

VII. CURRICULUM VITAE

1. NAME English :Tzu-Ching Chang Chinese : 張孜菁	TEL : 04-22052121 ext7710 e-mail : ctching9@gmail.com
2. CURRENT POSITION TITLE (現職) Assistant Professor	INSTITUTION and DEPARTMENT (單位) Graduate Institute of Clinical Medical Science, China Medical University

3. RESEARCH EXPERIENCE (經歷)

Institution and Location	Position Title	Field of Study
Institute of Cellular and System Medicine, National Health Research Institutes, Zhunan Town, Taiwan	Postdoctoral Fellow	Study of proliferation signaling in cancer and stem cells

4. EDUCATION (學位)

Institution and Location	Degree (if applicable)	Field of Study
Graduate Institute of Life Science, National Defense Medical Center, Taipei, Taiwan	Ph.D	1. Hypoxic signaling in HUVECs. 2. Gene therapy in pulmonary hypertension.
Institute of Physiology, National Taiwan University College of Medicine, Taipei, Taiwan	M.S.	Intracellular calcium signaling under ischemia condition in neuron

5. FIELDS OF SPECIALTY (研究專長領域)

Molecular Cell Biology; Stem Cell Biology; Cancer Cell Biology;

6. PUBLICATION

Original Articles in Journals

1. Liu CC*, **Chang TC*** (equal contribution), Lin YT, Yu YL, Jan YJ, Ko BS, Sung LY, Liou JY. Paracrine regulation of matrix metalloproteinases contributes to cancer cell invasion by hepatocellular carcinoma-secreted 14-3-3 σ . *Oncotarget*. 2016 May 09; 7(24): 36988-36999.
2. Yu CC, Chien CT, **Chang TC***. M2 macrophage polarization modulates epithelial-mesenchymal transition in cisplatin-induced tubulointerstitial fibrosis. *BioMedicine*. 2016 Mar; 6(1): 29-34.

3. **Chang TC***, Hsu MF, Wu KK. High glucose induces bone marrow-derived mesenchymal stem cell senescence by upregulating autophagy. *PLoS One*. 2015 May; 10(5): e0126537.
4. Liu CC, Jan YJ, Ko BS, Wu YM, Liang SM, Chen SC, Lee YM, Liu TA, **Chang TC**, Wang J, Shyue SK, Sung LY, Liou JY. 14-3-3 σ induces heat shock protein 70 expression in hepatocellular carcinoma. *BMC Cancer*. 2014 Jun; 14: 425-436.
5. Wu KK, Cheng HH, **Chang TC***. 5-methoxyindole metabolites of L-tryptophan: control of COX-2 expression, inflammation and tumorigenesis. *J Biomed Sci*. 2014 Mar; 21(1):17. doi: 10.1186/1423-0127-21-17
6. Cheng HH, Wang KH, Chu LY, **Chang TC**, Kuo CC, Wu KK. Quiescent and proliferative fibroblasts exhibit differential p300 HAT activation through control of 5-Methoxytryptopan production. *PLoS ONE*, 2014 Feb; 11(9): e88507-e88507
7. **Chang TC***, Liu CC, Hsing EW, Liang SM, Chi YL, Sung LY, Shen TL, Ko BS, Yen BL, Yet SF, Wu KK, Liou JY. 14-3-3 σ regulates β -catenin-mediated mouse embryonic stem cell proliferation by sequestering GSK-3 β . *PLoS One* 2012 Jun; 7: e40193.
8. Ko BS, **Chang TC**, Hsu C, Chen YC, Shen TL, Chen SC, Wang J, Wu KK, Jan YJ, Liou JY. Overexpression of 14-3-3 ϵ predicts tumor metastasis and poor survival in hepatocellular carcinoma. *Histopathology*. 2011; 58:705-711.
9. Ko BS, Lai IR, **Chang TC**, Liu TA, Chen SC, Wang J, Jan YJ, Liou JY. Involvement of 14-3-3 γ overexpression in extrahepatic metastasis of hepatocellular carcinoma. *Human Pathol*. 2011; 42:129-135.
10. Ko BS, **Chang TC**, Liou JY. Focal adhesion kinase as a therapeutic target of bortezomib. *Anti-Cancer Agents Med. Chem*. 2010; 10(10): 747-752.
11. **Chang TC***, Chen YC, Yang MH, Chen CH, Hsing EW, Ko BS, Liou JY, Wu KK. Rho kinases regulate the renewal and neural differentiation of embryonic stem cells in a cell plating density dependent manner. *PLoS ONE* 2010; 5:e9187.
12. Ko BS*, **Chang TC*** (equal contribution), Chen CH, Liu CC, Kuo CC, Hsu C, Shen YC, Shen TL, Golubovskaya V, Chang CC, Shyue SK, Liou JY. Bortezomib downregulates focal adhesion kinase via a proteasome-dependent interruption of NF κ B pathway. *Life Sci*. 2010; 86:199-206. (*Equal Contribution).

13. Jan YJ, Ko BS, Hsu C, Chen SC, **Chang TC**, Wang J, Liou JY. Overexpressed focal adhesion kinase predicts a higher incidence of extrahepatic metastasis and worse survival in hepatocellular carcinoma. *Human Pathol.* 2009; 40: 1384-1390.
14. Ko BS*, **Chang TC*** (*equal contribution*), Shyue SK, Chen YC, Liou JY. An efficient transfection method for mouse embryonic stem cells. *Gene Therapy* 2009; 16:154-158. (*Equal Contribution).
15. **Chang TC***, Huang CJ, Tam K, Chen SF, Tan KT, Tsai MS, Lin TN, Shyue SK. Stabilization of hypoxia-inducible factor-1 α by prostacyclin under prolonged hypoxia via reducing reactive oxygen species level in endothelial cells. *J Biol Chem.* 2005; 280:36567-74.
16. Chien CT, **Chang TC**, Tsai CY, Shyue SK, Lai MK. Adenovirus-mediated bcl-2 gene transfer inhibits renal ischemia/reperfusion induced tubular oxidative stress and apoptosis. *Am J Transplant.* 2005; 5:1194-203.

Books or Chapters

- Liou JY, Ko BS, **Chang TC***. (2010). Chapter 12. An efficient transfection method for mouse embryonic stem cells. RNAi and microRNA-Mediated Gene Regulation in Stem Cells. Methods in Molecular Biology Vol.650. P145-153. Zhang, B; Stellwag EJ (Eds.). ISBN: 978-1-60761-768-6.