

Principal Investigator (Last, First, Middle): Zhang, Jianying

BIOGRAPHICAL SKETCH			
Provide the following information for collaborators listed on this application. Follow this format for each person.			
DO NOT EXCEED TWO PAGES			
NAME Jianying Zhang		POSITION TITLE Professor	
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Zhengzhou University Medical School, China	M.D.	1979-1984	Medicine
Xi'an Jiaotong University Medical School, China	M.P.H.	1984-1987	Epidemiology
Xia'men University, China	Ph.D.	1992-1995	Tumor Biology & Immunology
The Scripps Research Institute, California, USA	Postdoctoral Fellow	12/1995- 12/2001	Cancer Autoimmunity

A. Positions and Honors. List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.

1987–1995, Lecturer & Assistant Professor, Zhengzhou University Medical School (former Henan Medical University), Zhengzhou, Henan, China.

1995–2001, Postdoctoral Research Fellow, W.K. Autoimmune Disease Center, Department of Molecular & Experimental Medicine, The Scripps Research Institute, La Jolla, California.

2002–2008, Assistant Professor and Lab Head, Cancer Autoimmunity and Cancer Epidemiology Research Lab, Department of Biological Sciences, The University of Texas at El Paso (UTEP), El Paso, Texas.

2008--2013, Associate Professor (with tenure) and Lab Head, Cancer Autoimmunity and Cancer Epidemiology Research Lab, Department of Biological Sciences, The University of Texas at El Paso (UTEP), El Paso, Texas.

2013—Present, Professor (with tenure) and Lab Head, Cancer Autoimmunity and Cancer Epidemiology Research Lab, Department of Biological Sciences, The University of Texas at El Paso (UTEP), El Paso, Texas

1997 – Present, Member of International Epidemiology Association (IEA).

1999 – Present, Active Member of American Association for Cancer Research (AACR).

2002 – Present, Member of Sigma Xi, The Scientific Research Society.

2005 -- Present, Member of International Society for Preventive Oncology (ISPO).

2013 -- Present, Elected Member of Henry Kunkel Society (HKS).

B. Selected peer-reviewed publications, in chronological order (earliest to recent). Do not include publications submitted or in preparation. For publicly available citations, URLs or PMC submission identification numbers may accompany the full reference. **(selected from over 160 SCI publications)**

- Zhang JY**, Chan EKL, Peng XX, Tan EM. (1999). A novel RNA-binding protein is an autoantigen in human hepatocellular carcinoma. *Journal of Experimental Medicine* 189:1101-1110.
- Zhang JY**, Zhu W, Imai H, Kiyosawa K, Chan EKL, Tan EM. (2001). De-novo humoral immune responses associated with transition from chronic liver disease to hepatocellular carcinoma. *Clin. Exp. Immunol.* 125:3-9.
- Zhang JY**, Chan EKL, Lu M, Wang X, Peng XX, Tan EM. (2001). Autoimmune responses to two cancer-related RRM-KH family proteins p62 and Koc in diverse malignancies. *Clinical Immunology* 100:149-156.
- Lu M, Nakamura RM, Dent ED, **Zhang JY**, Nielson FC, Christansen J, Tan EM. (2001). Aberrant expression of fetal RNA-binding protein p62 in liver cancer and liver cirrhosis. *Am. J. Pathol.* 159:945-953.
- Zhang JY**, Wang X, Peng XX, Chan EKL. (2002). Autoimmune responses in Chinese hepatocellular carcinoma. *Journal of Clinical Immunology* 22:98-105.
- Soo Hoo L, **Zhang JY**, Chan EKL. (2002). Cloning and characterization of a novel 90kDa 'companion' auto-antigen of p62 overexpressed in cancer. *Oncogene*, 21:5006-5015.
- Zhang JY**, Chan EKL. (2002). Autoantibodies to IGF-II mRNA binding protein p62 and overexpression of p62 in human hepatocellular carcinoma. *Autoimmunity Reviews*, 1:146-153.

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8. **Zhang JY**, Casiano CA, Peng XX, Koziol JA, Chan EKL, and Tan EM. (2003). Enhancement of antibody detection in cancer using panel of recombinant tumor-associated antigens. *Cancer Epidem. Biomar.*12:136-143.
9. Koziol JA, **Zhang JY**, Casiano CA, Peng XX, Chan EKL, and Tan EM. (2003). Recursive partitioning for tumor classification using a panel of recombinant tumor-associated antigens. *Clin. Cancer Res.* 9(14):5120-5126.
10. Shi FD, **Zhang JY**, Liu D, Rearden A, Elliot M, Nachtsheim D, Daniels T, Casiano CA, Jo Heeb M, Chan EKL, Tan EM. (2005). Preferential humoral immune response in prostate cancer to cellular proteins p90 and p62 in a panel of tumor associated antigens. *The Prostate*, 63:252-258. (*Shi FD and Zhang JY were equal contributions*)
11. Daniels TR, **Zhang JY**, Gutierrez I, Elliot M, Yamada B, Jo Heeb M, Sheets SM, Wu X, and Casiano CA. (2005). Antinuclear autoantibodies in prostate cancer: immunity to LEDGF/p75, a survival protein highly expressed in prostate tumor and cleaved during apoptosis. *The Prostate*, 62:14-26.
12. Himoto T, Kuriyama S, **Zhang JY**, Chan EK, Kimura Y, Masaki T, Uchida N, Nishioka M, Tan EM. (2005). Analyses of autoantibodies against tumor-associated antigens in patients with hepatocellular carcinoma. *International Journal of Oncology*. 27:1079-85.
13. **Zhang JY***, Megliorino R, Peng XX, Tan EM, Chen Y, Chan EK. (2007). Antibody detection using tumor-associated antigen mini-array in diagnosing human hepatocellular carcinoma. *J. of Hepatology*.46:107-114. (**See Editorial Comments: Paradis V, Bedossa P. In the new area of noninvasive markers of hepatocellular carcinoma. Journal of Hepatology 2007;46:107-114**)
14. **Zhang JY***. (2007). Mini-array of tumor-associated antigens to enhance autoantibody detection for immunodiagnosis of hepatocellular carcinoma. *Autoimmunity Reviews*, 6:143-148.
15. Chen Y, Lin P, Qiu S, Peng XX, Looi K, Farquhar MG, **Zhang JY***. (2007). Autoantibodies to Ca²⁺ binding protein Calnuc is a potential marker in colon cancer. *International Journal of Oncology* 30(5):1137-1144.
16. Tan EM, **Zhang J***. (2008). Autoantibodies to tumor-associated antigens: reporters from the immune system. *Immunological Reviews* 222:328-340.
17. Looi KS, Nakayasu ES, Tan EM, Almeida IC, **Zhang JY***. (2008). Using proteomic approach to identify tumor-associated antigens as markers in hepatocellular carcinoma. *Journal of Proteome Research* 7:4004-4012.
18. Wang K, Xu X, Nie Y, Dai L, Wang P, **Zhang J***. (2009). Identification of tumor-associated antigens by using SEREX in hepatocellular carcinoma. *Cancer Lett.* 281(2):144-50.
19. **Zhang JY***, Looi KS, Tan EM. (2009). Identification of tumor-associated antigens as diagnostic and predictive biomarkers in cancer. *Methods Mol Biol.* 2009;520:1-10.
20. Chen Y, Zhou Y, Qiu S, Wang K, Liu S, Peng XX, Li J, Tan EM, **Zhang JY***. (2010). Autoantibodies to tumor-associated antigens combined with abnormal alpha-fetoprotein enhance immunodiagnosis of hepatocellular carcinoma. *Cancer Lett.* 289:32-39.
21. **Zhang JY***, Tan EM. (2010). Autoantibodies to tumor-associated antigens as diagnostic biomarkers in hepatocellular carcinoma and other solid tumors. *Expert Rev. Mol. Diagn.* 10(3):321-328.
22. Wang K, Chen Y, Liu S, Qiu S, Gao S, Huang X, Zhang J, Peng XX, W Qian, **Zhang JY***. (2009). Immunogenicity of Ral A and its tissue-specific expression in hepatocellular carcinoma. *Int J Immunopathol Pharmacol* 22(3):735-743.
23. Zhang J, Wang K, Zhang J, Liu SS, Dai L, **Zhang JY***. (2011). Using proteomic approach to identify tumor-associated proteins as biomarkers in human esophageal squamous cell carcinoma. *Journal of Proteome Research*. 10:2863-2872.
24. Shao Q, Ren P, Li Y, Peng B, Dai L, Lei N, Yao W, Zhao G, Li L, **Zhang JY***. (2012). Autoantibody against glucose-regulated protein 78 (GRP78) as a serological diagnostic biomarker in hepatocellular carcinoma. *International Journal of Oncology*.41:1061-1067.
25. Peng B, Huang X, Nakayasu ES, Petersen JR, Qiu S, Almeida IC, **Zhang JY***. (2013). Identification and characterization of alpha-enolase as an autoantigen in human liver fibrosis. *Journal of Proteome Research*, 12:1789-1796.
26. Zhu Q, Liu M, Dai L, Ying X, Ye H, Zhou Y, Han S, **Zhang JY***. (2013). Using immunoproteomics to identify tumor-associated antigens (TAAs) as biomarkers in cancer immunodiagnosis. *Autoimmun Rev.* 12(12):1123-1128.
27. Ren P, Ye H, Dai L, Liu M, Liu X, Chai Y, Shao Q, Li Y, Lei N, Peng B, Yao W, **Zhang J***. (2013). Peroxiredoxin 1 is a tumor-associated antigen in esophageal squamous cell carcinoma. *Oncol Rep.* 30(5):2297-303.
28. Dai L, Ren P, Liu M, Imai H, Tan EM, **Zhang JY***. (2014). Using immunomic approach to enhance tumor-associated autoantibody detection in diagnosis of hepatocellular carcinoma. *Clinical Immunology*, 152:127-139.
29. Dai X, Zhang W, Zhang H, Sun S, Yu H, Yan G, Kou Z, Zhao G, Du L, Jiang S, **Zhang J**, Li J, Zhou Y. (2014). Modulation of HBV Replication by MicroRNA-15b through Targeting Hepatocyte Nuclear Factor1 α . *Nucleic Acids Res.* 42(10):6578-90.
30. Zhu Q, Han SX, Zhou CY, Cai MJ, Dai LP, **Zhang JY***. (2015). Autoimmune response to PARP and BRCA1/BRCA2 in cancer. *Oncotarget*. 6(13):11575-11584.
31. Peng B, Lei N, Chai Y, Chan EK, and **Zhang JY***. (2015). CIP2A regulates cancer metabolism and CREB phosphorylation in non-small cell lung cancer. *Molecular Biosystems* 11(1):105-14.

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32. Shi JX, Qin JJ, Ye H, Wang P, Wang KJ, **Zhang JY***. (2015). Tumor-associated antigens (TAAs) or anti-TAA autoantibodies as biomarkers in the diagnosis of ovarian cancer: a systematic review with meta-analysis. *Expert Rev. Mol. Diagn.* 15(6):829-852.
33. Li Y, Francia G, **Zhang JY***. (2015). P62/IMP2 stimulates cell migration and reduces cell adhesion in breast cancer. *Oncotarget*, 6(32):32656-68.
34. Li J, Dai X, Zhang H, Zhang W, Sun S, Gao T, Kou Z, Yu H, Guo Y, Du L, Jiang S, **Zhang J**, Zhou Y. (2015). Up-regulation of human cervical cancer proto-oncogene contributes to hepatitis B virus-induced liver tumorigenesis and metastasis. *Oncotarget*, 6(30):29196-208.
35. Peng B, Chai Y, Li Y, Liu X, **Zhang J***. (2015). CIP2A overexpression induces autoimmune response and enhances JUN signaling pathway in human lung cancer. *BMC Cancer*, 15 (1) : 895-02.
36. Dai L, Peng XX, Tan EM, **Zhang JY***. (2016). Tumor-Associated Antigen CAPER α and Microvessel Density in Hepatocellular Carcinoma. *Oncotarget*. 7(13):16985-95.
37. Li J, Dai L, Lei N, Xing M, Li P, Luo C, Casiano CA, **Zhang JY***. (2016). Evaluation and characterization of anti-RalA autoantibody as a potential serum biomarker in human prostate cancer. *Oncotarget*. 7(28):43546-43556.
38. Li P, Shi JX, Dai LP, Chai YR, Zhang HF, Kankonde M, Kankonde P, Yu BF, **Zhang JY***. (2016). Serum anti-MDM2 and anti-c-Myc autoantibodies as biomarkers in the early detection of lung cancer. *Oncoimmunology*. 2016 5(5):e1138200.
39. Dai L, Tsay JC, Li J, Yie TA, Munger JS, Pass H, Rom WN, Zhang Y, Tan EM, Zhang JY*. (2016). Autoantibodies against tumor-associated antigens in the early detection of lung cancer. *Lung Cancer*. 99:172-9.
40. Sanchez TW, Zhang G, Li J, Dai L, Mirshahidi S, Wall NR, Yates C, Wilson C, Montgomery S, **Zhang JY**, Casiano CA. (2016). Immunoseroproteomic Profiling in African American Men with Prostate Cancer: Evidence for an Autoantibody Response to Glycolysis and Plasminogen-Associated Proteins. *Mol Cell Proteomics*. 15(12):3564-3580.
41. Dai L, Li J, Xing M, Sanchez TW, Casiano CA, **Zhang JY***. (2016). Using Serological Proteome Analysis to Identify Serum Anti-Nucleophosmin 1 Autoantibody as a Potential Biomarker in European-American and African-American Patients With Prostate Cancer. *Prostate*. 76(15):1375-86.
42. Sun W, Tseng TL, **Zhang J**, Qian W. (2016). Computerized breast cancer analysis system using three stage semi-supervised learning method. *Comput Methods Programs Biomed*. 135:77-88.
43. Sun W, Tseng TB, **Zhang J**, Qian W. (2017). Enhancing deep convolutional neural network scheme for breast cancer diagnosis with unlabeled data. *Comput Med Imaging Graph*. 57:4-9.
44. **Zhang J***, Zhang B, Zhang Y. (2017). Cancer Immunology and cancer Immunodiagnosis (Editorial). *Journal of Immunology Research*. 2017, Article ID: 9127382
45. Dai L, Li J, Tsay JJ, Yie TA, Munger JS, Pass H, Rom WN, Tan EM, **Zhang JY***. (2017). Identification of autoantibodies to ECH1 and HNRNPA2B1 as potential biomarkers in the early detection of lung cancer. *Oncoimmunology*. 6(5):e1310359.
46. Dai L, Qu Y, Li J, Wang X, Wang K, Wang P, Jiang BH, **Zhang J***. (2017). Serological proteome analysis approach-based identification of ENO1 as a tumor-associated antigen and its autoantibody could enhance the sensitivity of CEA and CYFRA 21-1 in the detection of non-small cell lung cancer. *Oncotarget*. 8(22):36664-36673.
47. Wen YY, Liu WT, Sun HR, Ge X, Shi ZM, Wang M, Li W, **Zhang JY**, Liu LZ, Jiang BH. (2017). IGF-1-mediated PKM2/ β -catenin/miR-152 regulatory circuit in breast cancer. *Sci Rep*. 7(1):15897.
48. Li J, Lin X, Teng Y, Qi S, Xiao D, **Zhang J**, Kang Y. (2017). A Comprehensive Evaluation of Disease Phenotype Networks for Gene Prioritization. *PLoS One*. 11(7):e0159457.
49. Dai X, Theobard R, Cheng H, Xing M, **Zhang J***. (2018). Fusion genes: A promising tool combating against cancer. *Biochim Biophys Acta--Cancer Review*, 1869(2):149-160.
50. Koziol JA, Imai H, Dai L, **Zhang JY**, Tan EM. (2018). Early detection of hepatocellular carcinoma using autoantibody profiles from a panel of tumor-associated antigens. *Cancer Immunol Immunother*, 67(5):835-841.

*Note: *Corresponding Author; Based on the Google Scholar, some of my previous publications have been cited over 6300 times; h-index was 41, and i10-index was 115, until June 2020.*
see <https://scholar.google.com/citations?hl=en&user=38NtdLEAAAJ>

Other information considered essential for evaluation of your qualifications.

Peer Reviewer for Grants:

- NIH Grants Reviewer (2009--);
- Florida Department of Health (2010--).
- Cancer Research UK (2015--);
- National Science Foundation of Italy (2015--);

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Editorial Board Member:

- Liver Cancer Review Letters. (2009 - Present);
- International Journal of Cancer Sciences. (2008 - Present);
- The Open Autoimmunity Journal. (2008 - Present);
- Life Science Journal. (2005 - Present);
- Journal of Medical Laboratory Technology. (2004 - Present).
- Clinical and Developmental Immunology (Special Issue: Systemic Autoimmune Diseases, Published in 2013, Guest Editor)
- Journal of Immunology Research (Special Issue: Cancer Immunodiagnosis and Cancer Immunotherapy, Published in 2014, Lead Guest Editor)
- Journal of Immunology Research (Special Issue: Systemic Autoimmune Diseases, Published in 2015, Guest Editor)
- Journal of Immunology Research (Special Issue: Cancer Immunodiagnosis and Cancer Immunotherapy, Published in 2016, Lead Guest Editor)

AD HOC Peer Reviewer for Scientific Journals: *British Journal of Cancer; BMC Cancer; Clinical Cancer Research; Cancer Letters; Clinical Immunology; Cancer Detection and Prevention; Cancer Research; Cancer Investigation; Clinical and Investigative Medicine; Ethnicity and Diseases; Expert Review of proteomics; Gastroenterology; Journal of Medical Laboratory Technology; Journal of Proteome Research; Journal of Thoracic Oncology; Life Sciences; Life Science Journal; Nature Cancer Reviews; Oncotargets; Marine Biotechnology; Molecular and Cellular Proteomics; Tumori, etc. (Note: at least for over 50 Journals)*