NAME	POSITION TITLE		
Kou-Juey Wu (吳國瑞)	Director, Research Center for Tumor Medical Science Chair Professor (講座教授) Grad. Institute of Cancer Biology China Medical Univ.		
INSTITUTION AND LOCATION	**DEGREE**	**YEAR(s)**	**FIELD OF STUDY**
National Taiwan University, Taipei, Taiwan	M.D.	1983	Medicine
Baylor College of Medicine, Houston	Ph.D.	1992	Cell Biology

A. Personal Statement

Dr. Wu is a physician-scientist with training in gene regulation and tumor biology. HIs research includes the molecular mechanism of epithelial-mesenchymal transition (EMT) mediated by hypoxia. Research projects will focus on the identification of HIF-1α and Twist1 target genes and their relationship to EMT and metastasis. Other aspects of biology including epigenetics, protein stability and angiogenesis related to HIF-1α and Twist1 will be explored too.

B. Positions and Honors

Positions and Employment

9/92-9/94	Resident of Clinical Pathology, Department of Pathology, The Univ. of Texas Southwestern Medical Center, Dallas, TX
10/94-8/00	Post-doctoral fellow, Department of Pathology, Columbia University College of Physicians & Surgeons, New York, NY
10/00-7/03	Attending Physician, Department of Medical Genetics, National Taiwan Univ. Hospital, Taipei, Taiwan
8/03-7/06	Associate Professor, Institute of Biochemistry, National Yang-Ming Univ., Taipei, Taiwan
8/06-12/08	Professor, Institute of Biochemistry & Mol. Biology, National Yang-Ming Univ., Taipei, Taiwan
1/09-7/14	Distinguished Professor, Institute of Biochemistry & Mol. Biology, National Yang-Ming Univ., Taipei, Taiwan
3/12-1/14	Director, Cancer Research Center, National Yang-Ming Univ., Taipei, Taiwan
2/14-7/14	Director, Genome Research Center, National Yang-Ming Univ., Taipei, Taiwan
8/14-now	Director, Research Center for Tumor Medical Science
	Chair Professor, Grad. Institute of Cancer Biology, China Medical Univ.

Awards and Other Professional Activities:

1994-1997	Fellow, Leukemia Society of America
2009	Outstanding research award of National Science Council, Taiwan
2009	4th TienTe Lee Award- Outstanding (4th TienTe Lee Award- Outstanding), TienTe Lee Biomedical Foundation
2009	7th Yu-Ziang Hsu paper award (Science and Technology), Yu-Ziang Hsu Foundation
2010	2010 Hou Chin Tui Award: Basic science-Biology, Hou Chin Tui Foundation
2012	Outstanding research award of National Science Council, Taiwan
2015	Outstanding research award of Ministry of Science and Technology, Taiwan

C. Selected peer-reviewed publications

1. Wang, J.Q., and **Wu, K.J.** (2015) Epigenetic regulation of epithelial-mesenchymal transition by hypoxia in cancer: targets and therapy. Current Pharmaceutical Design, 21, 1272-1278 (Review article).
2. Chen, H.F., Huang, C.H., Liu, C.J., Hung, J.J., Hsu, C.C., Teng, S.C., and **Wu, K.J.** (2014) Twist1 induces endothelial differentiation of tumor cells through the Jagged1-KLF4 axis. Nature Communications, 5, 4697.
3. Tsai, Y.P., Chen, H.F., Chen, S.Y., W.C. Cheng, H.W. Wang, Z.J. Shen, Teng, S.C., Chuan, H., and **Wu, K.J.** (2014) TET1 regulates hypoxia-induced epithelial-mesenchymal transition by acting as a co-activator. Genome Biology, 15, 513.
4. Tsai, Y.P. and **Wu, K.J.** (2014) Epigenetic regulation of hypoxia-responsive gene expression: focusing on chromatin and DNA modifications. Int. J. Cancer, 134, 249-256. (Review article)
5. Wang, J.Q, Chen, J.H., Chen, Y.C., Chen, M.Y., Hsieh, C.Y., Teng, S.C., and **Wu, K.J.** (2013) Interaction between NBS1 and the mTOR/Rictor/SIN1 complex through specific domains. PLoS One, 8, e65586.
6. Wu, C.Y., Tsai, Y.P., Wu, M.Z., Teng, S.C., and **Wu, K.J.** (2012) Epigenetic reprogramming and post-transcriptional regulation during the epithelial-mesenchymal transition. Trends in Genetics, 28, 454-463. (Review article)
7. Tsai, Y.P., and **Wu, K.J.** (2012) Hypoxia-regulated target genes implicated in cancer metastasis. J. Biomed. Sci. 19, 102. (Review article)
8. Yang, W.H., Lan, H.Y., Huang, C.H., Tai, S.K., Tzeng, C.H., Kao, S.Y., **Wu, K.J.**, Hung, M.C., and Yang, M.H. (2012) Rac1 activation mediates Twist1-induced cancer cell migration. Nature Cell Biology, 14, 366-374.
9. Wu, M.Z., Tsai, Y.P., Yang, M.H., Huang, C.H., Chang, S.Y., Chang, C.C., Teng, S.C., and **Wu, K.J.** (2011) Interplay between HDAC3 and WDR5 is essential for hypoxia-induced epithelial-mesenchymal transition. Molecular Cell, 43, 811-822.
10. **Wu, K.J.** and Yang, M.H. (2011) Epithelial-mesenchymal transition and cancer stemness: the Twist1-Bmi1 connection. Bioscience Reports, 31, 449-455. (Review article)
11. Yang, M.H., Hsu, D.S., Wang, H.W., Yang, W.H., Kao, S.Y., Tzeng, C.H., Tai, S.K., Chang, S.Y., O.K. Lee, and **Wu, K.J.** (2010) Bmi1 is essential in Twist1-induced epithelial-mesenchymal transition. (co-corresponding author) Nature Cell Biology, 12, 982-992.
12. Huang, C.H., Chen, P.M., Lu, T.C., Kung, W.M., Chiou, T.H., Yang, M.H., Kao, J.Y., and **Wu, K.J.** (2010) Purified recombinant TAT-HOXB4 expands $CD34^+$ Umbilical Cord Blood and Peripheral Blood Progenitor Cells *ex vivo.* Tissue Engineering, Part C Methods, 16, 487-496.
13. Hung, J.J., Yang, M.H., Hsu, H.S., Hsu, W.H., Liu, J.S. and **Wu, K.J.** (2009) Prognostic significance of hypoxia-inducible factor-1alpha, TWIST1, and Snail expression in resectable non-small cell lung cancer. Thorax, 64, 1082-1089.
14. Tsai, Y.P., Yang, M.H., Huang, C.H., Chang, S.Y., Liu, C.J., Chen, P.M., Teng, S.C., and **Wu, K.J.** (2009) Interaction between HSP60 and β-catenin promotes metastasis. Carcinogenesis, 30, 1049-1057.
15. Wu, H.T., Su, Y.N., Hung, C.C., Hsieh, W.S., and **Wu, K.J.** (2009) Interaction between PHOX2B and CREBBP mediates synergistic activation: mechanistic implications of PHOX2B mutants. Human Mutation, 30, 655-660.
16. Tsai, Y.P., Teng, S.C., and **Wu, K.J.** (2008) Direct regulation of HSP60 expression by c-MYC induces transformation. FEBS Letters, 582, 4083-4088.
17. Yang, M.H, and **Wu, K.J.** (2008) TWIST activation by hypoxia inducible factor-1 (HIF-1): implications in metastasis and development. Cell Cycle, 7, 2090-2096 (Review article).
18. Yang, M.H., Wu, M.Z., Chiou, S.H., Chang, S.Y., Chen, P.M., Liu, C.J., Teng, S.C., and **Wu, K.J.** (2008) Direct regulation of TWIST by HIF-1alpha promotes metastasis. Nature Cell Biology, 10, 295-305.

19. Chen, Y.C., Chiang, H.Y., Yang, M.H., Chang, S.Y., Teng, S.C., Vanhaesebroeck, B. and **Wu, K.J.** (2008) Activation of phosphoinositide 3-kinase by the NBS1 DNA repair protein. J. Mol. Med. 86, 401-412.

20. Yang, M.H., Chang, S.Y., Chiou, S.H., Liu, C.J., Chi, C.W., Chen, P.M., Teng, S.C., and **Wu, K.J.** (2007) Overexpression of NBS1 induces epithelial-mesenchymal transition and co-expression of NBS1 and Snail predicts metastasis of head and neck cancer. Oncogene, 26, 1459-1467.

21. Yang, M.H., Chiang,W.C., Chou, T.Y., Chang, S.Y., Chen, P.M., Teng, S.C., and **Wu, K.J.** (2006) Increased NBS1 Expression Is a Prognostic Marker of Aggressive Head And Neck Cancer And Overexpression of NBS1 Contributes to Transformation. Clin. Cancer Res., 12, 507-515.

22. Chen, Y.C., Su, Y.N., Chou, P.C., Chiang, W.C., Chang, M.C., Wang, L.S., Teng, S.C., and **Wu, K.J.** (2005) Overexpression of NBS1 contributes to transformation through the activation of phosphatidylinositol 3-kinase/Akt. J. Biol. Chem. 280, 32505-32511.

23. Teng, S.C., Chen, Y.Y., Su, Y.N., Chou, P.C., Chiang, Y.C., Tseng, S.F. and **Wu, K.J.** (2004) Direct activation of *HSP90A* transcription by c-MYC contributes to c-MYC mediated transformation. J. Biol. Chem. 279, 14649-14655.

24. Chiang, Y.C., Teng, S.C., Su, Y.N., Hsieh, F.C. and **Wu, K.J.** (2003) c-MYC directly regulates the transcription of *NBS1* gene involved in DNA double-strand break repair. J.Biol.Chem. 278, 19286-19291.

25. **Wu, K.J.,** Grandori, C., Amacker, M., Simon-Vermot, N., Polack, A., Lingner, J. and Dalla-Favera, R. (1999). Direct activation of *TERT* transcription by c-MYC. Nature Genet. 21, 220-224.

26. **Wu, K.J**., Polack,A., and Dalla-Favera,R. (1999). Coordinated regulation of iron controlling genes, H-ferritin and IRP2, by c-MYC. Science 283, 676-679.