CURRICULUM VITAE

Liang-Yi Hung, PhD

I. Biographical

Name: Liang-Yi Hung

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II. Education

Ph.D. (1995/8 ~ 2000/10) Graduate Institute of Life Sciences, Academia Sinica and National Defense Medical Center, Taipei, Taiwan, Republic of China

III. Experience

Associate Professor (2012/8 ~ present)
Institute of Bioinformatics and Biosignal Transduction, College of Bioscience and Biotechnology, and Center for Gene Regulation and Signal Transduction Research, National Cheng Kung University, Tainan 70101, Taiwan

Assistant Professor (2010/8 ~ 2012/7)
Institute of Bioinformatics and Biosignal Transduction, College of Bioscience and Biotechnology, and Center for Gene Regulation and Signal Transduction Research, National Cheng Kung University, Tainan 70101, Taiwan

Assistant Professor (2009/2 ~ 2010/7)
Institute of Biosignal Transduction, College of Bioscience and Biotechnology, and Center for Gene Regulation and Signal Transduction Research, National Cheng Kung University, Tainan 70101, Taiwan

Research Assistant Professor (2005/2 ~ 2009/1)
Department of Pharmacology, College of Medicine, and Center for Gene Regulation and Signal Transduction Research, National Cheng Kung University, Tainan 70101, Taiwan

Post-doctoral fellow (2000/11 ~ 2005/1)

Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan, Republic of China

IV. Major interests

(1) To study the functional role of CPAP in the TNFα-induced NFκB mediated genes activation in HBV-associated HCC

(2) To study the molecular mechanism of overexpressed Aurora-A in tumor cells

(3) To study the target therapy in Aurora-A-overexpressing cancers

(4) To investigate the potential role and the transcription regulation of Aurora-C in tumorigenesis

VI. Publications (From 2011~now)

1. Jen-Hui Tsou, Kung-Chao Chang, Pey-Yi Chang-Liao, Shu-Ting Yang, Chung-Ta Lee, Ya-Ping Chen, Yi-Chao Lee, Bo-Wen Lin, Jenq-Chang Lee, Meng-Ru Shen, Chin-Kai Chuang, Wen-Chang Chang, Ju-Ming Wang* and **Liang-Yi Hung***. Aberrantly expressed AURKC enhances the transformation and tumorigenicity of epithelial cells. **Journal of Pathology**. **2011**; 225: 243-254. SCI.

2. Wu S-R, Li C-F[#], **Hung L-Y[#]**, Huang A-M, Tseng J-T, Tsou J-H and Wang J-M. CCAAT/enhancer binding protein delta mediates TNFalpha-induced aurora kinase C transcription and promotes genomic instability. **Journal of Biological Chemistry 2011**; 286(33): 28662-28670. (# equal contribution) SCI.

3. Hsu C-C, Lee Y-C, Yeh S-H, Chen C-H, Wu C-C, Wang T-Y, Chen Y-N, **Hung L-Y**, Liu Y-W, Chen H-K, Hsiao Y-T, Wang W-S, Tsou J-H, Tsou Y-H, Wu M-H, Chang W-C, Lin D-Y. The 58-kDa microspherule protein (MSP58) is a novel brahma-related gene 1 (BRG1)-associated protein that modulate the p53-p21 senescence pathway. **Journal of Biological Chemistry 2012**; 287(27): 22533-22548. SCI.

4. Ya-Ping Chen, **Liang-Yi Hung**, Yan-Shen Shan, and Kung-Chao Chang. ALK-positive large B-cell lymphoma presenting with jejunal intussusception. **European Journal of Haematology 2013**; 90(3):261.

5. Shu-Ting Yang, Chia-Jui Yen, Chein-Hsien Lai, Yih-Jyh Lin, Kung-Chao Chang, Jenq-Chang Lee, Yao-Wen Liu, Pey-Yi Chang-Liao, Lu-Shin Hsu, Wen-Chang Chang, Wen-Chun Hung, Tang K. Tang, Yi-Wen Liu and **Liang-Yi Hung[*]**. SUMOylated CPAP is required for IKK-mediated NF-κB activation and enhances HBx-induced NF-κB signaling in HCC. **Journal of Hepatology 2013;** 58(6): 1157-1164.

6. Ya-Ping Chen, Hui-Ju Lin, Jiann-Shiuh Chen, Ming-Ying Tsai, Hsing-Pang Hsieh, Jang-Yang Chang, Nai-Feng Chen, Kung-Chao Chang, Wen-Tsung Huang, Wu-Chou Su, Shu-Ting Yang, Wen-Chang Chang, **Liang-Yi Hung[*]**, and Tsai-Yun Chen[*]. CDKN1A-mediated Responsiveness of *MLL-AF4*-positive Acute Lymphoblastic Leukemia to Aurora Kinase-A Inhibitors. **International Journal of Cancer. 2014 Aug 1;** 135(3): 751-762.

7. Kung-Chao Chang, Yu-Chu Wang[#], **Liang-Yi Hung[#]**, Wan-Ting Huang[#], Jen-Hui Tsou, Jones Dan, Hsiang-Lin Song, Yu-Min Yeh, Lin-Yuan Kao and L. Jeffrey Medeiros. Monoclonality and Cytogenetic Abnormalities in Hyaline Vascular Castleman Disease. **Modern Pathology 2014 Jun;** 27(6): 823-831. **(DOI: 10.1038/modpathol.2013.202)** (# equal contribution)

8. Yu-Cheng Lee, Jenny Que, Yu-Chia Chen, Jen-Tai Lin, Yih-Cherng Liou, Po-Chi Liao, Yu-Peng Liu, Kuen-Haur Lee, Li-Ching Lin, Michael Hsiao, **Liang-Yi Hung**, Chi-Ying Huang and Pei-Jung Lu. Pin1 acts as a negative regulator of the G2/M transition through an interplay with the Aurora A/hBora complex. **Journal of Cell Science 2013 Nov 1;** 126 (Pt21): 4862-4872.

9. Kung-Chao Chang, Wei-Chao Chang, Yao Chang, **Liang-Yi Hung**, Chien-Hsien Lai, Yu-Min Yeh, Tu-Wei Chou, and Chung-Hsuan Chen. Ran GTPase-Activating Protein 1 Is a Therapeutic Target in Diffuse Large B-Cell Lymphoma. **PLoS One 2013** Nov 6; 8(11): e79863.

10. Ding-Yen Lin, Chi-Chen Huang, Ya-Ting Hsieh, Hsin-Chuan Lin, Ping-Chieh Pao, Jen-Hui Tsou, Chien-Ying Lai, **Liang-Yi Hung**, Ju-Ming Wang, Wen-Chang Chang and Yi-Chao Lee*. Analysis of the interaction between Zinc finger protein 179 (Znf179) and promyelocytic leukemia zinc finger (Plzf). **Journal of Biomedical Science 2013** Dec 20; 20:98. **(DOI:10.1186/1423-0127-20-98)**

11. Chen Chang, **Liang-Yi Hung**, Tung Tran Thanh, Chein-Hsien Lai, and Kung-Chao Chang*. Congenital Peribronchial Myofibroblastic Tumor with Features of Maturation in the Older Infant: Report of Two Cases with Literature Review. **Histopathology 2014** Apr; 64(5): 755-777.

12. Bo-Wen Lin[#], Yu-Chu Wang[#], Pey-Yi Chang-Liao[#], Ya-Ju Lin, Shu-Ting Yang, Jen-Hui Tsou, Kung-Chao Chang, Yao-Wen Liu, Joseph T. Tseng, Chung-Ta Lee, Jenq-Chang Lee[*] and **Liang-Yi Hung[*].** Overexpression of Aurora-C impaired the spindle checkpoint by promoting the degradation of Aurora-B. **Cell Death and Disease 2014** Mar 6; 5:e1106.

13. Pao-Lin Kuo, Yung-Ling Huang, Christine Chin-Jung Hsieh, Jenq-Chang Lee, Bo-Wen Lin and **Liang-Yi Hung[*]**. STK31 is a cell-cycle regulated protein that contributes to the tumorigenicity of epithelial cancer cells. **PLoS ONE 2014** Mar 25; 9(3):e93303.

14. Ying-Ren Chen, **Liang-Yi Hung,** Kung-Chao Chang. Mucosa-associated lymphoid tissue-type lymphoma presenting as a urethral caruncle with urinary bladder involvement. **Int J Urol. 2014 Oct;** 21(10):1073-4.

15. En-Ju Chou, **Liang-Yi Hung,** Chieh-Ju C Tang, Wen-Bin Hsu, Hsin-Yi Wu, Pao-Chi Liao, Tang K Tang**.** Phosphorylation of CPAP by Aurora-A Maintains Spindle Pole Integrity during Mitosis. **Cell Rep. 2016 Mar 29**; 14(12):2975-87.

16. Yi-Han Dai, **Liang-Yi Hung,** Rho-Yu Chen, Chien-Hsien Lai, Kung-Chao Chang. ON 01910.Na inhibits growth of diffuse large B-cell lymphoma by cytoplasmic sequestration of sumoylated C-MYB/TRAF6 complex. **Transl Res. 2016 Sep;** 175:129-143.e13.

17. Kung-Chao Chang, Jen-Chieh Lee[#], Yu-Chu Wang[#], **Liang-Yi Hung[#],** Yenlin Huang, Wan-Ting Huang, Ren-Ching Wang, Tse-Ching Chen, Yi-Shan Tsai, L Jeffrey Medeiros. Polyclonality in Sclerosing Angiomatoid Nodular Transformation of the Spleen. **Am J Surg Pathol. 2016 Aug 11. [Epub ahead of print]** (# equal contribution)

Clinical role of epigenetic silencing of *miR-137* in early colorectal carcinogenesis

Yu-Chuan Huang[1,2], Chung-Ta Lee[5], Jenq-Chang Lee[7], Yao-Wen Liu[8], Ying-Jen Chen[3], Joseph T. Tseng[1,2], Jui-Wen Kang[6], Bor-Shyang Sheu[6], Bo-Wen Lin[7] and **Liang-Yi Hung**[1,2,4,*]

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MicorRNA-137 is silenced in human colorectal cancer tissues and colon polyps. Our study showed that the decreased expression of *miR-137* is significantly different in various types of polyp which maintain different potentials to lead to CRC development. The expression of *miR-137* gradually decreases during the process of colorectal carcinogenesis. Receiver operating characteristic curve (ROC) analysis indicates that the loss of *miR-137* expression in colon polyps can serve as a biomarker to predict the predisposition of colorectal carcinogenesis. By cell model and xenograft animal model, the enforced expression of *miR-137* in colorectal cancer cells can inhibit cell proliferation and tumor formation, induce G2/M arrest, and lead to apoptosis. The expression pattern of *miR-137* and Aurora-A or COX-2 is negatively correlated in human colorectal cancer tissues and colon polyps. Those effects induced by overexpressed *miR-137* can be rescued by the overexpression of Aurora-A. In summary, our study suggests that the loss of *miR-137* expression in colon polyps can serve as a biomarker to predict the tendency toward to CRC formation through the impaired inhibitory effect of Aurora-A. The investigation of the regulatory mechanism of miR-137-mediated Aurora-A inhibition may shed new light on the early prognosis of cancer therapy for CRC in the future.