BIOGRAPHICAL SKETCH

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NAME	POSITION TITLE
Zhang, Yanping	Professor
eRA COMMONS USER NAME YANPING_ZHANG	

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

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Fudan University, Shanghai, China	B.S.	1982	Microbiology
Fudan University, Shanghai, China	M.S.	1985	Virology
University of Nebraska, Lincoln, Nebraska	Ph.D.	1992	Molecular Biology

B. Positions and Honors.

Positions and Employment

1993-1996 VP and Co-Founder, Megabase Research Products, Lincoln, Nebraska
1997-2000 Postdoctoral Fellow, University of North Carolina at Chapel Hill
2001-2003 Assistant Professor, U. T. M. D. Anderson Cancer Center, Houston, Texas
2004-2006 Assistant Professor, University of North Carolina at Chapel Hill
2007-2010 Associate Professor, University of North Carolina at Chapel Hill
2011- Professor, University of North Carolina at Chapel Hill

Other Experience and Professional Memberships

1998- Member of American Association for Cancer Research (AACR)
2000- Member of American Association for the Advancement of Science (AAAS)
2001-04 Fellow of the M.D. Anderson Research Trust
2001-04 Odyssey Advisory committee (MD Anderson Cancer Center)
2001- Society of Chinese Bioscientists in America (SCBA)
2005-07 Graduate Admission Committee for Molecular and Genetic Biology (UNC)
2005-06 Reviewer, DOD Breast Cancer Research Program Study Section
2005- Reviewer, DOD Prostate Cancer Research Grants Program Study Section
2007- Ad Hoc Reviewer, NIH CAMP Study Section
2008- Ad Hoc Reviewer, NIH MONC Study Section
2009- Ad Hoc Reviewer, NIH CE Study Section
2010- Ad Hoc Reviewer, NIH BMCT Study Section

Honors

1998 Postdoctoral Fellowship, Lineberger Comprehensive Cancer Center UNC at Chapel Hill
2000 Howard Temin Award
2000 Burroughs Wellcome Fund Career Award in the Biomedical Sciences
2001 M.D. Anderson Research Trust Fund Award
2003 M.D. Anderson Award for Excellence in Education
2006 Junior Research Fellow, UNC
2007 Leukemia & Lymphoma Society Scholar Award
2008 American Cancer Society Research Scholar Award
2008 UNC Jefferson-Pilot Award
2010 The Battle Distinguished Cancer Research Award

C. Selected peer-reviewed publications (in chronological order).

Yanping Zhang, Dwight E. Burbank, James L. Van Etten. Chlorella viruses isolated in China. ***Appl Environ Microbiol***. 1988 Sep;54(9):2170-3.

Peter Strasser, Yanping Zhang, Jon Rohozinski, James L. Van Etten . The termini of the chlorella virus PBCV-1 genome are identical 2.2-kbp inverted repeats. ***Virology***. 1991 Feb;180(2):763-9.

Yanping Zhang, Michael Nelson, James L. Van Etten. A single amino acid change restores DNA cytosine methyltransferase activity in a cloned chlorella virus pseudogene. ***Nucleic Acids Res***. 1992 Apr 11;20(7):1637-42.

Yanping Zhang, Michael Nelson, Joseph W. Nietfeldt, Dwight E. Burbank, James L. Van Etten. Characterization of Chlorella virus PBCV-1 CviAII restriction and modification system. ***Nucleic Acids Res***. 1992 Oct 25;20(20):5351-6.

Michael Nelson, Yanping Zhang, David L. Steffens, Reingard Grabherr, James L. Van Etten. Sequencing two DNA templates in five channels by digital compression. ***PNAS USA***. 1993 Mar 1;90(5):1647-51.

Yanping Zhang, Peter Strasse, Reingard Grabherr, James L. Van Etten.Hairpin loop structure at the termini of the chlorella virus PBCV-1 genome. ***Virology***. 1994 Aug 1;202(2):1079-82.

Aiwen Jin, Yanping Zhang, Yuanan Xia, Traylor E, Michael Nelson, James L. Van Etten. New restriction endonuclease CviRI cleaves DNA at TG/CA sequences. ***Nucleic Acids Res***. 1994 Sep 25;22(19):3928-9.

Zhiqiang Lu, Yu Li, Yanping Zhang, Gerald F. Kutish, Daniel L. Rock, James L. Van Etten. Analysis of 45 kb of DNA located at the left end of the chlorella virus PBCV-1 genome. ***Virology***. 1995 Jan 10;206(1):339-52.

Qiudeng Que, Yanping Zhang, Michael Nelson, Susan Ropp, Dwight E. Burbank, James L. Van Etten. Chlorella virus SC-1A encodes at least five functional and one nonfunctional DNA methyltransferases. ***Gene***. 1997 May 6;190(2):237-44.

Yanping Zhang, Michael Nelson, Joe Nietfeldt, Yuannan Xia, Dwight E. Burbank, Susan Ropp, James L. Van Etten. Chlorella virus NY-2A encodes at least 12 DNA endonuclease/methyltransferase genes. ***Virology***. 1998 Jan 20;240(2):366-75.

Yanping Zhang, Yue Xiong, Wendell G. Yarbrough. ARF promotes MDM2 degradation and stabilizes p53: ARF-INK4a locus deletion impairs both the Rb and p53 tumor suppression pathways. ***Cell***. 1998 Mar 20;92(6):725-34.

Scott Stewart, Meera Sundaram, Yanping Zhang, Jeeyong Lee, Min Han, Kun-Liang Guan. Kinase suppressor of Ras forms a multiprotein signaling complex and modulates MEK localization. ***Mol Cell Biol***. 1999 Aug;19(8):5523-34.

Yanping Zhang, Yue Xiong. Mutations in human ARF exon 2 disrupt its nucleolar localization and impair its ability to block nuclear export of MDM2 and p53. ***Molecular Cell***. 1999 May;3(5):579-91.

Manabu Furukawa, Yanping Zhang, Joseph McCarville, Tomohiko Ohta, Yue Xiong. The CUL1 C-terminal sequence and ROC1 are required for efficient nuclear accumulation, NEDD8 modification, and ubiquitin ligase activity of CUL1. ***Mol Cell Biol***. 2000 Nov;20(21):8185-97.

Yanping Zhang, Yue Xiong. A p53 amino-terminal nuclear export signal inhibited by DNA damage-induced phosphorylation. ***Science***. 2001 Jun 8;292(5523):1910-5.

Yanping Zhang, Yue Xiong. Control of p53 Ubiquitination and Nuclear Export by MDM2 and ARF. ***Cell Growth Differ***. 2001 Apr;12(4):175-186.

Nicole Schneiderhan, Andreja Budde, Yanping Zhang, Bernhard Brüne. Nitric oxide induces phosphorylation of p53 and impairs nuclear export. ***Oncogene***. 2003 May 15;22(19):2857-68.

Kevin O'Keefe, Huiping Li, Yanping Zhang. Nucleocytoplasmic shuttling of p53 is essential for MDM2-mediated cytoplasmic degradation but not ubiquitination. ***Mol Cell Biol***. 2003 Sept;23(18): 6396-6405.

Yanping Zhang (correspondence), Gabrielle Whitewolf, Krishna Bhat, Aiwen Jin, Theresa Allio, William A. Burkhart, and Yue Xiong. Ribosomal protein L11 negatively regulates oncoprotein MDM2 and mediates a p53-dependent ribosomal-stress checkpoint pathway. ***Mol Cell Biol***. 2003 Dec; 23(23): 8902-12.

Koji Itahana, Krishna Bhat, Aiwen Jin, Yoko Itahana, David Hawke, Ryuji Kobayashi, and Yanping Zhang. Tumor suppressor ARF degrades B23, a nucleolar protein involved in ribosome biogenesis and cell proliferation. ***Molecular Cell,*** 2003 Nov; 12: 1151-64.

Yanping Zhang. The ARF-B23 connection: implications for growth control and cancer treatment. ***Cell Cycle***, 2004; 3(3): 259-262.
Krishna Bhat, Koji Itahana, Aiwen Jin, and Yanping Zhang. Essential role of ribosomal protein L11 in mediating growth inhibition-induced p53 activation. ***EMBO J***. 2004 Jun 16;23(12): 2402-12.
Aiwen Jin, Koji Itahana, Kevin O'Keefe, and Yanping Zhang. Inhibition of HDM2 and activation of p53 by ribosomal protein L23. ***Mol Cell Biol***. 2004 Sept; 24(17): 7669-80.
Judith A. Erkmann, Eric J. Wagner, Jian Dong, Yanping Zhang, Ulrike Kutay, and William F. Marzluff. Nuclear Import of the Stem-Loop Binding Protein and Localization during the Cell Cycle. ***Mol Biol Cell***. 2005 Jun;16(6):2960-71
Yoko Itahana, Edward T. H. Yeh, and Yanping Zhang. Nucleocytoplasmic shuttling modulates activity and ubiquitination-dependent turnover of SUMO-specific protease 2. ***Mol Cell Biol***. 2006 June; 26(12): 4675-89.
Takeharu Enomoto, Mikael S. Lindstrom, Aiwen Jin, Hengming Ke and Yanping Zhang. Essential role of the B23/NPM core domain in regulating ARF binding and B23 stability. ***J Biol Chem***. 2006 Jul 7; 281(27):18463-72.
Mu-Shui Dai, Dingding Shi, Yetao Jin, Xiao-Xin Sun, Yanping Zhang, Steven R. Grossman and Hua Lu. Regulation of the MDM2-p53 pathway by ribosomal protein L11 involves a post-ubiquitination mechanism. ***J Biol Chem***. 2006 Aug 25; 281(34):24304-13.
Mikael S. Lindstrom and Yanping Zhang. B23 and ARF: Friends or Foes? ***Cell Biochem and Biophy*** 2006;46(1):79-90.
Mikael S. Lindström, Aiwen Jin, Chad Deisenroth, and Yanping Zhang. Cancer-associated mutations in the MDM2 zinc finger domain disrupt ribosomal protein interaction and attenuate MDM2-induced p53 degradation. ***Mol Cell Biol***. 2007 Feb; 27(3):1056-68.
Mikael S. Lindström, Chad Deisenroth, and Yanping Zhang. Putting a finger on growth surveillance: Insight into MDM2 zinc finger-ribosomal protein interactions. ***Cell Cycle***, 2007 Feb 18;6(4):434-437.
Min Huang, Koji Itahana, Yanping Zhang, and Beverly Mitchell. Guanine nucleotide depletion inhibits pre-ribosomal RNA synthesis and causes nucleolar disruption. ***Leukemia Res***, 2008 Jan;32(1):131-41.
Koji Itahana, Hua Mao, Aiwen Jin, Hilary Clegg, Yoko Itahana, Mikael S. Lindström, Krishna P. Bhat, Virginia L. Godfrey, and Yanping Zhang. Targeted inactivation of Mdm2 E3 ubiquitin ligase activity in the mouse reveals novel mechanistic insights into p53 regulation. ***Cancer Cell***, 2007 Oct 12:355–366 (Cover article).
Hilary Clegg, Koji Itahana, and Yanping Zhang. Unlocking the Mdm2-p53 loop: Ubiquitination is the key. ***Cell Cycle***, 2008 Feb 1;7(3):1-6.
Koji Itahana and Yanping Zhang. Mitochondrial p32 is a critical mediator of ARF-induced apoptosis. ***Cancer Cell***, 2008, Vol 13:542–553.
Mikael S. Lindström and Yanping Zhang. Ribosomal protein S9 is a novel B23/NPM-binding protein required for normal cell proliferation. ***J Biol Chem***. 2008 Jun 6;283(23):15568-76.
Koji Itahana, Hilary Clegg, and Yanping Zhang. ARF in the mitochondria: the last frontier? ***Cell Cycle***, 2008, 7(23), 3641-3646.
Yoko Itahana, Hengming Ke, and Yanping Zhang. p53 oligomerization is essential for C-terminal lysine acetylation. ***J Biol Chem***. 2009, 284(8):5158-5164. (PMID: 19106109)
Min Huang, Koji Itahana, Yanping Zhang, and Beverly S. Mitchell. Depletion of guanine nucleotides leads to the Mdm2-dependent proteasomal degradation of nucleostemin. ***Cancer Res***., 2009, 69(7):3004-12. (PMID: 19318567)
Wei Fu, Qiuping Ma, Lei Chen, Pengfei Li, Mu Zhang, Sivapriya Ramamoorthy, Zafar Nawaz, Tsukasa Shimojima, Hengbin Wang, Yonghua Yang, Zheng Shen, Yingtao Zhang, Xiaohong Zhang, Santo V. Nicosia, Yanping Zhang, Jack W. Pledger, Jiandong Chen and Wenlong Bai. MDM2 acts downstream of p53 as an E3 ligase to promote FOXO ubiquitnation and degradation. ***J Biol Chem***. 2009, 284(21):13987-4000. (PMID: 19321440)
Da-Qiang Li, kazufumi Ohshiro, Sirigiri Divijendra Natha Reddy, Suresh B. Pakala, Mong-Hong Lee, Yanping Zhang, Suresh K. Rayala, and Rakesh Kumar. E3 ubiquitin ligase COP1 regulates the stability and functions of MTA1. ***Proc Natl Acad Sci U S A***. 2009, 106(41):17493-8. (PMID: 19805145)

Yanping Zhang and Hua Lu. Signaling to p53: ribosomal proteins find their way**.** ***Cancer Cell***, 2009. 16(5):369-77. (PMID: 19878869)

Da-Qiang Li, Sirigiri Divijendra Natha Reddy, Suresh B. Pakala, Xifeng Wu, Yanping Zhang, Suresh K. Rayala, and Rakesh Kumar. MTA1 coregulator regulates p53 stability and function. ***J Biol Chem***. 2009, 284(50):34545-52. (PMID: 19837670)

Koji Itahana and Yanping Zhang. Mitochondrial targeting signals: another barcode in p14ARF? ***Cell Cycle***, 2010, 9(5), 864-5.

Hilary V. Clegg and Yanping Zhang. Regulation of the p53 tumor suppressor pathway: the problems and promises of studying Mdm2's E3 ligase function. ***Crit Rev Eukaryot Gene Expr.*** 2010;20(1):77-86.

Chad Deisenroth and Yanping Zhang. Ribosome biogenesis surveillance: probing the Ribosomal Protein-Mdm2-p53 pathway***. Oncogene***, 2010;29(30):4253-60.

Chad Deisenroth, Aaron R Thorner, Takeharu Enomoto, Charles Perou, and Yanping Zhang. Mitochondrial Hep27 is a c-Myb target gene that inhibits Mdm2 and stabilizes p53. ***Mol Cell Biol***, 2010;30(16):3981-93.

Everardo Macias, Aiwen Jin, Chad Deisenroth, Krishna Bhat, Hua Mao, Mikael S. Lindström, and Yanping Zhang. An ARF-independent c-Myc-activated tumor suppression pathway mediated by ribosomal protein-Mdm2 interaction. ***Cancer Cell***, 2010 14;18(3):231-43.

Rebecca A. Frum and Yanping Zhang. The RP-p53-Mdm2 pathway: A new link to genetic integrity? ***Cell Cycle***, 2010, 9(22), 4427-32.

Paula L. Miliani de Marval and Yanping Zhang. The RP-Mdm2-p53 Pathway and Tumorigenesis. ***Oncotarget***, 2011 Mar 4;2(3), 234-8.

Chad Deisenroth and Yanping Zhang. The Ribosomal Protein-Mdm2-p53 pathway and energy metabolism: bridging the gap between feast and famine. ***Genes and Cancer***, 2011 Apr;2(4):392-403.

Jiehui Di, Yanping Zhang and Junnian Zheng. Reactivation of p53 by inhibiting Mdm2 E3 ligase: a novel antitumor approach. ***Current Cancer Drug Targets***, 2011 Jul 15. [Epub ahead of print].

Wenqi Pan, Sameer Issaq, Yanping Zhang. The *in vivo* Role of the RP-Mdm2-p53 Pathway in Signaling Oncogenic Stress Induced by pRb Inactivation and Ras Overexpression. ***PloS ONE,*** 2011;6(6):e21625.

Chad Deisenroth, Yoko Itahana, Laura Tollini, Aiwen Jin, Yanping Zhang. p53 inducible *Dhrs3* is an endoplasmic reticulum protein associated with lipid droplet accumulation. ***J Biol Chem***. 2011 Aug 12;286(32):28343-56.

Regulation of the MDM2-P53 pathway and tumor growth by PICT1 via nucleolar RPL11. Sasaki M, Kawahara K, Nishio M, Mimori K, Kogo R, Hamada K, Itoh B, Wang J, Komatsu Y, Yang YR, Hikasa H, Horie Y, Yamashita T, Kamijo T, Zhang Y, Zhu Y, Prives C, Nakano T, Mak TW, Sasaki T, Maehama T, Mori M, Suzuki A. ***Nature Medicine.*** 2011 Jul 31;17(8):944-51. doi: 10.1038/nm.2392

Laura A. Tollini, Rebecca A. Frum, and Yanping Zhang. The Role of the Nucleolus in the Stress Response. A chapter for "***Nucleolus***" (Editor-in-Chief M. Zouhair Atassi) Springer Publisher. 2011, (In press).