YIN-YUAN MO **CURRICULUM VITAE**

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EDUCATION

Zhejiang University, Hangzhou, China B.S. Plant Biology 1982 Washington State University, Pullman Ph.D. 1991 Plant Pathology

A. PROFESSIONAL POSITIONS

Positions and Employment

1986-1991	Research Assistant, Department of Plant Pathology, Washington State University, Pullman, Washington.
1992-1994	Postdoctoral Research Associate, Department of Microbiology, Washington State University, Pullman, Washington.
1995-1996	Associate Investigator, Departments of Molecular Pharmacology and Tumor Cell Biology, St. Jude Children's Research Hospital, Memphis, Tennessee.
1996-2003	Research Assistant Professor, Department of Molecular Genetics and Department of Biopharmaceutical Sciences, University of Illinois at Chicago, Illinois.
2003-2006	Assistant Professor, Cancer Institute/Medical Microbiology, Immunology and Cell Biology, Southern Illinois University School of Medicine, Springfield, Illinois.
2006-2011	Associate Professor with tenure, Cancer Institute/Medical Microbiology, Immunology and Cell Biology, Southern Illinois University School of Medicine, Springfield, Illinois.
2012-present	Professor of Pharmacology/Toxicology and Director for Cancer Genetics Program, Cancer Institute, University of Mississippi Medical Center, MS
2003-present	Adjunct Assistant, and Associate professor, Department of Biopharmaceutical Sciences,

Professional services

University of Illinois at Chicago, Illinois.

2005	Ad hoc member, NIH Study Section (DMP)
2005	DOD Congressionally Directed Medical Research Program (CDMRP) Breast Cancer Research
	Program Pathobiology-3 Panel
2006-08	Illinois Penny Severn Breast Cancer Grant review panel

2007-09	Alberta Cancer Fund, Canada (2007); Austrian Science Fund (2007 & 2008); Ireland Health
	Research Board (2007 & 2009); Cancer Research UK (2007)
2007	Ad hoc member, NIH Study Section (BMCT)
2008	DOD Congressionally Directed Medical Research Program (CDMRP) Prostate Cancer
	Research Program Pathobiology-1 panel
2009-10	DOD breast cancer research program study section Pathobiology-3 panel
2011	Ad hoc member, NIH Study Section (CONC)
2012-13	DOD Congressionally Directed Medical Research Program (CDMRP) Prostate Cancer
	Research Program Pre-application Molecular Biology and Genetics panel
2012	DOD Congressionally Directed Medical Research Program (CDMRP) Prostate Cancer
	Research Program Clinical and Experimental Therapeutics-3 panel
2009-	Nature Science Foundation of China (NSFC), paper review of key projects
2010-12	Nature Science Foundation of China (NSFC) panel meeting; Co-Chair of Genetics and Cell
	Biology sections for 2011 and 2012
2009-	NIH Study Section (Cancer Diagnostic and Treatment SBIR/STTR) ZRG OTC-Y
2013	NIH Study Section ZCA1 SRLB-1
2014-15	DOD breast cancer research program study section Molecular Genetics panel
2015-	NIH Study Section ZCA1 TCRB-5 (IMAT)
2011	Chair of web seminar on "MicroRNA Regulatory Network and Human Diseases" organized by
2011	Target Meeting (http://targetmeeting.com/)
2010-	Senior Editorial Board for American Journal of Translational Research and American Journal of
	Cancer Research
2013-	Editorial Board for Journal of Pharmaceutics & Pharmacology
2014-	Associate Editor for Journal of Cancer Metastasis and Treatment
2012	Guest Editor for multiple author reviews on "MicroRNA regulatory network and human diseases"
	in Cell Mol Life Sci.
<u>Honors</u>	
2011	Top 5% most cited authors in Journals of Molecular Biology and Genetics by Thomson Reuters
2013	Excellence in Research Gold Award, UMMC

B. PEER-REVIEWED PUBLICATIONS (IN CHRONOLOGICAL ORDER)

Citation: only those with over 100 citations (Google Scholar) are shown

Total citations: >9,000 (Google Scholar)

https://scholar.google.com/citations?user=o19TZ4gAAAAJ&hl=en

- 1. **Mo Y-Y**, and Gross DC. 1991. Expression in vitro and during plant pathogenesis of the *syrB* gene required for syringomycin production by *Pseudomonas syringae* pv. *syringae*. Mol. Plant Microbe Interact. 4:28-36.
- 2. **Mo Y-Y**, and Gross DC. 1991. Plant signal molecules activate the *syrB* gene, which is required for syringomycin production by *Pseudomonas syringae* pv. *syringae*. J Bacteriol. 173:5784-5792.
- 3. **Mo Y-Y**, Nagel C, Taylor LP. 1992. Biochemical complementation of chalcone synthase mutants defines a role for flavonols in functional pollen. Proc. Natl. Acad. Sci. USA 89:7213-7217. **308 citations**.
- 4. Mo Y-Y, Mallavia LP. 1994. A Coxiella burnetii gene encodes a sensor-like protein. Gene 151:185-190.
- 5. **Mo, Y-Y**, Cianciotto, NP, and Mallavia, LP. 1995. Molecular identification of a *Coxiella burnetti* gene encoding a macrophage-infectivity potentiator (Mip) analogue. Microbiology 141:2861-2871.
- 6. Afseth G, **Mo Y-Y**, and Mallavia LP. 1995. Characterization of the 23S and 5S rRNA genes of *Coxiella burnetii* and identification of an intervening sequence within the 23S rRNA gene. J. Bacteriol. 177:2946-2949.

- 7. Hansen RA, **Mo Y-Y**, Robertson SJ, and Mallavia LP. 1995. Characterization of the succinate dehydrogenase gene cluster (*sdh*) from the rickettsia *Coxiella burnetii*. Gene 155:27-34.
- 8. **Mo** Y-Y, Geibel M, Bonsall RF, and Gross DC. 1995. Analysis of sweet cherry leaves for plant signal molecules that activate the *syrB* gene required for synthesis of the phytotoxin, syringomycin, by *Pseudomonas syringae* pv. *syringae*. Plant Physiol. 107:603-612.
- 9. **Mo, Y-Y**, and Reynolds, AB. 1996. Identification of murine p120 ^{cas}(CAS) isoforms and heterogenous expression of CAS isoforms in human tumor cell. Cancer Res. 56:2633-2640. **123 citations**
- 10. Reynolds AB, Daniel JM, Mo YY, Wu J, Zhang Z. The novel catenin p120cas binds classical cadherins and induces an unusual morphological phenotype in NIH3T3 fibroblasts. Exp Cell Res. 1996 Jun 15;225(2):328-37. **149 citations**
- 11. **Mo, Y-Y**. Wang, Q., and Beck, W.T. 1997. Down-regulation of topoisomerase IIα in CEM cells selected for merbarone resistance is associated with reduced expression of Sp3. Cancer Res. 57:5004-5008.
- 12. **Mo, Y-Y**. and Beck, W.T. 1997. Heterogeneous expression of DNA topoisomease $II\alpha$ isoforms in tumor cell lines. Oncol. Res 9:193-204.
- 13. **Mo Y-Y.** Seshu J, Wang D, and Mallavia LP. 1998. Synthesis in *Escherichia coli* of two smaller enzymically active analogues of *Coxiella burnetii* macrophage infectivity potentiator (CbMip) protein utilizing a single open reading frame from the cbmip gene. Biochem. J. 335:67-77.
- 14. **Mo Y-Y**. Ameiss KA, and Beck WT. 1998. Overexpression of human DNA topoisomerase II alpha by fusion to enhanced green fluorescent protein. Biotechniques 25:1052-1057, 1998.
- 15. **Mo, Y-Y**. Wang, P., and Beck, W.T. 2000. Functional expression of human topoisomerase I fused to enhanced green fluorescent protein in mammalian cells. Exp. Cell. Res. 256:480-490.
- 16. **Mo Y-Y**. and Beck WT. 1999 Association of human DNA topoisomerase IIalpha with mitotic chromosomes in mammalian cells is independent of its catalytic activity. Exp. Cell. Res. 252:50-62.
- 17. **Mo Y-Y.** and Beck WT. 1999. DNA damage signals induction of fas ligand in tumor cells. Mol. Pharmacol. 55(2):216-222.
- 18. Yu R, Chen C, **Mo Y-Y**, Hebbar V, Owuor ED, Tan TH, and Kong AN. 2000 Activation of Mitogen-activated Protein Kinase Pathways Induces Antioxidant Response Element-mediated Gene Expression via Nrf2-dependent Mechanism. J. Biol. Chem. 275:39907-39913. **263 citations**
- 19. **Mo, Y-Y,** Wang C. and Beck, W.T. 2000. A novel nuclear localization sequence in human DNA topoisomerase I. J. Bio. Chem. 275:41107-41113
- 20. Zhang JH, Barr VA, **Mo Y-Y**, Rojkova AM, Liu S, Simonds WF. 2001. Nuclear localization of G protein beta 5 and regulator of G protein signaling 7 in neurons and brain. J. Biol. Chem. 2001 276:10284-10289.
- 21. **Mo Y-Y**, Yu Y, Shen Z, Beck WT. 2002. Nucleolar delocalization of human topoisomerase I in response to topotecan correlates with sumoylation of the protein. J Biol Chem.277:2958-64.
- 22. Tavormina PA, Come MG, Hudson JR, **Mo Y-Y**, Beck WT, Gorbsky GJ. 2002. Rapid exchange of mammalian topoisomerase II{alpha}at kinetochores and chromosome arms in mitosis. J. Cell Biol. 158:23-29. **100 citations**
- 23. Rallabhandi P, Hashimoto K, **Mo YY**, Beck WT, Moitra PK, D'Arpa P. 2002. Sumoylation of topoisomerase I is involved in its partitioning between nucleoli and nucleoplasm and its clearing from nucleoli in response to camptothecin. J Biol Chem. 277:40020-40026.
- 24. **Mo, Y-Y**, Yu Y, Ee P.P., Beck, W.T. 2004. Overexpression of a dominant negative mutant Ubc9 is associated with increased sensitivity to anticancer drugs, Cancer Research, 64(8):2793-8
- 25. **Mo, Y-Y**, Yu Y, Theodosio E., Ee P.P., Beck, W.T. 2005. A role for Ubc9 in tumorigenesis. Oncogene. 24:2677-83. **129 citations**
- 26. Anh Dinh, **Mo, Y-Y**. 2005. An alternative approach to generating shRNAs from cDNAs. Biotechniques. 38:629-632.
- **27. Mo, Y-Y.**, Moschos, S. 2005. Targeting Ubc9 for cancer therapy. Expert Opinion on Therapeutic Targets. 9:1203-16.
- 28. Lu Z, Wu H, **Mo YY**. 2006. Regulation of bcl-2 expression by Ubc9. Experimental Cell Research. 2006 Jun 10;312(10):1865-75
- 29. Moschos SJ, Mo YY. 2006. Role of SUMO/Ubc9 in DNA Damage Repair and Tumorigenesis. Mol

- Histol. 2006 Sep;37(5-7):309-19. Epub 2006 Jun 7.
- 30. Si ML, Zhu S, Wu H, Lu Z, Wu F, **Mo YY**. 2007. miR-21-mediated tumor growth. Oncogene. 26(19):2799-803. **1147 citations**.
- 31. Wu F, **Mo YY**. 2007. Ubiquitin-like protein modifications in prostate and breast cancer. Front Biosci. 12:700-11.
- 32. Zhu S, Si ML, Wu H, **Mo YY**. MicroRNA-21 targets the tumor suppressor gene tropomyosin 1 (TPM1). J Biol Chem. 2007 May 11;282(19):14328-36. **889 citations; listed as a hot paper by the Scientist magazine;** http://www.the-scientist.com/2009/04/1/61/2/.
- 33. Wu F, Chiocca S, Beck WT, **Mo YY**. 2007. Gam1-associated alterations of drug responsiveness through activation of apoptosis. Molecular Cancer Therapeutics. 6(6):1823-30.
- 34. Wu F, Stutzman A, **Mo YY**. 2007. Notch signaling and its role in breast cancer. Front Biosci. 2007 May 1;12:4370-83.
- 35. Wu H, Dinh A, **Mo YY**. 2007. Generation of shRNAs from randomized oligonucleotides. Biol Proced Online. 9:9-17.
- 36. Zhu S, Wu H, Wu F, Nie D, Sheng S. **Mo YY.** 2008. MicroRNA-21 targets tumor suppressor genes in invasion and metastasis. Cell Research. 18(3):350-9. **858 citations; A featured article of 2007-2008**.
- 37. Furuta E, Pai SK, Zhan R, Bandyopadhyay S, Watabe M, **Mo YY**, Hirota S, Hosobe S, Tsukada T, Miura K, Kamada S, Saito K, Iiizumi M, Liu W, Ericsson J, Watabe K. 2008. Fatty acid synthase gene is up-regulated by hypoxia via activation of Akt and sterol regulatory element binding protein-1. Cancer Res. 68(4):1003-11. **135 citations**
- 38. Wu F, Zhu S, Ding Y, Beck WT, **Mo YY**. 2009. MicroRNA-mediated Regulation of Ubc9 Expression in Cancer Cells. Clin Cancer Res. 15(5):1550-1557. Epub 2009 Feb 17. PMID: 19223510.
- 39. Sachdeva M, Zhu S, Wu F, Wu H, Walia V, Kumar S, Elble R, Watabe K, **Mo YY**. 2009. p53 represses c-Myc through induction of the tumor suppressor miR-145. Proc Natl Acad Sci U S A. 106(9):3207-12. Epub 2009 Feb 6. <u>465 citations; Recommended by Faculty of 1000 Biology.</u> http://f1000.com/1157173#evaluations
- 40. Wu H, Zhu S, **Mo YY**. Suppression of cell growth and invasion by miR-205 in breast cancer. Cell Res. 2009 Apr;19(4):439-48. PubMed PMID: 19238171; PubMed Central PMCID: PMC2664859. A featured article in 2009. **227 citations**
- 41. Ronen, O., Malone, J.P., Kay, P., Bivens, C., Paruchuri, L.P., Hall, K., **Mo, YY**., Robbins, T.K. and Ran, S. 2009. Expression of a Novel Marker, Ubc9, in Head and Neck Squamous Cell Carcinoma. Head and Neck. 2009 Jul;31(7):845-55
- 42. Sachdeva M, **Mo YY**. p53 and c-myc: how does the cell balance "yin" and "yang"? (Editorial). Cell Cycle. 2009 May 1;8(9):1303. Epub 2009 May 3.
- 43. Huang TH, Wu F, Loeb GB, Hsu R, Heidersbach A, Brincat A, Horiuchi D, Lebbink RJ, **Mo YY**, Goga A, McManus MT. Upregulation of miR-21 by HER2/neu signaling promotes cell invasion. J Biol Chem. 2009 Jul 3;284(27):18515-24. 129 citations
- 44. Daum JR, **Mo YY**, Gorbsky GJ. The Dynamics of DNA Topoisomerase IIalpha in Living Cells. Methods Mol Biol. 2009;582:233-44. PubMed PMID: 19763954.
- 45. Leavenworth JW, Ma X, **Mo YY**, Pauza ME. SUMO conjugation contributes to immune deviation in nonobese diabetic mice by suppressing c-Maf transactivation of IL-4. J Immunol. 2009 Jul 15;183(2):1110-9. Epub 2009 Jun 24. PubMed PMID: 19553542.
- 46. Peng S, Wu H, **Mo YY**, Watabe K, Pauza ME. c-Maf increases apoptosis in peripheral CD8 cells by transactivating Caspase 6. Immunology. 2009 Jun;127(2):267-78. PubMed PMID: 19476513; PubMed Central PMCID: PMC2691792.
- 47. Jiang Q, Feng MG, **Mo YY**. Systematic validation of predicted microRNAs for cyclin D1. BMC Cancer. 2009 Jun 18;9:194. PubMed PMID: 19538740; PubMed Central PMCID: PMC2728105.
- 48. Wu H, **Mo YY**. Targeting miR-205 in breast cancer. Expert Opin Ther Targets. 2009 Dec;13(12):1439-48 (Review).
- 49. Zhu S, Sachdeva M, Wu F, Lu Z, **Mo YY**. Ubc9 promotes breast cell invasion and metastasis in a sumoylation-independent manner. Oncogene. 2010 Mar 25;29(12):1763-72
- 50. Sachdeva M, **Mo YY**. MicroRNA-145 suppresses cell invasion and metastasis by directly targeting mucin 1. Cancer Res. 2010 Jan 1;70(1):378-87. PMID: 19996288. **251 citations; Recommended by**

Faculty of 1000 Medicine. http://f1000.com/2606956# evaluations

- 51. Sachdeva M, **Mo YY.** Stroma-mediated expression of estrogen and its role in cancer. (Review) Front Biosci. 2010 Jan 1;15:237-48. PubMed PMID: 20036818.
- 52. Mohit Sachdeva, Shoumin Zhu and **Yin-Yuan Mo**. MicroRNA-21 as a novel therapeutic target. (Review) Cancer Therapeutics Review, Volume 6, Number 1, February 2010, pp. 41-50(10).
- 53. Lee J, Padhye A, Sharma A, Song G, Miao J, **Mo YY**, Wang L, Kemper JK. A pathway involving FXR and shp positively regulates hepatic SIRT1 levels via MIR-34A inhibition. J Biol Chem. 2010 Apr 23:285(17):12604-11.
- 54. Sachdeva M, **Mo YY**. miR-145-mediated suppression of cell growth, invasion and metastasis. (Review) Am J Transl Res 2010;2(2):170-180.
- 55. Yan D, Ng WL, Zhang X, Wang P, Zhang Z, **Mo YY**, Mao H, Hao C, Olson JJ, Curran WJ, Wang Y. Targeting DNA-PKcs and ATM with miR-101 sensitizes tumors to radiation. PLoS One. 2010 Jul 1;5:e11397. PubMed PMID: 20617180; PubMed Central PMCID: PMC2895662. **103 citations**
- 56. Liu W, Furuta E, Shindo K, Watabe M, Xing F, Pandey PR, Okuda H, Pai SK, Murphy LL, Cao D, **Mo YY**, Kobayashi A, Iiizumi M, Fukuda K, Xia B, Watabe K. Cacalol, a natural sesquiterpene, induces apoptosis in breast cancer cells by modulating Akt-SREBP-FAS signaling pathway. Breast Cancer Res Treat. 2011 Jul;128(1):57-68.
- 57. Ng WL, Yan D, Zhang X, **Mo YY**, Wang Y. Over-expression of miR-100 is responsible for the low-expression of ATM in the human glioma cell line: M059J.DNA Repair (Amst). 2010 Nov 10;9(11):1170-5.
- 58. Gupta A, **Mo YY**. Detection of microRNAs in cultured cells and paraffin-embedded tissue specimens by in situ hybridization. Methods Mol Biol. 2011;676:73-83.PubMed PMID: 20931391.
- 59. Sachdeva M, Wu H, Ru P, Hwang L, Trieu V, **Mo YY**. MicroRNA-101-mediated Akt activation and estrogen-independent growth. Oncogene. 2011 Feb 17;30(7):822-31
- 60. Chen CF, He X, Arslan AD, **Mo YY**, Reinhold WC, Pommier Y, Beck WT. Novel regulation of NF-YB by miR-485-3p affects expression of DNA topoisomerase II{alpha} and drug responsiveness. Mol Pharmacol. Mol Pharmacol. 2011 Apr;79(4):735-41
- 61. Pandey PR, Okuda H, Watabe M, Pai SK, Liu W, Kobayashi A, Xing F, Fukuda K, Hirota S, Sugai T, Wakabayashi G, Koeda K, Kashiwaba M, Suzuki K, Chiba T, Endo M, Fujioka T, Tanji S, **Mo YY**, Cao D, Wilber AC, Watabe K. Resveratrol suppresses growth of cancer stem-like cells by inhibiting fatty acid synthase. Breast Cancer Res Treat. 2010 Dec 29. [Epub ahead of print] PubMed PMID: 21188630.
- 62. Xing F, Okuda H, Watabe M, Kobayashi A, Pai SK, Liu W, Pandey PR, Fukuda K, Hirota S, Sugai T, Wakabayshi G, Koeda K, Kashiwaba M, Suzuki K, Chiba T, Endo M, **Mo YY**, Watabe K. Hypoxia-induced Jagged2 promotes breast cancer metastasis and self-renewal of cancer stem-like cells. Oncogene. 2011 Apr 18. [Epub ahead of print] PubMed PMID: 2149930
- 63. Liu Z, Yan R, Al-Salman A, Shen Y, Bu Y, Ma J, Luo DX, Huang C, Jiang Y, Wilber A, **Mo YY**, Huang M, Zhao Y, Cao D. Epidermal Growth Factor Induces Tumor Marker AKR1B10 Expression through Activator Protein-1 Signaling in Hepatocellular Carcinoma Cells. Biochem J. 2011 Dec 2. [Epub ahead of print] PubMed PMID:22136414.
- 64. Zhou N, **Mo YY**. Roles of microRNAs in cancer stem cells. Front Biosci (Schol Ed). 2012 Jan 1;4:810-8. PubMed PMID: 22202092.
- 65. Huang J, **Mo YY**. Role of microRNAs in leukemia stem cells. Front Biosci (Schol Ed). 2012 Jan 1:4:799-809. PubMed PMID: 22202091.
- 66. Liu Z, Yan R, Al-Salman A, Shen Y, Bu Y, Ma J, Luo DX, Huang C, Jiang Y, Wilber A, **Mo YY**, Huang MC, Zhao Y, Cao D. Epidermal growth factor induces tumour marker AKR1B10 expression through activator protein-1 signalling in hepatocellular carcinoma cells. Biochem J. 2012 Mar 1;442(2):273-82. doi:10.1042/BJ20111322. PubMed PMID: 22329800.
- 67. Liu W, Xing F, Iiizumi-Gairani M, Okuda H, Watabe M, Pai SK, Pandey PR, Hirota S, Kobayashi A, **Mo YY**, Fukuda K, Li Y, Watabe K. N-myc downstream regulated gene 1 modulates Wnt-β-catenin signalling and pleiotropically suppresses metastasis. EMBO Mol Med. 2012 Feb;4(2):93-108. doi:10.1002/emmm.201100190. Epub 2012 Jan 13. PubMed PMID: 22246988; PubMed Central PMCID: PMC3306556.

- 68. Xu M, **Mo YY**. The Akt-associated microRNAs. Cell Mol Life Sci. 2012 Nov;69(21):3601-12. doi: 10.1007/s00018-012-1129-8. Epub 2012 Aug 31. Review. PubMed PMID: 22936352; PubMed Central PMCID: PMC3475760.
- 69. **Mo YY**. MicroRNA regulatory networks and human disease. Cell Mol Life Sci. 2012 Nov;69(21):3529-31. doi: 10.1007/s00018-012-1123-1. Epub 2012 Aug 25. Review. PubMed PMID: 22926413; PubMed Central PMCID: PMC3475759.
- 70. Sachdeva M, Liu Q, Cao J, Lu Z, **Mo YY**. Negative regulation of miR-145 by C/EBP-β through the Akt pathway in cancer cells. Nucleic Acids Res. 2012 Aug;40(14):6683-92. doi: 10.1093/nar/gks324. Epub 2012 Apr 11. PubMed PMID:22495929; PubMed Central PMCID: PMC3413133.
- 71. Pandey PR, Xing F, Sharma S, Watabe M, Pai SK, Iiizumi-Gairani M, Fukuda K, Hirota S, **Mo YY**, Watabe K. Elevated lipogenesis in epithelial stem-like cell confers survival advantage in ductal carcinoma in situ of breast cancer. Oncogene. 2012 Dec 3. doi: 10.1038/onc.2012.519. [Epub ahead of print] PubMed PMID: 23208501.
- 72. Zhang A, Zhou N, Huang J, Liu Q, Fukuda K, Ma D, Lu Z, Bai C, Watabe K, **Mo YY**. The human long non-coding RNA-RoR is a p53 repressor in response to DNA damage. Cell Res. 2013 Mar;23(3):340-50. doi: 10.1038/cr.2012.164. Epub 2012 Dec 4.PubMed PMID: 23208419; PubMed Central PMCID: PMC3587705.
- 73. Okuda H, Xing F, Pandey PR, Sharma S, Watabe M, Pai SK, **Mo YY**, Iiizumi-Gairani M, Hirota S, Liu Y, Wu K, Pochampally R, Watabe K. miR-7 suppresses brain metastasis of breast cancer stem-like cells by modulating KLF4. Cancer Res. 2013 Feb 15;73(4):1434-44. doi: 10.1158/0008-5472.CAN-12-2037. Epub 2013 Feb 5. PubMed PMID: 23384942; PubMed Central PMCID: PMC3576138.
- 74. Singh R, **Mo YY**. Role of microRNAs in breast cancer. Cancer Biol Ther. 2013 Mar 1;14(3):201-12. doi: 10.4161/cbt.23296. Epub 2013 Jan 4. PubMed PMID: 23291983; PubMed Central PMCID: PMC3595302.
- 75. Xing F, Kobayashi A, Okuda H, Watabe M, Pai SK, Pandey PR, Hirota S, Wilber A, **Mo YY**, Moore BE, Liu W, Fukuda K, Iiizumi M, Sharma S, Liu Y, Wu K, Peralta E, Watabe K. Reactive astrocytes promote the metastatic growth of breast cancer stem-like cells by activating Notch signalling in brain. EMBO Mol Med. 2013 Mar;5(3):384-96. doi: 0.1002/emmm.201201623. PubMed PMID: 23495140; PubMed Central PMCID: PMC3598079.
- 76. Liu Q, Huang J, Zhou N, Zhang Z, Zhang A, Lu Z, Wu F, **Mo YY**. LncRNA loc285194 is a p53-regulated tumor suppressor. Nucleic Acids Res. 2013 May 1;41(9):4976-87.doi: 10.1093/nar/gkt182. Epub 2013 Apr 4. PubMed PMID: 23558749; PubMed Central PMCID: PMC3643595.PMCID: PMC3576138.
- 77. Gupta S, Prasad S, Sethumadhavan DR, Nair MS, **Mo YY**, Aggarwal BB. Nimbolide, a Limonoid Triterpene, Inhibits Growth of Human Colorectal Cancer Xenografts by Suppressing the Proinflammatory Microenvironment. Clin Cancer Res. 2013 Jun 13. [Epub ahead of print] PubMed PMID: 23766363.
- 78. **Mo YY**, Tang H, Miele L. Notch-Associated MicroRNAs in Cancer. Curr Drug Targets. 2013 Jul 4. [Epub ahead of print] PubMed PMID: 23834150.
- 79. Zhang Z, Zhu Z, Watabe K, Xu M, Bai C, Wu F, **Mo YY**. Negative regulation of lncRNA GAS5 by miR-21. Cell Death and Differentiation. 2013 Nov;20(11):1558-68.
- 80. Gupta SC, Francis SK, Nair MS, **Mo YY**, Aggarwal BB. Azadirone, a limonoid tetranortriterpene, induces death receptors and sensitizes human cancer cells to tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) through a p53 protein-independent mechanism: evidence for the role of the ROS-ERK-CHOP-death receptor pathway. J Biol Chem. 2013 Nov 8;288(45):32343-56.
- 81. Huang J, Zhou N, Watabe K, Lu Z, Wu F, Xu M, **Mo YY**. Long non-coding RNA UCA1 promotes breast tumor growth by suppression of p27 (Kip1). Cell Death Dis. 2014 Jan 23;5:e1008. doi: 10.1038/cddis.2013.541. PubMed PMID: 24457952.
- 82. Zhang A, Xu M, **Mo YY**. Role of the lncRNA-p53 regulatory network in cancer. J Mol Cell Biol. 2014 Apr 9. [Epub ahead of print] PubMed PMID: 24721780.
- 83. Wang C, Mao J, Redfield S, **Mo Y**, Lage JM, Zhou X. Systemic distribution, subcellular localization and differential expression of sphingosine-1-phosphate receptors in benign and malignant human tissues. Experimental and molecular pathology. 2014; 97(2):259-65. NIHMSID: NIHMS618499 PubMed [journal] PMID: 25084322, PMCID: PMC4177454

- 84. Zhang JH, Pandey M, Kahler JF, Loshakov A, Harris B, Dagur PK, **Mo YY**, Simonds WF. Improving the specificity and efficacy of CRISPR/CAS9 and gRNA through target specific DNA reporter. J Biotechnol. 2014 Nov 10;189:1-8. doi: 10.1016/j.jbiotec.2014.08.033. Epub 2014 Sep 2. PubMed PMID: 25193712; PubMed Central PMCID: PMC4252756.
- 85. Ho TT, Zhou N, Huang J, Koirala P, Xu M, Fung R, Wu F, **Mo YY**. Targeting non-coding RNAs with the CRISPR/Cas9 system in human cell lines. Nucleic Acids Res. 2015 Feb 18;43(3):e17. doi: 10.1093/nar/gku1198. Epub 2014 Nov 20. PubMed PMID: 25414344; PubMed Central PMCID: PMC4330338.
- 86. Singh R, Pochampally R, Watabe K, Lu Z, **Mo YY**. Exosome-mediated transfer of miR-10b promotes cell invasion in breast cancer. Mol Cancer. 2014 Nov 26;13:256. doi: 10.1186/1476-4598-13-256. PubMed PMID: 25428807; PubMed Central PMCID: PMC4258287.
- 87. Gupta SC, Singh R, Pochampally R, Watabe K, **Mo YY**. Acidosis promotes invasiveness of breast cancer cells through ROS-AKT-NF-κB pathway. Oncotarget. 2014 Dec 15;5(23):12070-82. PubMed PMID: 25504433; PubMed Central PMCID: PMC4322981.
- 88. Xing F, Sharma S, Liu Y, **Mo YY**, Wu K, Zhang YY, Pochampally R, Martinez LA, Lo HW, Watabe K. miR-509 suppresses brain metastasis of breast cancer cells by modulating RhoC and TNF-α. Oncogene. 2015 Feb 9. doi: 10.1038/onc.2014.412. [Epub ahead of print] PubMed PMID: 25659578.
- 89. Vallabhaneni KC, Penfornis P, Dhule S, Guillonneau F, Adams KV, **Mo YY**, Xu R, Liu Y, Watabe K, Vemuri MC, Pochampally R. Extracellular vesicles from bone marrow mesenchymal stem/stromal cells transport tumor regulatory microRNA, proteins, and metabolites. Oncotarget. 2015 Mar 10;6(7):4953-67. PubMed PMID:25669974.
- 90. Wu K, Fukuda K, Xing F, Zhang Y, Sharma S, Liu Y, Chan MD, Zhou X, Qasem SA, Pochampally R, Mo YY, Watabe K. Roles of the cyclooxygenase 2 matrix metalloproteinase 1 pathway in brain metastasis of breast cancer. J Biol Chem. 2015 Apr 10;290(15):9842-54. doi: 10.1074/jbc.M114.602185. Epub 2015 Feb 17. PubMed PMID: 25691572; PubMed Central PMCID: PMC4392281.
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- 95. Liu H, Li J, Koirala P, Ding X, Chen B, ... **Mo YY**. Long non-coding RNAs as prognostic markers in human breast cancer. Oncotarget. 2016; PubMed [journal] PMID: 26942882
- 96. Xu M, Bian S, Li J, He J, Chen H, Ge L, Jiao Z, Zhang Y, Peng W, Du F, **Mo Y**, Gong A. MeCP2 suppresses LIN28A expression via binding to its methylated-CpG islands in pancreatic cancer cells. Oncotarget. 2016; 7(12):14476-85. PubMed [journal] PMID: 26910839
- 97. Zhang Z, Zhou N, Huang J, Ho TT, Zhu Z, ... **Mo YY**. Regulation of androgen receptor splice variant AR3 by PCGEM1. Oncotarget. 2016; PubMed [journal] PMID: 26848868
- 98. Villamizar O, Chambers CB, **Mo YY**, Torry DS, Hofstrand R, et al. Fas-antisense long noncoding RNA is differentially expressed during maturation of human erythrocytes and confers resistance to Fas-mediated cell death. Blood cells, molecules & diseases. 2016; 58:57-66. PubMed [journal] PMID: 27067490
- 99. Villamizar O, Chambers CB, **Mo YY**, Torry DS, Hofstrand R, Riberdy JM, Persons DA, Wilber A. Data in support of transcriptional regulation and function of Fas-antisense long noncoding RNA during

- human erythropoiesis. Data in brief. 2016; 7:1288-95. PubMed [journal] PMID: 27141526, PMCID: PMC4838931
- 100. Singh R, Gupta SC, Peng WX, Zhou N, Pochampally R, Atfi A, Watabe K, Lu Z, **Mo YY**. Regulation of alternative splicing of Bcl-x by BC200 contributes to breast cancer pathogenesis. Cell death & disease. 2016; 7(6):e2262. PubMed [journal] PMID:27277684
- 101. Ho TT, Huang J, Zhou N, Zhang Z, Koirala P, Zhou X, Wu F, Ding X, **Mo YY**. Regulation of PCGEM1 by p54/nrb in prostate cancer. Sci Rep. 2016 Sep 29;6:34529. doi: 0.1038/srep34529. PubMed PMID: 27682980
- 102. Chen, B., Liu, J., Ho, T.T., Ding, X. and **Mo, YY**. (2016) ERK-mediated NF-kappaB activation through ASIC1 in response to acidosis. Oncogenesis, 2016 **5**, e279.
- 103. Koirala P, Huang J, Ho TT, Wu F, Ding X, **Mo YY**. LncRNA AK023948 is a positive regulator of AKT. Nat Commun. 2017 Feb 8;8:14422. doi: 10.1038/ncomms14422. PubMed PMID: 28176758.
- 104. Liu J, Peng WX, **Mo YY**, Luo D. MALAT1-mediated tumorigenesis. Front Biosci (Landmark Ed). 2017 Jan 1;22:66-80.

Patent:

- 1. Taylor LP and **Mo YY**. March 31, 1998. Patent number 5,733,759. Methods for the regulation of plant fertility.
- 2. **Mo YY** and Wu F. Oct. 7, 2014. A genetic selection system for identification of microRNA target genes. US 8,852,926 B2.

C. RESEARCH SUPPORT

Ongoing Research Support

1R01CA154989 Mo (PI) 7/6/2011-6/30/2017 (no-cost extension)

"The Akt-associated microRNAs"

The major goal of this project is to investigate the role of Akt-associated microRNAs in cancer, and their regulations.

LC150477 Mo (PI) 08/1/2016-07/31/2017

"Lung cancer-specific circular RNAs as biomarkers"

Department of Defense Lung Cancer Research Program

The goal of this application is to identify a specific group of IncRNAs, circular RNAs, in lung cancer as potential biomarkers

LC150479 Mo (PI) 08/1/2016-07/31/2017

"Genome-wide screen for synthetic lethal interactions with mutant KRAS in lung cancer"

Department of Defense Lung Cancer Research Program

The goal of this application is to screen CRISPR/Cas library for genes involved in synthetic lethal interactions with KRAS in lung cancer.

Completed Research Support (last 5 years)

The role of microRNA editing in breast cancer

Funding Agency: Department of Defense Breast Cancer Research Program

MO, YIN-YUAN (PI) BC096452 (2010-2011)

Screening of microRNA library for cancer biomarkers and novel therapeutics

Funding Agency: Abraxis

MO, YIN-YUAN (PI); No number (2009-2012)

Role of long non-coding RNAs in prostate cancer

Funding Agency: Department of Defense Prostate Cancer Research Program

MO, YIN-YUAN (PI) PC110379 (2012-2013)

MicroRNA-mediated estrogen independent growth in ER positive breast cancer cells

Agency: Susan G. Komen for the Cure

MO, YIN-YUAN (PI) KG100027 (2010-2013)

Competitive endogenous RNAs in prostate cancer

Funding Agency: Department of Defense Prostate Cancer Research Program

MO, YIN-YUAN (PI) PC121467 (2013-2014)

Identification of prostate cancer specific microDNAs

Funding Agency: Department of Defense Prostate Cancer Research Program

MO, YIN-YUAN (PI) PC121472 (2013-2014)

Methods of systematic microRNA target validation and identification

Funding agency: National Institute of Cancer

MO, YIN-YUAN (PI) <u>1R21CA138333 (IMAT)</u> (2011-2014)

Identification of prostate cancer-specific circular RNAs

Department of Defense Prostate Cancer Research Program

Funding Agency: Department of Defense Prostate Cancer Research Program

MO, YIN-YUAN (PI) PC131272 (2014-2015)

Systematic identification of genes required for expression of androgen receptor splice variants

Funding Agency: Department of Defense Prostate Cancer Research Program

MO, YIN-YUAN (PI) PC141083 (2015-2016)

Identification of androgen receptor-specific enhancer RNAs

Funding Agency: Department of Defense Prostate Cancer Research Program

MO, YIN-YUAN (PI) PC141096 (2015-2016)

Characteristics of multidrug resistance

Funding Agency: NCI

R01-CA40750 (PI: William Beck); Subaward PI: Yin-Yuan Mo, (2006-2011)

INVITED TALKS (from 2004):

Role for Ubc9 in drug responsiveness and tumorigenesis

May 2004, SIUC Department of Biochemistry

siRNA technology and its clinic applications

September 2004, Zhejiang University, China

Regulation of ER-mediated gene expression by sumoylation

October 2004, Department of Physiology, SIUC

siRNA libraries and their applications

January 2005, SIU Cancer Institute Research Seminar Series

Induction of sumoylation in the tumor cells in response to stress

April 2005, SIU Molecular Biology Symposium

Protein sumoylation and its role in breast tumorigenesis

June 2005, Loyola University Chicago

MicroRNAs: a role in cancer

June 2006, Department of Internal Medicine, SIU

MicroRNAs and human malignancy

Feb 2007, Department of Biology, University of Illinois at Springfield

Role of microRNA-21 in tumor growth and metastasis

November 2007, Engineering School of SIU at Edwardsville

A genetic selection system for microRNA target validation and identification

May 2008, Abraxis Biosciences, CA

MicroRNAs as oncogenes or tumor suppressors

June 2008, Department of Biopharmaceutical Sciences, University of Illinois at Chicago

MicroRNAs as oncogenes or tumor suppressors

October 2008, Department of Physiology, SIUC

MicroRNAs as oncogenes or tumor suppressors and what else

October 2009, SIU-SimmonsCooper Cancer Institute Research Symposium

MicroRNAs in Cancer: from profiling to function studies

November 2009, SBI, CA

MicroRNAs in Cancer: from profiling to function studies

December 2009, SIU-SimmonsCooper Cancer Institute Research seminar series

Role of microRNAs in breast cancer cell growth, metastasis and tamoxifen resistance

April 2010. The 3rd World Cancer Congress 2010-Breast Cancer Conference, Shanghai, China,

MicroRNA research update

May, 2010. Chongging Medical University, Chongging, China

MicroRNAs in cancer: oncogenes, tumor suppressors and what else

May, 2010. Zhejiang University School of Medicine, Hangzhou, China

MicroRNAs as important players in the Akt-regulated network in cancer cells

April, 2011. TargetMeeting Web Seminar on MicroRNA regulatory network and human diseases http://targetmeeting.com/

Role of microRNAs in cancer: oncogenes and tumor suppressors

May, 2011. University of Mississippi Medical Center, MS

Identification of microRNAs that regulate estrogen-independent growth pathways

August, 2011 DOD Era of Hope Meeting, Orlando, FL

Dissecting the molecular mechanism of IncRNA-mediated gene regulation

February 2012, Department of Medical Microbiology, Immunology and Cell Biology, Southern Illinois University School of Medicine, Springfield, IL

Long non-coding RNAs as master gene regulators in cancer

June 2012, Cancer Institute, University of Mississippi Medical Center

Role of non-coding RNAs in cancer

July 2012. University of Jiangsu, Zhengjiang, China

LncRNA RoR is a negative regulator of p53 in response to DNA damage

July 2012. Chinese Academy of Military Medical Sciences, Beijing, China

The methods used for investigation of non-coding RNAs for cancer research

September 2012. Department of Pharmacology and Toxicology, University of Mississippi Medical Center

Akt-associated non-coding RNAs

November 2012. Cancer Research Symposium, Cancer Institute, University of Mississippi Medical Center

Role of non-coding RNAs in cancer

February, 2013. TargetMeeting Web Seminar on regulatory RNA

Pathway specific regulation of gene expression by non-coding RNAs

May, 2013. University of Louisiana at Monroe, LA

CeRNAs in cancer

August 2013, University of Jiangsu Affiliated Hospital, Zhengjiang, China

Reciprocal repression of microRNAs and IncRNAs

August 2013, Yangzhou University, Yangzhou, China

Reciprocal repression of microRNAs and IncRNAs

September 2013, School of Pharmacy, Zhejiang University, Hangzhou, China

Techniques used for microRNAs and IncRNAs

September 2013, School of Environment Sciences, Zhejiang University, Hangzhou, China

LncRNAs as master gene regulators in cancer

February 2014, Cancer Institute, Southern Illinois University School of Medicine, Springfield, IL

LncRNAs as master gene regulators in cancer

June 2014, Department of Biopharmaceutical Sciences, University of Illinois at Chicago, Chicago, IL

Gene Knockout by CRIPR/Cas9

August 2014, College of Medicine, University of Jiangsu, Zhengjiang, China

Role of IncRNAs in cancer

August 2014, University of Jiangsu Affiliated Hospital, Zhengjiang, China

Regulation of alternative splicing by IncRNAs

March 2015, Cancer Center, Louisiana State University, New Orleans

LncRNA-mediated mRNA stability in cancer

April 2015, Department of Biochemistry and Molecular Biology, University of Nebraska Medical Center, Omaha

SCRISPR/Cas9 as a research tool

October 2015, Jiangsu University, Zhengjiang, China

LncRNA-mediated tumorigenesis

October 2015, Guangxi Medical Univerity, Nanning, China

Regulation of AKT and NF-kB pathways by IncRNAs

February 2016, Department of Biochemistry and Molecular Biology Louisiana State University, New Orleans, LA

LncRNA-mediated tumorigenesis

October 2016, Jiangsu University, Zhengjiang, China

The role of IncRNAs in AKT activation

October 2016, Shandong University 2nd affiliated hospital, Shandong, China

Meeting abstracts

Fangting Wu and Yin-Yuan Mo. Stress-mediated expression of SUMO genes and their role in drug resistance April 2004, SIU Molecular Biology Symposium, Pere Marquette, IL

Hailong Wu and **Yin-Yuan Mo**. **Generation of shRNAs from randomized oligonucleotides.** April 2004, SIU Molecular Biology Symposium, Pere Marquette, IL

Yin-Yuan Mo, Zhaohui Lu, Hailong Wu and Sabrina Luster. Regulation of estrogen receptor-mediated gene expression by sumoylation. 2005 AACR meeting, Anaheim, CA

Uppoor G. Bhat, Rachel P. L. EE, Yin-Yuan Mo, Joaquina Mascarenhas, Lucio Miele, William T. Beck. **Arsenic trioxide-induced modification of Notch1 in mannalian cells is associated with increased expression of MRP1.** 2005 AACR meeting, Anaheim, CA

Yin-Yuan Mo, Hailong Wu, Sabrina Luster, and William T. Beck. A role for sumoylation in regulating estrogen receptor-mediated gene expression. 2005 DOD era of hope meeting in Philadelphia, PA

Fangting Wu, Susanna Chiocca and Yin-Yuan Mo. Sumoylation-associated sensitization of drug responses through the apoptosis pathways. 2006 AACR meeting, Washington DC

Hailong Wu and **Yin-Yuan Mo**. **Generation of shRNA libraries from randomized oligonucleotides.** 2006 AACR meeting, Washington DC

Min-Liang Si, Hailong Wu, Zhaohui Lu, Fangting Wu and Yin-Yuan Mo. Suppression of tumor growth by anti-miRNA21. 2006 AACR meeting, Washington DC

Zhaohui Lu, Hailong Wu and **Yin-Yuan Mo**. **Regulation of Bcl-2 expression by sumoylation.** 2006 AACR meeting, Washington DC

Fangting Wu and Yin-Yuan Mo. SUMO-associated alterations of drug sensitivity through induction of apoptosis. Oct 2006, SIU Life Science Research Symposium, Carbondale, IL

Shoumin Zhu, Min-Liang Si and Yin-Yuan Mo. MicroRNA-21 targets the tumor suppressor gene tropomyosin 1. 2007 AACR meeting, Los Angles, CA

Hailong Wu, Min-Liang Si and **Yin-Yuan Mo**. **MicroRNA-205 is a putative tumor suppressor.** 2007 AACR meeting, Los Angles, CA

Fangting Wu, and Yin-Yuan Mo. Induction of apoptosis by suppression of the sumoylation pathway. 2007 AACR meeting, Los Angles, CA

Fangting Wu and Yin-Yuan Mo. A genetic selection system for identification of mir-21 target genes. April 2007, SIU Molecular Biology Symposium, Pere Marquette, IL

Fangting Wu, Katie DeClerk and **Yin-Yuan Mo. A genetic selection system for microRNA-21 targets.** AACR symposium on Role of non-coding RNAs, 2007, Boston, MA

Fangting Wu, Katie DeClerk, Hailong Wu, Shoumin Zhu and Yin-Yuan Mo. Identification of microRNA-21 target genes. 2008 AACR meeting, San Diego, CA

Hailong Wu, Shoumin Zhu, Min-Liang Si and **Yin-Yuan Mo**. **Suppression of cell growth and invasion by microRNA-205 in breast cancer**. 2008 AACR meeting, San Diego, CA

Mohit Sachdeva, Shuomin Zhu and Yin-Yuan Mo. **MicroRNA-145 suppresses tumor cell growth and invasion** 2008 AACR meeting, San Diego, CA

Shuomin Zhu, Hailong Wu, Fangting Wu, Daotai Nie, Shijie Sheng and **Yin-Yuan Mo**. **MicroRNA-21 targets multiple tumor suppressor genes in invasion and metastasis.** 2008 AACR meeting, San Diego, CA

Katie DeClerck, Fangting Wu, Shoumin Zhu, Hailong Wu, Mohit Sachdeva, **Yin-Yuan Mo**. **Generation of microRNA library for biological function studies**. 2008 SIU training research symposium

Yin-Yuan Mo, Katie DeClerck, Fangting Wu, Shoumin Zhu, Hailong Wu, Mohit Sachdeva and Jack Lin **A microRNA precursor library for biological function studies.** 2009 AACR meeting, Denver, CO.

Mohit Sachdeva and Yin-Yuan Mo. MicroRNA-145-mediated repression of c-Myc by p53. 2009 Keystone symposium on microRNAs, Keystone, CO

Shoumin Zhu, Fangting Wu, Zhaohui Lu and **Yin-Yuan Mo. Ubc9 promotes invasion and metastasis in a sumoylation independent manner.** 2009 AACR meeting, Denver, CO.

Mohit Sachdeva, Shoumin Zhu, Fangting Wu, Hailong Wu, Sumit Kumar, Vijay Wlia, Randolph Elble, Kounosuke Watabe, **Yin-Yuan Mo. p53 represses c-Myc through induction of the tumor suppressor miR-145.** 2009 AACR meeting, Denver, CO

Ashim Gupta, Shoumin Zhu, Mohit Sachdeva, Chrishna Rao, Thomas Robbins and Yin-Yuan Mo. Upregulation of miR-155 is associated with cisplatin resistance in the head and neck cancer UMSCC-10B/15S cells. 2010 AACR meeting in Washington D.C.

Mohit Schadeva, Hailong Wu, Peng Ru, Larn Hwang, Vuong Trieu and Yin-Yuan Mo. MicroRNA-101 promotes estrogen independent growth and confers tamoxifen resistance in ER positive breast cancer cells. 2010 AACR meeting in Washington D.C.

Mohit Schadeva and Yin-Yuan Mo. MicroRNA-145 suppresses cell invasion and metastasis by targeting mucin1. 2010 AACR meeting in Washington D.C.

Mohit Sachdeva, Hailong Wu, and **Yin-Yuan Mo**. **The Akt-associated microRNAs in cancer cells**. Targeting PI3K/mTOR Signaling in Cancer 2011, San Francisco, CA

Mohit Sachdeva and **Yin-Yuan Mo**. **Negative regulation of miR-145 by C/EBP-beta**. 2011 AACR meeting in Orlando FL.

Xiaolong He, Ahmet Dirim Arslan, Tsui-Ting Ho, Yin-Yuan Mo and William T. Beck. **Downregulation of microRNA miR-124 in ovarian and breast tumorigenesis.** 2011 AACR meeting in Orlando FL.

Mohit Sachdeva, Hailong Wu and **Yin-Yuan Mo**. **Identification of microRNAs that regulate estrogen-independent growth pathways.** 2011 DOD Era of Hope Meeting, Orlando, FL.

Ramesh Singh and Yin-Yuan Mo. Exosome-mediated microRNA transfer in breast cancer metastasis 2011 DOD Era of Hope Meeting, Orlando, FL.

Fangting Wu, Nanjiang Zhou and Yin-Yuan Mo. A genetic selection system for microRNA target validation and identification. 2011 DOD Era of Hope Meeting, Orlando, FL.

Resha Bajracharya and **Yin-Yuan Mo**. **The role of microRNA editing in breast cancer.** 2011 DOD Era of Hope Meeting, Orlando, FL.

Nanjiang Zhou, Mohit Sachdeva and Yin-Yuan Mo. Regulation of miR-145 expression by Foxo3a, C/EBP-β and p53 in cancer cells. 2012 AACR meeting in Chicago, IL.

Ramesh Singh and Yin-Yuan Mo. Exosomal microRNAs: Mediators for Cell-Cell Communications. 2012 AACR meeting in Chicago, IL.

Jianguo Huang, Qian Liu, Mohit Sachdeva, Shoumin Zhu and Yin-Yuan Mo. Differential expression of PDCD4 in response to Resveratrol in breast cancer cells. 2012 AACR meeting in Chicago, IL.

Fangting Wu and Yin-Yuan Mo. A real-time PCR based long noncoding RNA profiler for cancer research. 2012 AACR meeting in Chicago, IL.

Ramesh Singh and **Yin-Yuan Mo**. **Exosome-mediated non-coding RNA transfer.** 2013 AACR meeting in Washington DC.

Jianguo Huang and Yin-Yuan Mo. hnRNP I interacts with IncRNA UCA1 and regulates its stability. 2013 AACR meeting in Washington DC.

Ziqiang Zhang and **Yin-Yuan Mo. Negative regulation of IncRNA GAS5 by miR-21.** 2013 AACR meeting in Washington DC.

Juan Zhang and Yin-Yuan Mo. A simple and easy way to assemble TALE/TALEN modules for genetic engineering. 2013 AACR meeting in Washington DC.

Nanjiang Zhou and Yin-Yuan Mo. Identification of microRNA targets by a genetic selection system. 2013 AACR meeting in Washington DC.

Tsui-Ting Ho and **Yin-Yuan Mo. Targeting non-coding genes by CRISPR/Cas9.** 2014 AACR meeting in Philadelphia, PA.

Jianguo Huang and Yin-Yuan Mo. Linc-RoR promotes c-Myc expression through hnRNP I and AUF1. 2014 AACR meeting in Philadelphia, PA.

Ramesh Singh and **Yin-Yuan Mo. Regulation of Bclx splicing by BC200.** 2014 AACR meeting in Philadelphia, PA.

Pratirodh Koirala and **Yin-Yuan Mo. AK023948 promotes tumorigenesis by activating AKT.** 2014 AACR meeting in Philadelphia, PA.

Tsui-Ting Ho and **Yin-Yuan Mo. Regulation of PCGEM1by p54/nrb.** 2015 AACR meeting in New Orleans, LA.

Pratirodh Koirala and **Yin-Yuan Mo. AK023948-mediated AKT activation.** 2015 AACR meeting in New Orleans, LA.

D. TEACHING

Graduate courses

2004 Spring & 2006 Spring	MBMB567	Advanced Cell Biology (team taught) at SIU
2004-2011	MBMB558	Advanced Immunology (team taught) at SIU
2005 Fall	MBMB504	Research Methods (Co-director) at SIU
2004 Fall-2006 Spring	MBMB597	Seminar coordinator at SIU
2006-2011	MBMB504	Research Methods (Director) at SIU
2006-2011	MBMB 560	Molecular Oncology (Co-director) at SIU

2013-present	BCH740 Biochemical Methods (team taught) at UMMC
2013	BCH724 Research Tools in Molecular Biology (team taught) at UMMC
2013	ID721 Molecular Oncology (team taught) at UMMC
2013-present	MICRO702 Graduate Virology (team taught) at UMMC
2013-present	PHARM723 MECHANISMS OF DRUG ACTION (team taught) at UMMC
2016	PHARM 724: Experimental Design & Methods to Study Cell Signaling (team taught)
2016	Path 748 Problems in Cancer Biology (team taught)

Medical student courses

2005 -2006 2nd year medical student tutoring (HII) (Co-tutor) at SIU 2007-2011 2nd year medical student tutoring (HII) (Tutor) at SIU

Students trained in the lab

Undergraduate students at SIU Anh Dinh (2004 summer) Jon Farmer (2004 fall) Kyela Tibbs (2005 Spring) Chad Ersgerd (2005 summer)

Marguerite Nelson (2005 fall)

Christina Hay (2006 summer)

Liz Norwell (2006 summer)

Katie DerClark (2006 fall)

Ashley Elizabeth Satorius (2007 summer)

Michelle Sharaf (2007 summer)

Jack Lin (2008 summer-2009 Spring)

Lindleigh Cheshire (2010 Summer)

Hilary Holms (2010 Summer)

Julia Cao (2010 Summer)

Zack Gao (2011 Summer)

Undergraduate students at UMMC

Cindy Nguyen (2013-14 Summer)

Ansley E. Scott (2014 Summer)

Matt Asters (2014 Summer)

Medical students at SIU

Kate Penderson (MS3)

John Yost (MS4)

Kristy Walter (MS2)

Graduate students

Hailong Wu (Ph.D., graduated in 2009)

Fangting Wu (Ph.D., graduated in 2009)

Diana Brunsman (M.S, transferred)

Mohit Sachdeva (Ph.D., graduated in 2010)

Yanna Ding (Ph.D., transferred)

Katie DeClerk (M.S., graduated 2009)

Ashim Gupta (M.S. graduated 2010)

Fan Yang (Ph.D., transferred)

Resha Bajracharya (M.S. graduated 2011)

Juan Zhang (M.S. graduated 2011)

Nanjiang Zhou (Ph.D., graduated in 2014)

Ramesh Singh (Ph.D., graduated in 2015)

Jianguo Huang (Ph.D., graduated in 2015)

Pratirodh Koirala (Ph.D., graduated in 2016)

Exchange students

Xinmei Wang

Qiong Jiang

Qian Liu

Ping Xu

Jianghua Liu

Juang Li

Huarong Liu

Wan-Xing Peng

Xiangeng Ding

Chao Ou

Zuozhong Xie

Daming Wei

Postdoctoral fellows

Zhaohui Lu

Shoumin Zhu

Peng Ru Ali Zhang Ziqiang Zhang Tsui-Ting Ho

Research instructors

Min-Liang Si Subash Gupta Swart Dhar

Graduate Committee

Ying Wang (MS, graduated in 2005), SIU department of MMI&CB Rui Zhan (MS, graduated in 2006), SIU department of MMI&CB Siying Peng (Ph.D graduated 2008), SIU department of MMI&CB Jon Leavenwoth (Ph.D graduated 2008), SIU department of MMI&CB Jianmei Leavenwoth (Ph.D graduated 2008), SIU department of MMI&CB Jun Ma (MS, graduated in 2007), SIU department of MMI&CB Yong Tang (Ph.D, graduated in 2010), SIU department of MMI&CB Chen Cheng Fen (Ph.D, graduated in 2011), UIC Department of Biopharmaceutical Sciences Tsui-Ting Ho (Ph.D, graduated in 2012), UIC Department of Biopharmaceutical Sciences Fei Xing (Ph.D, graduated in 2012), SIU department of MMI&CB Puspa Pandey (Ph.D, graduated in 2011), SIU department of MMI&CB Hongmei Jiang (Ph.D), SIU department of MMI&CB Jun Ma (Ph.D, graduated in 2012), SIU department of MMI&CB Debasish Boral (Ph.D., graduated in 2014), SIU department of MMI&CB Zunamys I. Carrero (Ph.D., graduated in 2014), UMMC Department of Biochemistry Xiaochen He (Ph.D., graduated in 2016), UMMC Department of Pharmacology&Toxicology

E. REVIEWERS FOR THE FOLLOWING JOURNALS

Cancer Research Oncogene JAMA PNAS PLoS Biology

Nature communications Nucleic Acids Research

Cell Research

Cell Death and Differentiation

Clinical Cancer Research

Journal of Molecular Cell Biology

RNA

Molecular Pharmacology

Molecular Cancer Therapeutics

International Journal of Cancer

Cancer Biomarker

BMC Cancer

Cell Proliferation

Cancer Letter

Cancer Biology and Therapy

Molecular Carcinogenesis

Molecular Cancer

Cancer Prevention Research

Bioinformatics

Pharmacological Research
BioTechniques
Frontiers in Bioscience
Environmental Health Perspectives
Photochemical & Photobiological Sciences
Apoptosis
Lab Investigation
FEBS Letters
Medicinal Research Review
Journal of Medical Genetics
Experimental Cell Research
Molecular Therapy

F. SERVICE

2005-2008	Laboratory Animal Care and Use Committee, SIUSOM
2005-2011	Patent and Copyright Committee, SIUSOM
2005-2008	Central Research Committee, SIUSOM
2009-2011	Central Research Committee, SIUSOM
2007	The SIU Allocation Committee for the Concept Development Award, SIUSOM
2004-2007	Library Advisory Committee, SIUSOM
2014-present	Tenure and Promotion Committee, Department of Pharmacology/Toxicology, UMMC
2016	IRSP grant review