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Chinese and Western Medicine Laboratory

Lab Introduction:

1. To study the application of targeted therapy in cancer treatment.
2. To study the effect of Chinese herb extract-chrysin on cancer treatment.

Principal Investigator:

Yun-Ju Chen, Ph.D.
Research Fellow

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Educations:

Ph.D. degree, (Institute of Basic Medical Sciences, National Cheng Kung University)

Academic Experiences:

Duration	Department	Position
2020~present	Office of Research and Development, I-Shou University, Kaohsiung, Taiwan.	Dean
2019~present	School of Medicine for International Students, I-Shou University, Kaohsiung, Taiwan.	Professor
2011~present	Dept. of Medical Research, E-Da Hospital, Kaohsiung, Taiwan.	Research Fellow
2015~2020	School of Medicine for International Students, I-Shou University, Kaohsiung, Taiwan.	Associate Chair
2015~2019	School of Medicine for International Students, I-Shou University, Kaohsiung, Taiwan.	Associate Professor
2014~2015	Dept. of Biological Science and Technology, I-Shou University, Kaohsiung, Taiwan.	Associate Professor
2011~2014	Dept. of Biological Science and Technology, I-Shou University, Kaohsiung, Taiwan.	Assistant Professor
2009~2011	Center for Molecular Medicine, China Medical University and Hospital, Taichung, Taiwan	Postdoctoral Fellow

Honors and Awards: (Optional)

2007 Scholarship of Graduate Students Research Abroad Program (GSRAP) by National Science Council (NSC) of R.O.C. (Taiwan) for advanced research in the University of Texas M. D. Anderson Cancer Center.

Team Members:

Collaborators:

Ching-Ting Wei M.D.
Chih-I Chen M.D.

Post-doc:

None

Assistants:

Pei-Hsuan Chien

Techniques & Equipments (Optional)

Research Projects

Project titles	PI	Source	Duration
The study of development of DDB2 inhibitor to enhance chemosensitivity of breast cancer	Yun-Ju Chen	MOST	2021.8.1~ 2022.7.31
The study of involvement of phosphatase in celecoxib-mediated cancer stemness inhibition of colorectal cancer cells	Yun-Ju Chen (co-PI)	MOST	2021.8.1~ 2023.7.31
Role of NPM1 interaction in nuclear HER2-mediated tumor progression and drug resistance	Yun-Ju Chen	MOST	2022.8.1~ 2023.7.31
The study of development of DDB2 inhibitor to enhance chemosensitivity of solid tumors	Yun-Ju Chen	NSTC	2023.8.1~ 2024.7.31

Publications:

1. Chen, J. Y.[#], **Chen, Y. J.[#]**, Yen, C. J., Chen, W. S., Huang, W. C.* HBx sensitizes hepatocellular carcinoma cells to lapatinib by up-regulating ErbB3. Oncotarget 7(1):473-489, Jan. 2016.
2. Chen, W. S., Liu, L. C., Yen, C. J., **Chen, Y. J.**, Chen, J. Y., Ho, C. Y., Liu, S. H., Chen, C. C., Huang, W. C.* Nuclear IKKα mediates microRNA-7/-103/107/21 inductions to downregulate maspin expression in response to HBx overexpression. Oncotarget 7(35): 56309-56323, Aug. 2016.

3. Huang, W. C., Hung, C. M., Wei, C. T.[#], Chen, T. M.[#], Chien, P. H., Pan, H. L., Lin, Y. M., **Chen, Y. J.*** Interleukin-6 expression contributes to lapatinib resistance through maintenance of stemness property in HER2-positive breast cancer cells. Oncotarget 7(38): 62352-62363, Sep. 2016.

4. Chen, C. H., Hsia, T. C., Yeh, M. H., Chen, T. W., **Chen, Y. J.**, Chen, J. T., Wei, Y. L., Tu, C. Y., Huang, W. C.* MEK inhibitors induce Akt activation and drug resistance by suppressing negative feedback ERK-mediated HER2 phosphorylation at Thr701. Mol. Oncol. 11(9): 1273-1287, Sep. 2017. SCI.

5. Tu, C. Y., Cheng, F. J., Chen, C. M., Wang, S. L., Hsiao, Y. C., Chen, C. H., Hsia, T. C., He, Y. H., Wang, B. W., Hsieh, I. S., Yeh, Y. L., Tang, C. H., **Chen, Y. J.**, Huang, W. C.* Cigarette smoke enhances oncogene addiction to c-MET and desensitizes EGFR-expressing non-small cell lung cancer to EGFR TKIs. Mol. Oncol. 12(5): 705-723, May. 2018. SCI.

6. Lin, Y. M., Chen, C. I., Hsiang, Y. P., Hsu, Y. C., Cheng, K. C., Chien, P. H., Pan, H. L., Lu, C. C.*, **Chen, Y. J.*** Chrysin attenuates cell viability of human colorectal cancer cells through autophagy induction unlike 5-fluorouracil/oxaliplatin. Int. J. Mol. Sci. 19(6): 1763, Jun. 2018. SCI.

7. Wei, C. T., Chen, L. C., Hsiang, Y. P., Hung, Y. J., Chien, P. H., Pan, H. L., **Chen, Y. J.*** Chrysin-induced ERK1/2 phosphorylation enhances the sensitivity of human hepatocellular carcinoma cells to sorafenib. Anticancer Res. 39(2): 695-701, Feb. 2019. SCI.

8. Chen, J. Y.[#], Huang, W. C.[#], Wei, C. T., Chien, P. H., **Chen, Y. J.*** The C-terminus of hepatitis B virus-encoded X protein is required for lapatinib sensitivity in hepatocellular carcinoma cells. Anticancer Res. 39(2): 721-726,

Feb. 2019. SCI.

9. Lin, Y. M., Lu, C. C., Hsiang, Y. P., Pi, S. C., Chen, C. I., Cheng, K. C., Pan, H. L., Chien, P. H., **Chen, Y. J.*** c-Met inhibition is required for celecoxib-attenuated stemness property of human colorectal cancer cells. J. Cell. Physiol. 234(7): 10336-10344, Jul. 2019. SCI.

10. Huynh, T. K., Ho, C. Y., Tsai, C. H., Wang, C. K., **Chen, Y. J.**, Bau, D. T., Tu, C. Y., Li, T. S., Huang, W. C.* Proteasome inhibitors suppress ErbB family expression through HSP90-mediated lysosomal degradation. Int. J. Mol. Sci. 20(19): 4812, Sep. 2019, SCI.

11. Wang, B. W., Huang, C. H., Liu, L. C., Cheng, F. J., Wei, Y. L., Lin, Y. M., Wang, Y. F., Wei, C. T., Chen, Y.*, **Chen, Y. J.***, Huang, W. C.* Pim1 kinase inhibitors exert anti-cancer activity against HER2-positive breast cancer cells through downregulation of HER2. Front. Pharmacol. 12: 614673, Jun. 2021.

12. Chen, C. H., Wang, B. W., Hsiao, Y. C., Wu, C. Y., Cheng, F. J., Hsia, T. C., Chen, C. Y., Wang, Y., Weihua, Z., Chou, R. H., Tang, C. H., **Chen, Y. J.**, Wei, Y. L., Hsu, J. L., Tu, C. Y., Hung, M. C., Huang, W. C.* PKCδ-mediated SGLT1 upregulation confers the acquired resistance of NSCLC to EGFR TKIs. Oncogene 40(29): 4796-4808, Jul. 2021

13. Wu, C. Y., Cheng, K. C., **Chen, Y. J.**, Lu, C. C., Lin, Y. M. Risk of NSAID-associated anastomosis leakage after colorectal surgery: a large-scale retrospective study using propensity score matching. Int. J. Colorectal. Dis. 37(5): 1189-1197, May 2022.

14. Wang, J. Z, Lu, N. H., Du, W. C., Liu, K. Y., Hsu, S. Y., Wang, C. Y., **Chen, Y. J.**, Chang, L. C., Twan, W. H., Chen, T. B., Huang, Y. H.* Classification of color fundus photographs using fusion extracted features and customized CNN models. Healthcare 11(15): 2228, Aug. 2023.

15. Shieh, J. M., Chang, T. W., Wang, J. H., Liang, S. P., Kao, P. L., Chen, L. Y., Yen, C. J., **Chen, Y. J.**, Chang, W. C., Chen, B. K.* RNA-binding proteins-regulated fibronectin is essential for EGFR-activated metastasis of head and neck squamous cell carcinoma. FASEB J. 37(10): e23206, Oct.

2023.

16. **Chen, Y. J.**, Huang, W. C., Chen, J. Y., Chien, P. H., Chen, W. S. “The level of HBx expression is used for molecular indicator.” Patent Number: Invest I522472, Taiwan, Validity period: 2016.02.21~2034.02.18.

17. **Chen, Y. J.**, Huang, W. C., Chen, J. Y., Chien, P. H., Chen, W. S. “The method for evaluation of lapatinib effectiveness in HCC and the level of ErbB3 expression is used for molecular indicator.” Patent Number: Invest I535852, Taiwan, Validity period: 2016.06.01~2034.02.18.

18. **Chen, Y. J.**, Huang, W. C., Chen, J. Y., Chien, P. H., Chen, W. S. “The methods for HCC therapy.” Patent Number: Invest US9790563 B2, U.S.A., Validity period: 2017.10.17~2034.04.24.