Chi-Ying F. Huang



學歷：

l          Ph.D. in Biochemistry and Biophysics (Iowa State University) (1988-1994) (Laboratory of Donald J. Graves)

l          Research Assistant in Institute of Botany (Academia Sinica) (1987-1988) (Laboratory of Li-Chun Huang)

l          B.S. in Chemistry (Tunghai University) (1981-1985)

經歷：

l          Professor in Institute of Clinical Medicine, National Yang-Ming University (陽明大學臨醫所) (2007-present)

l          Associate Investigator in Institute of Cancer Research, National Health Research Institutes (國家衛生研究院癌症研究所) (2005-2007)

l          Associate Investigator in Division of Molecular and Genomic Medicine, NHRI (國家衛生研究院分子與基因醫學組) (2003-2005)

l          Adjunct Associate Professor in Department of Computer Science and Information Engineer, National Taiwan University (台灣大學資訊工程研究所) (2003-present)

l          Adjunct Associate Professor in Institute of Biotechnology in Medicine and Institute of Bio-Pharmaceutical Sciences, National Yang-Ming University (陽明大學生物醫學技術研究所(2003-present)及生物藥學研究所(2006-present)

l          Adjunct Associate Professor in Graduate Institute of Life Sciences, National Defense Medical Center (國防大學生命科學研究所) (1999-present)

l          Assistant Investigator in Division of Molecular and Genomic Medicine (National Health Research Institutes) (1998-2003)

l          Postdoctoral Fellow (Stanford University) (1994-1998) (Laboratory of James E. Ferrell, Jr.)



研究方向：

l          Elucidation the function of oncogenic Aurora-A protein kinase mediated signaling transduction.

l          Combination of systems biology and a broad spectrum of experimental approaches to identify and characterize the function of novel oncogenes involved in the hepatocellular carcinoma and lung cancer.

l          Characterization of a Chinese herbal medicine (ZC008, a single plant) in the treatment of liver fibrosis by using functional genomics approaches.

執行計畫：

1.      Role of CRMP-1 in controlling cytokinesis (探討CRMP-1在細胞質分裂時期的調控) (2005-2008)

2.      Functional genomics analysis elucidates the signaling networks of hepatocellular carcinoma (利用基因體學來探討肝癌訊息傳遞網絡) (2006-2009)

3.      POINT to the midbody: the study of the protein-protein interaction networks in midbody (中心顆粒體之蛋白質交互作用網路) (2006-2009)



發表之論文：

  1.  Ann-Ping Tsou#, Chu-Wen Yang#,**Chi-Ying F. Huang**#, Chang-Tze R. Yu, Yuan-Chii G. Lee, Cha-Wei Chang, Bo-Rue Chen, Yu-Fang Chung, Ming-Ji Fann, Chin-Wen Chi, Jen-HweyChiu, and Chen-Kung Chou. Identification of a novel cell cycle regulated gene, HURP, overexpressed in human hepatocellular carcinoma. *Oncogene*22, 298-307 (2003) (#contributed equally).

  2.     Jin-Yuan Shih, Yuan-Chii G. Lee, Shuenn-Chen Yang, Tse-Ming Hong, **Chi-Ying F. Huang**, and Pan-Chyr Yang. Collapsin Response Mediator Protein-1: a novel invasion-suppressor gene. *Clinical and Experimental Metastasis* 20, 69-74 (2003).

  3.     Chang-Han Chen, Shen-Long Howng, Tai-Shan Cheng, Meng-Hui Chou, **Chi-Ying F. Huang**, and Yi-Ren Hong. Molecular characterization of human ninein protein: Two distinctsubdomains required for centrosomal targeting and regulating signals in cell cycle. *Biochem. Biophys. Res. Comm.*308*,* 975-983 (2003).

4*.*     Wei-Li Wang, Sheau-Farn Yeh, Yuan-I Chang, Shun-Fang Hsiao, Wei-Nan Lian, Chi-Hung Lin, **Chi-Ying F. Huang**, Wey-Jinq Lin. PICK1, an Anchoring Protein That Specifically Targets Protein Kinase Ca to Mitochondria Selectively upon Serum Stimulation in NIH 3T3 Cells. *J. Biol. Chem.* 278, 37705-37712(2003).

  5.     An-Chi Tien,Ming-Hong Lin, Li-Jen Su, Yi-Ren Hong, Tai-Shan Cheng, Yuan-Chii G. Lee, Wey-Jinq Lin, Ivan Still, and **Chi-Ying F. Huang\***. Identification of the substrates and interaction proteins of Aurora kinases from a protein-protein interaction model. *Molecular and Cellular Proteomics* 3, 93-104 (2004)*.*

  6.     Fu-Hsiung Chang, Chien-Hsin Lee, Ming-Ta Chen, Chun-Chen Kuo, Yi-Lin Chiang, **Chi-Ying F. Huang**, and Steve Roffler.Surfection: a new platform for transfected cell arrays. *Nucleic Acids Res.* 32, e33 (2004).

  7.     Jung-Mao Hsu, Yuan-Chii G. Lee, Chang-Tze R. Yu, and **Chi-Ying F. Huang\***.Fbx7 functions in the SCF complex regulating Cdk1-cyclin B-phosphorylated HURP proteolysis byproline-rich region. *J. Biol. Chem.* 279, 32592-32602 (2004).

  8.     Wan-Shu Lee, Chiung-Yueh Hsu, Pei-Ling Wang, **Chi-Ying F. Huang,**Chia-Hua Chang, and Chiun-Jye Yuan. Identification and characterization of the nuclear import and export signals of the mammalian Ste20-like protein kinase 3. *FEBS Letters* 13, 41-45 (2004).

  9.     Cheng-Yan Kao, D. Frank Hsu, Han-Yu Chuang, **Chi-Ying F. Huang**, and Kuang-Chi Chen. To combine or not to combine. *International Chinese Statistical Association* Bulletin, 37-39 (2004).

10.     Tao-Wei Huang, An-Chi Tien, Wen-Shien Huang, Yuan-Chii G. Lee, Chin-Lin Peng, Huei-Hun Tseng, Cheng-Yan Kao, and **Chi-Ying F. Huang\***. POINT: a database for the prediction of protein-protein interactions based on the orthologous interactome. *Bioinformatics* 20, 3273-3276 (2004).

11.     Jiunn-Chyi Wu, Tzong-Yueh Chen, Chang-Tze R. Yu, Si-Jie Tsai, Jung-Mao Hsu, Ming-Jer Tang, Chen-Kung Chou, Wey-Jinq Lin, Chiun-Jye Yuan and **Chi-Ying F. Huang\***. Identification of V23RalA-Ser194 as a critical mediator for Aurora-A-induced cellular motility and transformation by small pool expression screening. *J. Biol. Chem.* 280, 9013-9022 (2005).

12.     Chi-Chih Cheng, Shu-Mei Yang, **Chi-Ying F. Huang**, Jung-Chou Chen, Wei-Mao Chang, and Shih-Lan Hsu. Molecular mechanisms of ginsenoside Rh2-mediated G1 growth arrest and apoptosis in human lung adenocarcinoma A549 cells. *Cancer Chemotherapy and Pharmacology* 55, 531-40 (2005).

13.     Te-Jung Lu, **Chi-Ying F. Huang**, Chiun-Jye Yuan, Yuan-Chii Lee, Tzeng-Horng Leu, Wen-Chang Chang, Te-Ling Lu, Wen-Yih Jeng, Ming-Derg Lai. Zinc ion acts as a cofactor for serine/threonine kinase MST3 and has a distinct role in autophosphorylation of MST3. *J. Inorg. Biochem.* 99, 1306-1313 (2005).

14.     Chang-Tze Ricky Yu, Jung-Mao Hsu, Yuan-Chii Gladys Lee, Ann-Ping Tsou, Chen-Kung Chou and **Chi-Ying F. Huang**. Phosphorylation and stabilization of HURP by Aurora-A: implication of HURP as a transforming target of Aurora-A. *Mol. Cell. Biol.* 25, 5789-5800 (2005).

15.     Kuang-Chi Chen, Tse-Yi Wang, Huei-Hun Tseng, **Chi-Ying F. Huang** and Cheng-Yan Kao. A stochastic differential equation model for quantifying transcriptional regulatory network inSaccharomyces cerevisiae*. Bioinformatics* 21, 2883-2890 (2005).

16.     Kuo-Ting Chang, **Chi-Ying F. Huang**, Chun-Ming Tsai, Chao-Hua Chiu and Ying-Yung Lok. Role of IL-6 in Neuroendocrine Differentiation and Chemosensitivity of Non-Small Cell Lung Cancer. *American Journal of Physiology: Lung Cellular and Molecular Physiology* 289, 438-445 (2005).

17.     Kuo-Ting Chang, Chun-Ming Tsai, Yih-Chy Chiou, Chao-Hua Chiu, King-Song Jeng and **Chi-Ying F. Huang**. IL-6 induces neuroendocrine de-differentiation and cell proliferation in non-small cell lung cancer cells. *American Journal of Physiology: Lung Cellular and Molecular Physiology* 289, 446-453 (2005).

18.     Yong-Shiang Lin, Li-Jen Su, Chang-Tze Ricky Yu, Fen-Hwa Wong, Hsu-Hua Yeh, Su-Liang Chen, Jiunn-Chyi Wu, Wey-Jinq Lin, Yow-Ling Shiue, Hsiao- Sheng Liu, Shih-Lan Hsu,Jin-Mei Lai and **Chi-Ying F. Huang**. Gene Expression Profiles of the Aurora Family Kinases**.***Gene Expression* 13, 15-26 (2006).

19.     Shih-Lan Hsu, Chang-Tze Ricky Yu, Sui-Chu Yin, Ming-Jer Tang, An-Chi Tien, Yi-Mi Wu, and **Chi-Ying F. Huang**. Caspase 3, periodically expressed and activated at G2/M transition, is required for nocodazole-induced mitotic checkpoint. *Apoptosis* 11, 765-771 (2006).

20.     Cheng-Ming Lee, Shih-Yin Chen, Yuan-Chii G. Lee,**Chi-Ying F. Huang** and Yi-Ming Arthur Chen. Benzo[a]pyrene and Glycine N-methyltransferse Interactions: Gene Expression Profiles of the Liver Detoxification Pathway. *Toxicology and Applied Pharmacology* 214, 126-135 (2006).

21.     Li-Jen Su, Shih-Lan Hsu, Jyh-Shyue Yang, Huei-Hun Tseng, Shiu-Feng Huang, and **Chi-Ying F. Huang**. Global gene expression profiling of dimethylnitrosamine induced liver fibrosis: from pathological and biochemical data to microarray analysis. *Gene Expression* 13, 107-132 (2006).

22.     He-Yen Chou, Shen-Long Howng, Tai-Shan Cheng, Yun-Ling Hsiao, Ann-Shung Lieu**,**Joon-Khim Loh,Shiuh-Lin Hwang,Ching-Chih Lin, Ching-Mei Hsu, Chihuei Wang, Chu-I Lee, Pei-Jung Lu, Chen-Kung Chou, **Chi-Ying F. Huang** and Yi-Ren Hong. GSKIP is homologous to the Axin GSK3beta interaction domain and functions as a negative regulator of GSK3beta. *Biochemistry* 45, 11379-11389 (2006).

23.     Ya-Shih Tseng, Ching-Cherng Tzeng, **Chi-Ying F. Huang**, Ping-Hong Chen, Allen Wen-Hsiang Chiu, Pei-Yin Hsu, Guan-Cheng Huang, Yu-Chun Wang, Hsiao-Sheng Liu. Aurora-Aoverexpression associates with Ha-ras codon-12 mutation and blackfoot disease endemic area in bladder cancer. *Cancer Letters* 241, 93-101 (2006).

24.     Te-Jung Lu, Wen-Yang Lai, **Chi-Ying F. Huang**, Wan-Jung Hsieh, Jau-Song Yu, Ya-Ju Hsieh, Wen-Tsan Chang, Tzeng-Horng Leu, Wen-Chang Chang, Woei-Jer Chuang, Ming-JerTang, Tzong-Yueh Chen, Te-Ling Lu, Ming-Derg Lai. Inhibition of cell migration by autophosphorylated mammalian sterile 20-like kinase 3 (MST3) involves paxillin and protein tyrosine phosphatase (PTP)-PEST. *J. Biol. Chem.* 281, 38405-38417 (2006).

25.     Yuan-Chii Gladys Lee, Yu-Chyi Hwang, Kuang-Chi Chen, Yong-Shiang Lin, Dah-Yeou Huang, Tao-Wei Huang, Cheng-Yan Kao, Han-Chung Wu, Chin-Tarng Lin, **Chi-Ying F. Huang**. Effect of Epstein-Barr Virus Infection on Global Gene Expression in Nasopharyngeal Carcinoma. *Functional and Integrative Genomics* 7, 79-93 (2007).

26.     Kuan-Yu Chen, Yuan-Chii Gladys Lee, Jin-Mei Lai, Yih-Leong Chang, Yung-Chie Lee, Chong-Jen Yu, **Chi-Ying F. Huang**\*, Pan-Chyr Yang\*. Identification of Trophinin as an Enhancer for Cell Invasion and a Prognostic Factor for Early Stage Lung Cancer.*European Journal of Cancer* 43, 782-90 (2007). (\*corresponding author)

27.     Tai-Shan Cheng, Yun-Ling Hsiao, Ching-Chih Lin, Ching-Mei Hsu, Mau-Sun Chang, Chu-I Lee, Ricky Chang-Tze Yu, **Chi-Ying F. Huang**, Shen-Long Howng, and Yi-Ren Hong.hNinein is required for targeting spindle-associated protein Astrin to the centrosome during the S and G2 phases. *Exp. Cell. Res.* 313, 1710-1721 (2007).

28.     Chun-Nan Hsu, Jin-Mei Lai, Chia-Hung Liu, Huei-Hun Tseng, Chih-Yun Lin, Kuan-Ting Lin, Hsu-Hua Yeh, Ting-Yi Sung, Wen-Lian Hsu, Li-Jen Su, Sheng-An Lee, Chan-Han Chen, Gen-Cher Lee, Der-Tsai Lee, Yow-Ling Shiue, Chang-Wei Yeh, Chao-Hui Chang, Cheng-Yan Kao, **Chi-Ying F. Huang**. Detection of the inferred interaction network in hepatocellular carcinoma from EHCO (Encyclopedia of Hepatocellular Carcinoma genes Online). BMC Bioinformatics 8, 66 (2007).

29.     Chang-Han Chen, Pei-Jung Lu, Yu-Chia Chen, Shu-Ling Fu, Kou-Juey Wu, Ann-Ping Tsou, Yuan-Chii Gladys Lee, Tsu-Chun Emma Lin, Shih-Lan Hsu, Wey-Jinq Lin, **Chi-Ying F. Huang\*** and Chen-Kung Chou\*.FLJ10540-elicited cell transformation is through the activation of PI3-kinase/AKT pathway. *Oncogene* 26, 4272-4283 (2007) (\*corresponding author)

30.     Li-Jen Su, Ching-Wei Chang, Yu-Chung Wu, Kuang-Chi Chen, Chien-Ju Lin, Shu-Ching Liang, Chi-Hung Lin, Jacqueline Whang-Peng, Shih-Lan Hsu, Chen-Hsin Chen and **Chi-Ying F. Huang**.Selection of DDX5 as a Novel Internal Control for Q-RT-PCR from microarray data: Using a Block Bootstrap Re-sampling scheme. BMC Genomics 8(1),140 (2007).

31.     Chueh-Chuan Yen, Shu-Ching Liang, Yiin-Jeng Jong, Yann-Jang Chen, Chi-Hung Lin, Yuh-Min Chen, Yu-Chung Wu, Wu-Chou Su, **Chi-Ying F. Huang**, Szu-Wen Tseng and Jacqueline Whang-Peng. Chromosomal aberrations of malignant pleural effusions of lung adenocarcinoma: Different cytogenetic changes are correlated with genders and smoking habits. Lung Cancer (2007) (in press).

32.     Wei-Li Wang, Sheau-Farn Yeh, Eagle Yi-Kung Huang, Yu-Ling Lu, Chun-Fa Wang, **Chi-Ying F. Huang** and Wey-Jinq Lin. Mitochondrial anchoring of PKCa by PICK1 confers resistance to etoposide-induced apoptosis. Apoptosis (2007) (in press)



 獲獎:

* Leukemia Society of America Career Development Award (1998-1999)
* Leukemia Society of America Fellowship (1996-1998)
* Keystone Symposium Travel Award (1997)
* Stanford Dean’s Postdoctoral Fellowship (1994-1995)
* Graduate Research Excellence Award (Iowa State University) (1994)
* The Honor Society of Agriculture (Gamma Sigma Delta) (1989)