

**Hsin-Yi Chang, Ph.D.**

Position: Assistant Professor

Department: Graduate Institute of Medical Sciences

Affiliation: National Defense Medical Center

Office: +886287923100#18692

E-mail: [hsinyi.chang@mail.ndmctsgh.edu.tw](mailto:hsinyi.chang@mail.ndmctsgh.edu.tw)Homepage: <https://www.ndmc.ndmctsgh.edu.tw/DocDet/191/100015/676/2902>**Education**

yyyy.mm-yyyy.mm	degree	affiliation
2008.09-2013.01	Ph.D.	Institute of Molecular and Cellular Biology, National Taiwan University, Taiwan
2006.09-2008.06	M.S.	Institute of Molecular and Cellular Biology, National Taiwan University, Taiwan
2002.09-2006.06	B.S.	Department of Life Science, National Taiwan Normal University, Taiwan

**Professional Experience**

yyyy.mm-yyyy.mm	position	affiliation
2021.08-now	Assistant Professor	Graduate Institute of Medical Sciences, National Defense Medical Center, Taiwan
2019.04-2021.08	Assistant Professor	Graduate Institute of Metabolism and Obesity Sciences, Taipei Medical University, Taiwan
2017.04-2019.03	Assistant Professor	Graduate School of Pharmaceutical Sciences, Kyoto University, Japan

**Academic Society**

yyyy.mm-yyyy.mm	position	society
2021.02-now	Board Member	Taiwan Proteomics Society (TPS)
2004-now	Member	Taiwan Proteomics Society (TPS)
2017-now	Member	Japanese Society of HUPO (JPrOS)

**Publications**

- Li-Han Chen#, Shy-Shin Chang#, Hsin-Yi Chang, Chieh-Hsi Wu, Chun-Hsu Pan, Chun-Chao Chang, Ching-Hung Chan, Hui-Yu Huang\*. (2021) Probiotic supplementation attenuates age-related sarcopenia via the gut-muscle axis in SAMP8 mice. *Journal of Cachexia, Sarcopenia and Muscle*. (Accepted)
- Yi-Fen Chiang, Hsin-Yuan Chen, Mohamed Ali, Tzong-Ming Shieh, Yun-Ju Huang, Kai-Lee Wang, Hsin-Yi Chang, Tsui-Chin Huang, Yong-Han Hong, Shih-Min Hsia\*. (2021) The Role of Cell Proliferation and Extracellular Matrix Accumulation Induced by Food Additive Butylated Hydroxytoluene in Uterine Leiomyoma. *Nutrients*. 13:3074.
- Hsin-Yuan Chen, Wen-Pin Cheng, Yi-Fen Chiang, Yong-Han Hong, Mohamed Ali, Tsui-Chin Huang, Kai-Lee Wang, Tzong-Ming Shieh, Hsin-Yi Chang, Shih-Min Hsia\*. (2021) Hinokitiol Exhibits Antitumor Properties through Induction of ROS-Mediated Apoptosis and p53-Driven Cell-Cycle Arrest in Endometrial Cancer Cell Lines (Ishikawa, HEC-1A, KLE). *Int. J. Mol. Sci*. 22:8268.

4. Tsui-Chin Huang, Kuan-Chieh Peng, Tzu-Ting Kuo, Li-Chun Lin, Bai-Chia Liu, Shu-Ping Ye, Chien-Chou Chu, Shih-Min Hsia, Hsin-Yi Chang\*. (2021) Predicting Agents That Can Overcome 5-FU Resistance in Colorectal Cancers via Pharmacogenomic Analysis. *Biomedicines*. 9:882.
5. Hsin-Yuan Chen, Yi-Fen Chiang, Kai-Lee Wang, Tsui-Chin Huang, Mohamed Ali, Tzong-Ming Shieh, Hsin-Yi Chang, Yong-Han Hong, Shih-Min Hsia. (2021) Rice Husk Silica Liquid Protects Pancreatic  $\beta$  Cells from Streptozotocin-Induced Oxidative Damage. *Antioxidants*. 10:1080.
6. Guan-Wen Chen, Yi-An Chen, Hsin-Yi Chang, Tsui-Chin Huang, Tai-Yuan Chen. (2021) Combined impact of high-pressure processing and slightly acidic electrolysed water on *Listeria monocytogenes* proteomes. *Food Research International*. 147:110494.
7. Yi-Fen Chiang, Chih-Hung Tsai, Hsin-Yuan Chen, Kai-Lee Wang, Hsin-Yi Chang, Yun-Ju Huang, Yong-Han Hong, Mohamed Ali, Tzong-Ming Shieh, Tsui-Chin Huang, Ching-I Lin, Shih-Min Hsia. (2021) Protective Effects of Fucoxanthin on Hydrogen Peroxide-Induced Calcification of Heart Valve Interstitial Cells. *Mar. Drugs*. 19(6):307.
8. Ching-Feng Chiu, Hsin-Yi Chang, Chun-Yine Huang, Chen-Zou Mau, Tzu-Ting Kuo, Hsiu-Chuan Lee, Shih-Yi Huang. (2021) Betulinic Acid Affects the Energy-Related Proteomic Profiling in Pancreatic Ductal Adenocarcinoma Cells. *Molecules*. 26(9): 2482.
9. Tzu-Ting Kuo\*, Hsin-Yi Chang\*, Tai-Yuan Chen, Bai-Chia Liu, Hsin-Yi Chen, Yuan-Chin Hsiung, Shih-Min Hsia, Chun-Ju Chang#, Tsui-Chin Huang#. (2020) Melissa officinalis Extract Induces Apoptosis and Inhibits Migration in Human Colorectal Cancer Cells. *ACS Omega*. 5(49):31792.
10. Chih-Hsiang Chang, Hsin-Yi Chang, Juri Rappsilber, Yasushi Ishihama. (2020) Isolation of acetylated and unmodified protein N-terminal peptides by strong cation exchange chromatographic separation of TrypN-digested peptides. *Mol Cell Proteomics*. mcp.TIR120.002148.
11. Titus Ime Ekanem, Wei-Lun Tsai, Yi-Hsuan Lin, Wan-Qian Tan, Hsin-Yi Chang, Tsui-Chin Huang, Hsin-Yi Chen, Kuen-Haur Lee. (2020) Identification of the Effects of Aspirin and Sulindac Sulfide on the Inhibition of HMGA2-Mediated Oncogenic Capacities in Colorectal Cancer. *Molecules*. 25(17):3826.
12. Akihiro Matsumoto, Yuki Takahashi, Hsin-Yi Chang, Yi-Wen Wu, Aki Yamamoto, Yasushi Ishihama, Yoshinobu Takakura. (2020) Blood concentrations of small extracellular vesicles are determined by a balance between abundant secretion and rapid clearance. *Journal of Extracellular Vesicles*. 9(1): 1696517.
13. Kazuki Tajima, Kenji Ikeda, Hsin-Yi Chang, Chih-Hsiang Chang, Takeshi Yoneshiro, Yasuo Oguri, Heejin Jun, Jun Wu, Yasushi Ishihama, Shingo Kajimura. (2019) Mitochondrial lipoylation integrates age-associated decline in brown fat thermogenesis. *Nature Metabolism*. 1:886-898.
14. Li-Chun Lin\*, Tzu-Ting Kuo\*, Hsin-Yi Chang, Wen-Shan Liu, Shih-Min Hsia, Tsui-Chin Huang. (2018) Manzamine A Exerts Anticancer Activity against Human Colorectal Cancer Cells. *Marine Drugs*. 16(8): 252. \*Equal contribution.
15. Jean-Michel Fustin#, Rika Kojima\*, Kakeru Itoh\*, Hsin-Yi Chang\*, Shiqi Ye\*, Bowen Zhuang, Asami Oji, Shingo Gibo, Rajesh Narasimamurthy, David M. Virshup, Gen Kurosawa, Ichiro Manabe, Yasushi Ishihama, Masahito Ikawa, Hitoshi Okamura#. (2018) Two Ck1 $\delta$  transcripts regulated by m6A methylation code for two antagonistic kinases in the control of the circadian clock. *Proceedings of the National Academy of Sciences, USA*. 115:5980-5985. \*Equal contribution.
16. Hsin-Yi Chang\*, Shu-Ping Ye\*, Shiow-Lin Pan, Tzu-Ting Kuo, Bia Chia Liu, Yi-Lin Chen, Tsui-Chin Huang. (2017) Overexpression of miR-194 Reverses HMGA2-driven Signatures in Colorectal Cancer. *Theranostics*. 7(16):3889-3900. \*Equal contribution.
17. Chia-Lang Hsu, Hsin-Yi Chang, Jen-Yun Chang, Wen-Ming Hsu, Hsuan-Cheng Huang, and Hsueh-Fen Juan. (2016) Unveiling MYCN regulatory networks in neuroblastoma via integrative analysis of heterogeneous genomics data. *Oncotarget*. 7(24): 36293-36310.

18. Kosaku Shinoda, Kana Ohyama, Yutaka Hasegawa, Hsin-Yi Chang, Mayu Ogura, Ayaka Sato, Haemin Hong, Takashi Hosono, Louis Z. Sharp, David W. Scheel, Mark Graham, Yasushi Ishihama, and Shingo Kajimura. (2015) Phosphoproteomics Identifies CK2 as a Negative Regulator of Beige Adipocyte Thermogenesis and Energy Expenditure. *Cell Metabolism*. 22(6):997-1088.
19. Hsin-Yi Chang, Ming-Hua Li, Tsui-Chin Huang, Chia-Lang Hsu, Shang-Ru Tsai, Si-Chen Lee#, Hsuan-Cheng Huang#, and Hsueh-Fen Juan#. (2015) Quantitative proteomics reveals middle infrared radiation-interfered networks in breast cancer cells. *Journal of Proteome Research*. 14(2):1250-62.
20. Hsin-Yi Chang, Tsui-Chin Huang, Nan-Ning Chen, Hsuan-Cheng Huang#, and Hsueh-Fen# Juan. (2014) Combination Therapy Targeting Ectopic ATP Synthase and 26S Proteasome Induces ER Stress in Breast Cancer Cells. *Cell Death & Disease*. 5:e1540.
21. Wei-Jan Huang, Yen-An Tang, Mei-Yu Chen, Ying-Jan Wang, Fu-Han Hu, Tseng-Wei Wang, Shi-Wei Chao, Hui-Wen Chiu, Ya-Ling Yeh, Hsin-Yi Chang, Hsueh-Fen Juan, Pinpin Lin, Yi-Ching Wang#. (2014) A histone deacetylase inhibitor YCW1 with antitumor and antimetastasis properties enhances cisplatin activity against non-small cell lung cancer in preclinical studies. *Cancer Letters*. 46(1):84-93.
22. Hsin-Yi Chang\*, Meng-Her Shih\*, Hsuan-Cheng Huang, Shang-Ru Tsai, Hsueh-Fen Juan#, and Si-Chen Lee#. (2013) Middle Infrared Radiation Induces G2/M Cell Cycle Arrest in A549 Lung Cancer Cells. *PLoS One*. 8(1):e54117. \*Equal contribution.
23. Hsin-Yi Chang, Hsuan-Cheng Huang, Tsui-Chin Huang, Pan-Chyr Yang#, Yi-Ching Wang#, Hsueh-Fen Juan#. (2013) Flow Cytometric Detection of Mitochondrial Membrane Potential. *Bio-protocol*. 3(8):e430.
24. Hsin-Yi Chang, Hsuan-Cheng Huang, Tsui-Chin Huang, Pan-Chyr Yang#, Yi-Ching Wang#, Hsueh-Fen Juan#. (2013) Flow Cytometric Detection of Reactive Oxygen Species. *Bio-protocol*. 3(8):e431.
25. Hsin-Yi Chang, Hsuan-Cheng Huang, Tsui-Chin Huang, Pan-Chyr Yang#, Yi-Ching Wang#, Hsueh-Fen Juan#. (2012) Ectopic ATP synthase blockade suppresses lung adenocarcinoma growth by activating the unfolded protein response. *Cancer Research*. 72(18):4696-706.
26. Ming-Wei Chang, Jem-Mau Lo, Hsueh-Fen Juan, Hsin-Yi Chang, Chun-Yu Chuang. (2012) Combination of RGD compound and low-dose paclitaxel induces apoptosis in human glioblastoma cells. *PLoS One*. 2012;7(5):e37935.
27. Shang-Ru Tsai, Tsui-Chin Huang, Chia-Ming Liang, Hsin-Yi Chang, Yi-Tsung Chang, Hsuan-Cheng Huang, Hsueh-Fen Juan#, Si-Chen Lee#. (2011) The effect of narrow bandwidth infrared radiation on the growth of Escherichia coli. *Applied Physics Letters*. 99:163704.
28. Tsui-Chin Huang, Hsin-Yi Chang, Cheng-Yu Chen, Pei-Yi Wu, Hsinyu Lee, Yung-Feng Liao, Wen-Ming Hsu#, Hsuan-Cheng Huang#, Hsueh-Fen Juan#. (2011) Silencing of miR-124 induces neuroblastoma cell differentiation, cell cycle arrest and apoptosis through promoting AHR. *FEBS Letters*. 585(22): 3582-3586.
29. Chiung-Mei Chen, Chih-Hsin Lin, Hsueh-Fen Juan, Fen-Ju Hu, Ya-Chin Hsiao, Hsin-Yi Chang, Chih-Ying Chao, I-Cheng Chen, Li-Ching Lee, Tsu-Wei Wang, Ya-Tang Chen, Yi-Tsun Chen, Guey-Jen Lee-Chen, Yih-Ru Wu. (2011) ATP13A2 variability in Taiwanese Parkinson's disease. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*. 156B:720-729.
30. Tsui-Chin Huang\*, Hsin-Yi Chang\*, Chun-Hua Hsu, Wen-Hung Kuo, King-Jen Chang, Hsueh-Fen Juan. (2008) Targeting Therapy on Breast Carcinoma by ATP Synthase Inhibitor Aurovertin B. *Journal of Proteome Research*. 7:1433-1444. \*Equal contribution.
31. Tsui-Chin Huang, Hsuan-Cheng Huang, Chih-Chin Chang, Hsin-Yi Chang, Chern-Han Ou, Chun-Hua Hsu, Shui-Tein Chen, Hsueh-Fen Juan. (2007) An Apoptosis-related Gene Network Induced by Novel Compound-cRGD in Human Breast Cancer Cells. *FEBS Letters*. 581:3517-3522.