (#153), 3/2012.
37. **Shen J**, Angel, J, Repass, J., Person, M.D., and DiGiovanni, J. Induction of pro-inflammatory molecules may underlie the sensitivity difference in skin tumor promotion. The Role of Inflammation during Carcinogenesis. A Keystone Symposia on Molecular and Cellular Biology Royal Dublin Society, Dublin, Ireland (#343), 5/2012.
38. **Shen, J.**, Walker, M., Rundhaug, J., Coletta, L., Abel, E., Lin, K., Chen, Y., Johanning, E., Lu, Y., Hursting, S., Fischer, S. The role of COX-2 in obesity-associated pancreatic cancer. Cold Spring Harbor Asia Conferences, 5/2013.
39. **Shen, J.**, Rundhaug, J., Coletta, L., Walker, M., Abel, E., Mikulec, C., Lin, K., Lu, Y., Hursting, S., Fischer, S.M. Up-regulation of the NF- κ B and COX-2 inflammatory pathways may be linked with rapid tumor progression in a xenograft Panc02 tumor obese mouse model. Keystone Symposia Conference on Inflammation, Infection and Cancer, Fairmont Chateau Whistler, Whistler, British Columbia, Canada (#3020), 3/2014.
40. Rundhaug, J., Simper, M., Coletta, L.D., Abel, E.L., Mikulec, C., Lin, K., Lu, Y., Hursting, S.D., **Shen, J.**, Fischer, S.M. Illuminating molecular mechanisms of obesity-related tumor

- progression in a xenograft Panc02 tumor mouse model. Keystone Symposia Conference on Human Nutrition, Environment and Health, Beijing, China (#2017), 10/2015.
41. Simper M, Coletta LD, Walker M, Lin K, Estecio M, MacLeod M, Lu Y, **Shen J**. Comparison of ChIPSeq data prepared with different techniques and very low levels of input DNA. CPRIT 2017 Innovations in Cancer Prevention and Research Conference, Austin, TX, 2017.
 42. **Shen J**, MacLeod M, Lu Y. Next-Generation Sequencing (NGS) Facility Core at MD Anderson Cancer Center Science Park. CPRIT 2017 Innovations in Cancer Prevention and Research Conference, Austin, TX, 2017.
 43. **J. Shen**, L. Yan, J. Repass, K.L. Powell, S. Gaddis, L. Della Coletta, Y. Chen, K. Lin, Y. Zhong, B. Liu, Y. Lu, and M.C. MacLeod. Integrated miRNA and mRNA expression profiling of ATF3 transgenic mouse mammary gland tumors reveals similar gene expression and pathway signatures to human basal-like breast cancer. Keystone Symposia Conference on Small Regulatory RNAs (D7), Daejeon, South Korea (#3041) 04/2019.

EDITORIAL AND REVIEW ACTIVITIES

Editorial Board

Journal of Biomolecular Techniques (published by Association of Biomolecular Resource Facilities)

Journal Reviewer

Journal of Medical Genetics
Molecular Carcinogenesis
BMC Cancer
BMC Gastroenterology
Pancreas
Proteome Science
Journal of Proteome Research
Cancer Informatics
Journal of Biomolecular Techniques

TEACHING

Teaching Within Current Institution - The University of Texas MD Anderson Cancer Center

Formal Teaching

Courses Taught

Co-Director & Instructor, Molecular Methods and Biotechniques, Course Number: GS04 1183

Spring Semester, 1/2012-5/2012

Spring Semester, 1/2014-5/2014

Co-Director and Instructor, Molecular Methods and Bioinformatics, Course Number: GS04 1183

Spring Semester, 1/2016-5/2016

Co-Director and/or Instructor, Practical Bioinformatics, Course Number: GS04 1251-513 (5995)

Fall Semester, 8/2018-12/2018

Fall Semester, 8/2020-12/2020

Training Programs/Workshops

Organizer and Presenter, Molecular Biology Workshop on DNA Isolation, DNA Sequencing, Proteomics and Genomics Services, Hours: 3

6/2007-6/2009 (presented once every calendar year)

Organizer and Presenter, Training Workshop regarding a comprehensive overview of CPRIT Grant Support, NGS facility User Group Membership, service charge structure, competitive allotment, and available NGS Services

11/2012

Organizer, NGS Training Workshop for second grant year, and Dr. Yue Lue presented on "Differential Expression Analysis Using RNA-Seq."

1/2013

Organizer and Presenter, Science Park NGS Facility ChIP-Seq Workshop

11/2013

Organizer, NGS Workshop: DNA Methylation (Drs. Marcos Estecio and Ting Gong presented to both Science Park and MD Anderson-Houston)

9/2014

Organizer and Presenter, NGS Workshop: Updates on ChIP-Seq protocol development

11/2014

Organizer and Presenter, NGS Workshop: Updates on RNA-Seq protocol development (including small RNA-Seq and ultra-low-input RNA-Seq)

2/2015

Organizer and Presenter, NGS Workshop: Summary of the Last 5 Years & Plan for the Next 5 Years

4/2017

Organizer, NGS Workshop: Methods for DNA Methylation Analysis-New Laboratorial Tools and Bioinformatics Pipeline

6/2017

Organizer, NGS Workshops: Learn to use Bioinformatics Tools and Resources-A Hands-on Training Series (consisting five workshops on RNA-Seq, ChIP-Seq, DNA Mutational Analysis, Data Integration & Functional Analysis, and CRISPR Screens)

5/2018

Co-Organizer and Presenter, Next-generation epigenetics services and analysis: Learn about the services offered at MD Anderson Cores to support one's epigenetics research

9/2019

Supervisory Teaching

Direct Supervision

Undergraduate and Allied Health Students

Mentor, Summer Undergraduate Research Program, The University of Texas MD Anderson Cancer Center, Department of Molecular Carcinogenesis, Shawen M. Ilaria, 6/2007-8/2007

Mentor, Summer Undergraduate Research Program, The University of Texas MD Anderson Cancer Center, Department of Molecular Carcinogenesis, Alexander Chau, 6/2009-8/2009

Mentor, Summer Undergraduate Research Program, The University of Texas MD Anderson Cancer Center, Department of Molecular Carcinogenesis, Stephanie Gimenez, 7/2011

Mentor, Summer High School Student, The University of Texas MD Anderson Cancer Center, Department of Molecular Carcinogenesis, Emily Johanning, 6/2012-8/2012

Mentor, Summer High School Student, The University of Texas MD Anderson Cancer Center, Department of Molecular Carcinogenesis, Gregory Tang, 6/2013-8/2013

Teaching Outside Current Institution

Formal Teaching

Courses Taught

Instructor, "Proteomics" in "Methods in Toxicology", College of Pharmacy, The University of Texas at Austin, Course Hours: 6
3/2000-4/2007 for 8 years

Instructor, "Genomics Methods (Large scale gene expression analyses)" in "Molecular Mechanisms and Methods in Nutrition and Cancer", Department of Nutritional Sciences, The University of Texas at Austin, Course Hours: 3
Spring, 2013
Spring, 2014
Spring, 2015
Spring, 2016

Instructor, "Genomics/Proteomics Methods" in "Molecular Mechanisms and Methods in Nutrition and Cancer", Division of Pharmacology & Toxicology, College of Pharmacy, The University of Texas at Austin, Course Hours: 3
Spring, 2017
Spring, 2018
Spring, 2019

PROFESSIONAL MEMBERSHIPS/ACTIVITIES

Professional Society Activities, with Offices Held

National and International

American Association for the Advancement of Science
Member, 1996-present

American Society of Human Genetics
Member, 1999-2015

American Association for Cancer Research
Member, 2001-present

American Society of Human Genetics mentorship network (an international program),
Mentor, 7/2002-2008

Association of Biomolecular Resource Facilities (ABRF)
Member, 2011-present

ABRF Career Development Committee
Member, 5/2017-present

ABRF Mentoring Program
Organizer and Mentor, 5/2019-present

Local/State

Advisory Committee for the Gifted and Talented Program, Bastrop Independent School District, Bastrop, TX
Member, 3/2003-5/2007

Cedar Creek Middle School Parent Teacher Association (PTA), Bastrop Independent School District, Bastrop, TX
Vice President/Memberships, 4/2005-5/2007

Board member, Bastrop Education Foundation, Bastrop, TX
Vice President/Programs, 7/2006-4/2007

UNIQUE ACTIVITIES

American Cancer Society's (ACS) "Relay for Life"
Co-Organized Annual Chinese Cooking Class for ACS fund-raising for the last 13 years, 2002-2019 (Cooking class for Year 2020 was initially delayed and then cancelled because of the current pandemic)

DATE OF LAST CV UPDATE 2/14/2021