

CURRICULUM VITAE

(updated September 12, 2017)

Jung-Chen Su, Ph. D.

Assistant Professor

National Yang-Ming University, Taiwan

Faculty of Pharmacy

BUSINESS ADDRESS

No.155, Sec.2, Linong Street, Taipei, 112 Taiwan (ROC)

Phone 02-28267000 #5760

E-mail jjjaannee@ym.edu.tw

EDUCATION

2005-2009 **B.S.**, Department of Medicinal and Applied Chemistry,
Kaohsiung Medical University, Taiwan

2009-2010 **Master.**, Department of Medicinal and Applied Chemistry,
Kaohsiung Medical University, Taiwan

2010-2014 **Ph.D.**, Institute of Biopharmaceutical Sciences, National
Yang-Ming University, Taiwan

PROFESSIONAL EXPERIENCES

9/2014 Post-doctoral Research Fellow

College of Medicine, National Taiwan University-
Department of Oncology

10/2014-11/2014 Post-doctoral Research Fellow

Teh-Tzer Study Group for Human Medical Research
Foundation

12/2014-7/2016 Post-doctoral Research Fellow

College of Medicine, National Taiwan University-
Department of Clinical Labtory Science and Medical
Biotechnology

8/2016-Present Assistant professor

National Yang-Ming University- Faculty of Pharmacy

7/2017-8/2017 Visiting scholar
University of Michigan College of Pharmacy

AWARDS

- 2013 **MOST Travel grant** (AACR Annual Meeting-Full Scholarship)
- 2014 **Scholarship of Biotechnology Education Fund** (National Yang-Ming University)
- 2015 **The 11th National Innovation Award** “以 SHP-1 增敏劑為標靶機轉之嶄新抗肝癌藥物研發”
- 2016 **Young scholar award** (Tenth International Symposium for Chinese Medicinal Chemists-10th ISCMC)

CONFERENCE ORAL PRESENTATIONS

- 2016 Tenth International Symposium for Chinese Medicinal Chemists (10th ISCMC) “Disruption of p-STAT3 mediated VEGF-A paracrine and autocrine feed-forward loops by targeting SHP-1 suppresses triple negative breast cancer cells metastasis”

CONFERENCE POSTER PRESENTATIONS

- 2013 In: The Twenty-first Symposium on Recent Advances in Cellular and Molecular Biology. *Annual Meeting.* (Taiwan)
- 2013 Obatoclax analogue, SC-2001, induced autophagy through SHP1/STAT3 pathway in Hepatocelluar carcinoma. In: *AACR Annual Meeting.* (In U.S.A)- supported by NSC
- 2014 RFX1-dependent activation of SHP-1 inhibits STAT3 signaling in hepatocellular carcinoma cells. In: *AACR Annual Meeting.* (U.S.A)
- 2014 A novel imidazole derivate inhibits STAT3 activation via induction of SHP-1 hepatocellular carcinoma. In: *AACR Annual Meeting.* (U.S.A)
- 2014 Obatoclax analogue SC-2001 inhibits STAT3 phosphorylation by enhancing protein tyrosine phosphatase SHP-1 expression and induces apoptosis in human breast cancer cells. In: *AACR Annual Meeting.* (U.S.A)

- 2014** Targeting Rfx-1/Shp-1 activation by a small molecule overcome sorafenib resistance in hepatocellular carcinoma. In: *ILCA Annual Meeting*. (Japan)
- 2015** Targeting RFX-1 as a novel therapeutic strategy in hepatocellular carcinoma. In: *AACR Annual Meeting*. (U.S.A)
- 2016** Disrupting p-STAT3-mediated VEGF-A paracrine and autocrine feed-forward loops by targeting SHP-1 suppresses triple negative breast cancer cell metastasis. In: *AACR Annual Meeting*. (U.S.A)
- 2017** Targeting SHP-1 mediated VEGF signaling to block triple negative breast cancer cell migration. In: AACR Annual Meeting. (U.S.A)
- 2017** Design and synthesize novel small molecules as AMPK activators. In: *TPST Medicinal Chemistry Symposium*. (Taiwan)
- 2017** Design and synthesis of quinoxaline derivatives as CIP2A inhibitors. In: *CHENG HSIN General Hospital* (Taiwan)

MEMBERSHIP

American Association for Cancer Research (AACR): Associate member, since 2013

PUBLICATIONS

1. Yang SH, Chien CM, Su JC, Chen YL, Chang LS, Lin SR. Novel indoloquinoline derivative, IQDMA, inhibits STAT5 signaling associated with apoptosis in K562 cells. *J Biochem Mol Toxicol.* 2008;22(6):396-404.
2. Su JC, Lin KL, Chien CM, Lu CM, Chen YL, Chang LS, Lin SR. Novel indoloquinoline derivative, IQDMA, induces G(2)/M phase arrest and apoptosis in A549 cells through JNK/p38 MAPK signaling activation. *Life Sci.* 2009; 85(13-14):505-16. (*First author*)
3. Lin KL, Su JC, Chien CM, Tseng CH, Chen YL, Chang LS, Lin SR. Naphtho[1,2-b]furan-4,5-dione induces apoptosis and S-phase arrest of MDA-MB-231 cells through JNK and ERK signaling activation. *Toxicol In Vitro.* 2010; 24(1):61-70.
4. Chien CM, Lin KL, Su JC, Chang LS, Lin SR. Inactivation of epidermal growth

- factor receptor and downstream pathways in oral squamous cell carcinoma Ca9-22 cells by cardiotoxin III from Naja naja atra. *J Nat Prod.* 2009; 72(10):1735-40.
5. Su JC, Lin KL, Chien CM, Tseng CH, Chen YL, Chang LS, Lin SR. Naphtho[1,2-b]furan-4,5-dione inactivates EGFR and PI3K/Akt signaling pathways in human lung adenocarcinoma A549 cells. *Life Sci.* 2010; 86(5-6):207-13. (*First author*)
 6. Lin KL, Su JC, Chien CM, Chuang PW, Chang LS, Lin SR. Down-regulation of the JAK2/PI3K-mediated signaling activation is involved in Taiwan cobra cardiotoxin III-induced apoptosis of human breast MDA-MB-231. *Toxicon.* 2010; 55(7):1263-73.
 7. Lin KL, Su JC, Chien CM, Tseng CH, Chen YL, Chang LS, Lin SR. Naphtho[1,2-b]furan-4,5-dione disrupts Janus kinase-2 and induces apoptosis in breast cancer MDA-MB-231 cells. *Toxicol In Vitro.* 2010; 24(4):1158-67.
 8. Chien CM, Lin KL, Su JC, Chuang PW, Tseng CH, Chen YL, Chang LS, Lin SR. Naphtho[1,2-b]furan-4,5-dione induces apoptosis of oral squamous cell carcinoma: involvement of EGF receptor/PI3K/Akt signaling pathway. *Eur J Pharmacol.* 2010; 636(1-3):52-8.
 9. Su JC, Lin KL, Chien CM, Chuang PW, Chang LS, Lin SR. Concomitant inactivation of the epidermal growth factor receptor, phosphatidylinositol 3-kinase/Akt and Janus tyrosine kinase 2/signal transducer and activator of transcription 3 signalling pathways in cardiotoxin III-treated A549 cells. *Clin Exp Pharmacol Physiol.* 2010; 636(1-3):52-8. (*First author*)
 10. Chen KF, Su JC, Liu CY, Huang JW, Chen KC, Chen WL, Tai WT, Shiau CW. A novel obatoclax derivative, SC-2001, induces apoptosis in hepatocellular carcinoma cells through SHP-1-dependent STAT3 inactivation. *Cancer Lett.* 2012 ;321(1):27-35. (*First author*)
 11. Chen KF, Pao KC, Su JC, Chou YC, Liu CY, Chen HJ, Huang JW, Kim I, Shiau CW. Development of erlotinib derivatives as CIP2A-ablating agents independent of EGFR activity. *Bioorg Med Chem.* 2012 ;20(20):6144-53.
 12. Su JC, Chen KF, Chen WL, Liu CY, Huang JW, Tai WT, Chen PJ, Kim I, Shiau CW. Synthesis and biological activity of obatoclax derivatives as novel and potent SHP-1 agonists. *Eur J Med Chem.* 2012 ;56:127-33. (*First author*)
 13. Liu CY, Tseng LM, Su JC, Chang KC, Chu PY, Tai WT, Shiau CW, Chen KF.

- Novel sorafenib analogues induce apoptosis through SHP-1 dependent STAT3 inactivation in human breast cancer cells. Breast Cancer Res. 2013;15(4):R63.
14. Liu CY, Su JC, Ni MH, Tseng LM, Chu PY, Wang DS, Tai WT, Kao YP, Hung MH, Shiao CW, Chen KF. Obatoclax analog SC-2001 inhibits STAT3 phosphorylation through enhancing SHP-1 expression and induces apoptosis in human breast cancer cells. Breast Cancer Res Treat. 2014;146(1):71-84. (**First author**)
15. Su JC, Tseng PH, Hsu CY, Tai WT, Huang JW, Ko CH, Lin MW, Liu CY, Chen KF, Shiao CW. RFX1-dependent activation of SHP-1 induces autophagy by a novel obatoclax derivative in hepatocellular carcinoma cells. Oncotarget. 2014;15(513):4909-19. (**First author**)
16. Su JC, Tseng PH, Wu SH, Hsu CY, Tai WT, Li YS, Chen IT, Liu CY, Chen KF, Shiao CW. SC-2001 overcomes STAT3-mediated sorafenib resistance through RFX-1/SHP-1 activation in hepatocellular carcinoma. Neoplasia. 2014 Jul;16(7):595-605. (**First author**)
17. Liu CY, Hung MH, Wang DS, Chu PY, Su JC, Teng TH, Huang CT, Chao TT, Wang CY, Shiao CW, Tseng LM, Chen KF. Tamoxifen induces apoptosis through cancerous inhibitor of protein phosphatase 2A-dependent phospho-Akt inactivation in estrogen receptor-negative human breast cancer cells. Breast Cancer Res. 2014 Sep;16(5):431.
18. Tai WT, Chu PY, Shiao CW, Chen YL, Li YS, Hung MH, Chen LJ, Chen PL, Su JC, Lin PY, Yu HC, Chen KF. STAT3 mediates regorafenib-induced apoptosis in hepatocellular carcinoma. Clin Cancer Res. 2014 Nov 15;20(22):5768-76.
19. Su JC, Chiang HC, Tseng PH, Tai WT, Hsu CY, Li YS, Huang JW, Ko CH, Lin MW, Chu PY, Liu CY, Chen KF, Shiao CW. RFX-1-dependent activation of SHP-1 inhibits STAT3 signaling in hepatocellular carcinoma cells. Carcinogenesis. 2014 Dec;35(12):2807-14. (**First author**)
20. Su JC, Chang JH, Huang JW, Chen PP, Chen KF, Tseng PH, Shiao CW. Copper-obatoclax derivative complexes mediate DNA cleavage and exhibit anti-cancer effects in hepatocellular carcinoma. Chem Biol Interact. 2015 Feb 25;228:108-13. (**First author**)

21. Chang HC, Huang YT, Chen CS, Chen YW, Huang YT, Su JC, Teng LJ, Shiau CW, Chiu HC. In vitro and in vivo activity of a novel sorafenib derivative SC5005 against MRSA. *J Antimicrob Chemother.* 2016 Feb;71(2):449-59.
22. Mukherjee N, Lu Y, Almeida A, Lambert K, Shiau CW, Su JC, Luo Y, Fujita M, Robinson WA, Robinson SE, Norris DA, Shellman YG. Use of a MCL-1 inhibitor alone to de-bulk melanoma and in combination to kill melanoma initiating cells. *Oncotarget.* 2016 Apr 12.
23. Su JC, Mar AC, Wu SH, Tai WT, Chu PY, Wu CY, Tseng LM, Lee TC, Chen KF, Liu CY, Chiu HC, Shiau CW. Disrupting VEGF-A paracrine and autocrine loops by targeting SHP-1 suppresses triple negative breast cancer metastasis. *Sci Rep.* 2016 Jul 1;6:28888. (*First author*)
24. Liu CY, Su JC, Huang TT, Chu PY, Huang CT, Wang WL, Lee CH, Lau KY, Tsai WC, Yang HP, Shiau CW, Tseng LM, Chen KF. Sorafenib analogue SC-60 induces apoptosis through the SHP-1/STAT3 pathway and enhances docetaxel cytotoxicity in triple-negative breast cancer cells. *Mol Oncol.* 2017 Mar;11(3):266-279.
25. Liu CY, Chen KF, Chao TI, Chu PY, Huang CT, Huang TT, Yang HP, Wang WL, Lee CH, Lau KY, Tsai WC, Su JC, Wu CY, Chen MH, Shiau CW, Tseng LM. Sequential combination of docetaxel with a SHP-1 agonist enhanced suppression of p-STAT3 signaling and apoptosis in triple negative breast cancer cells. *J Mol Med (Berl).* 2017 Jun 4.
26. Huang TT, Su JC, Liu CY, Shiau CW and Chen KF. Alteration of SHP-1/p-STAT3 Signaling: A Potential Target for Anticancer Therapy. *Int J Mol Sci.* 2017 Jun 8;18(6). pii: E1234.
27. Liu CY, Huang TT, Chu PY, Huang CT, Lee CH, Wang WL, Lau KY, Tsai WC, Chao TI, Su JC, Chen MH, Shiau CW, Tseng LM, Chen KF. The tyrosine kinase inhibitor nintedanib activates SHP-1 and induces apoptosis in triple-negative breast cancer cells. *Exp Mol Med.* 2017 Aug 11;49(8):e366.