
BIOGRAPHICAL SKETCH

NAME in English Chih-Ching Wu	POSITION TITLE Assistant Professor, Department of Medical Biotechnology and Laboratory Science		
NAME in Chinese 吳治慶			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Graduate Institute of Biomedical Sciences, Chang Gung University	MSc.	06/1998	Immunology
Graduate Institute of Biomedical Sciences, Chang Gung University	Ph.D.	12/2004	Biochemistry
Molecular Medicine Research Center, Chang Gung University	Postdoctoral	01/2005	Proteomics
Molecular Medicine Research Center, Chang Gung University	Assistant Research Fellow	04/2008	Proteomics

A. Positions and Honors

Positions and Employment

2008-2010	Research Assistant Professor, Molecular Medicine Research Center, Chang Gung University
2010-	Assistant Professor, Department of Medical Biotechnology and Laboratory Science

Other Experience and Professional Memberships

Honors

2009	HUPO Young Investigator Travel Award
2009	TPS International Proteomics Conference & 5th AOHUPO MPI Workshop Poster Award
2007	AOHUPO/KSMS Young Scientist Award
2004	Chang Gung University Youth Award

B. Selected Peer-reviewed Publications (2010-2014) (in chronological order)

1. Wang LJ, Huang HY, Huang MP, Liou W, Chang YT, **Wu CC**, Ojcius DM, Chang YS. The microtubule-associated protein, EB1, links AIM2 inflammasomes with autophagy-dependent secretion. **J Biol Chem** 2014, Aug 27. [Epub ahead of print]
2. Hsu CW, Yu JS, Peng PH, Liu SC, Chang YS, Chang KP, **Wu CC**. Secretome profiling of primary cells reveals that THBS2 is a salivary biomarker of oral cavity squamous cell carcinoma. **J Proteome Res** 2014, Apr 16. [Epub ahead of print].
3. Wang LJ, **Wu CC**, Lee SY, Tsai YF. Salivary neurosteroid levels and behavioural profiles of children with attention-deficit/hyperactivity disorder during six months of methylphenidate treatment. **J Child Adolesc Psychopharmacol** 2014, 24(6), 336-40.
4. Chen CD, Wang CL, Yu CJ, Chien KY, Chen YT, Chen MC, Chang YS, **Wu CC**[#], Yu JS[#]. Targeted proteomics pipeline reveals potential biomarkers for the diagnosis of metastatic lung cancer in pleural effusion. **J Proteome Res** 2014, 13(6), 2818-29. ([#]corresponding author)
5. **Wu CC**, Chang YT, Chang KP, Liu YL, Liu HP, Lee IL, Yu JS, Chiang WF. Salivary auto-antibodies as

- noninvasive diagnostic markers of oral cavity squamous cell carcinoma. **Cancer Epidemiol Biomarkers Prev** 2014, 23(8), 1569-78
6. Yeh YM, Chen CY, Huang PR, Hsu CW, **Wu CC**[#], Wang TC[#]. Proteomic analyses of genes regulated by heterogeneous nuclear ribonucleoproteins A/B in Jurkat cells. **Proteomics** 2014, 14(11), 1357-66. ([#]corresponding author)
 7. Chen CC, Liu HP, Chao M, Liang Y, Tsang NM, Huang HY, **Wu CC**, Chang YS. NF- κ B-mediated transcriptional upregulation of TNFAIP2 by the Epstein-Barr virus oncoprotein, LMP1, promotes cell motility in nasopharyngeal carcinoma. **Oncogene** 2014, 33(28), 3648-59.
 8. Lin HR*, **Wu CC**^{*,#}, Wu YH, Hsu CW, Cheng ML, Chiu DT. Proteome-wide dysregulation by glucose-6-phosphate dehydrogenase (G6PD) reveals a novel protective role for G6PD in aflatoxin B₁-mediated cytotoxicity. **J Proteome Res** 2013, 12(7), 3434-48. (*equal contribution, [#]corresponding author)
 9. Chen CL, Lin TS, Tsai CH, **Wu CC**, Chung T, Chien KY, Wu M, Chang YS, Yu JS, Chen YT. Identification of potential bladder cancer markers in urine by abundant-protein depletion coupled with quantitative proteomics. **J Proteomics** 2013, 85, 28-43.
 10. Chang KP, **Wu CC**, Fang KH, Tsai CY, Chang YL, Liu SC, Kao HK. Serum levels of chemokine (C-X-C motif) ligand 9 (CXCL9) are associated with tumor progression and treatment outcome in patients with oral cavity squamous cell carcinoma. **Oral Oncol** 2013, 49(8), 802-7.
 11. Chang KP, Kao HK, **Wu CC**, Fang KH, Chang YL, Huang YC, Liu SC, Cheng MH. Pretreatment interleukin-6 serum levels are associated with patient survival for oral cavity squamous cell carcinoma. **Otolaryngol Head Neck Surg** 2013, 148(5), 786-91.
 12. Chang YF, Yu JS, Chang YT, Su LC, **Wu CC**, Chang YS, Lai CS, Chou C. The utility of a high-throughput scanning biosensor in the detection of the pancreatic cancer marker ULBP2. **Biosens Bioelectron** 2013, 41(1), 232-7.
 13. Wang LJ, Hsu CW, Chen CC, Liang Y, Chen LC, Ojcius DM, Tsang NM, Hsueh C, **Wu CC**[#], Chang YS[#]. Interactome-wide analysis identifies end-binding protein 1 as a crucial component for the speck-like particle formation of activated AIM2 inflammasomes. **Mol Cell Proteomics** 2012, 11(11), 1230-44. ([#]corresponding author)
 14. Tsai MH, **Wu CC**, Peng PH, Liang Y, Hsiao YC, Chien KY, Chen JT, Lin SJ, Tang RP, Hsieh LL, Yu JS. Identification of secretory gelsolin as a plasma biomarker associated with distant organ metastasis of colorectal cancer. **J Mol Med** 2012, 90(2), 187-200.
 15. Liu HP, Chen CC, **Wu CC**, Huang YC, Liu SC, Liang Y, Chang KP, Chang YS. Epstein-Barr Virus-Encoded LMP1 Interacts with FGD4 to Activate Cdc42 and Thereby Promote Migration of Nasopharyngeal Carcinoma Cells. **PLoS Pathog** 2012, 8(5), e1002690.
 16. Hsu CC, Lee YC, Yeh SH, Chen CH, **Wu CC**, Wang TY, Chen YN, Hung LY, Liu YW, Chen HK, Hsiao YT, Wang WS, Tsou JH, Tsou YH, Wu MH, Chang WC, Lin DY. 58-kDa microspherule protein (MSP58) is novel Brahma-related gene 1 (BRG1)-associated protein that modulates p53/p21 senescence pathway. **J Biol Chem** 2012, 287(27), 22533-48.
 17. Chen YT, Chen HW, Domanski D, Smith DS, Liang KH, **Wu CC**, Chen CL, Chung T, Chen MC, Chang YS, Parker CE, Borchers CH, Yu JS. Multiplexed quantification of 63 proteins in human urine by multiple reaction monitoring-based mass spectrometry for discovery of potential bladder cancer biomarkers. **J Proteomics** 2012, 75(12), 3529-45.
 18. Chen CL, Lai YF, Tang P, Chien KY, Yu JS, Tsai CH, Chen HW, **Wu CC**, Chung T, Hsu CW, Chen CD, Chang YS, Chang PL, Chen YT. Comparative and targeted proteomic analyses of urinary microparticles from bladder cancer and hernia patients. **J Proteome Res** 2012, 11(12), 5611-29.
 19. Yu CJ, Wang CL, Wang CI, Chen CD, Dan YM, **Wu CC**, Wu YC, Lee IN, Tsai YH, Chang YS, Yu JS. Comprehensive proteome analysis of malignant pleural effusion for lung cancer biomarker discovery by using multidimensional protein identification technology. **J Proteome Res** 2011, 10(10), 4671-82.
 20. Yu CJ, Chang KP, Chang YJ, Hsu CW, Liang Y, Yu JS, Chi LM, Chang YS, **Wu CC**. Identification of guanylate-binding protein 1 as a potential oral cancer marker involved in cell invasion using omics-based analysis. **J Proteome Res** 2011, 10(8), 3778-88.
 21. Wang LJ, Huang YS, Hsiao CC, Chiang YL, **Wu CC**, Shang ZY, Chen CK. Salivary

- dehydroepiandrosterone, but not cortisol, is associated with attention deficit hyperactivity disorder. **World J Biol Psychiatry** 2011, 12(2), 99-109.
22. Wang LJ, Hsiao CC, Huang YS, Chiang YL, Ree SC, Chen YC, Wu YW, **Wu CC**, Shang ZY, Chen CK. Association of salivary dehydroepiandrosterone levels and symptoms in patients with attention deficit hyperactivity disorder during six months of treatment with methylphenidate. **Psychoneuroendocrinology** 2011, 36(8), 1209-16.
 23. Wang CI, Wang CL, Wang CW, Chen CD, **Wu CC**, Liang Y, Tsai YH, Chang YS, Yu JS, Yu CJ. Importin subunit alpha-2 is identified as a potential biomarker for non-small cell lung cancer by integration of the cancer cell secretome and tissue transcriptome. **Int J Cancer** 2011, 128(10), 2364-72.
 24. Peng PH, **Wu CC**[#], Liu SC, Chang KP, Chen CD, Chang YT, Hsu CW, Chang YS, Yu JS[#]. Quantitative plasma proteome analysis reveals aberrant level of blood coagulation-related proteins in nasopharyngeal carcinoma. **J Proteomics** 2011, 74(5), 744-57. ([#]corresponding author)
 25. Liu HP*, **Wu CC***, Kao HY, Huang YC, Liang Y, Chen CC, Yu JS, Chang YS. Proteome-wide dysregulation by PRA1 depletion delineates a role of PRA1 in lipid transport and cell migration. **Mol Cell Proteomics** 2011, 10(3), M900641MCP200. (*equal contribution)
 26. Chang YT, **Wu CC**[#], Shyr YM, Chen TC, Hwang TL, Yeh TS, Chang KP, Liu HP, Liu YL, Tsai MH, Chang YS, Yu JS[#]. Secretome-Based Identification of ULBP2 as a Novel Serum Marker for Pancreatic Cancer Detection. **PLoS One** 2011, 6(5), e20029. ([#]corresponding author)
 27. Chang KP, Chang YT, **Wu CC**, Liu YL, Chen MC, Tsang NM, Hsu CL, Chang YS, Yu JS. Multiplexed immunobead-based profiling of cytokine markers for detection of nasopharyngeal carcinoma and prognosis of patient survival. **Head Neck** 2011, 33(6), 886-97.
 28. Chang KP, Chang YT, Liao CT, Yen TC, Chen IH, Chang YL, Liu YL, Chang YS, Yu JS[#], **Wu CC**[#]. Prognostic cytokine markers in peripheral blood for oral cavity squamous cell carcinoma identified by multiplexed immunobead-based profiling. **Clin Chim Acta** 2011, 412(11-12), 980-7. ([#]corresponding author)
 29. Zhai HL, Chang YT, **Wu CC**, Yu JS. An approach to the elimination of inter-individual variability in tumor detection. **Analyst** 2010, 135(5), 875-9. ([#]corresponding author)
 30. **Wu CC***, Hsu CW*, Chen CD, Yu CJ, Chang KP, Tai DI, Liu HP, Su WH, Chang YS, Yu JS. Candidate serological biomarkers for cancer identified from the secretomes of 23 cancer cell lines and the human protein atlas. **Mol Cell Proteomics** 2010, 9(6), 1100-17. (*equal contribution)
 31. Chen YT, Chen CL, Chen HW, Chung T, **Wu CC**, Chen CD, Hsu CW, Chen MC, Tsui KH, Chang PL, Chang YS, Yu JS. Discovery of novel bladder cancer biomarkers by comparative urine proteomics using iTRAQ technology. **J Proteome Res** 2010, 9(11), 5803-15.
 32. Chang KP*, **Wu CC***, Chen HC, Chen SJ, Peng PH, Tsang NM, Lee LY, Liu SC, Liang Y, Lee YS, Hao SP, Chang YS, Yu JS. Identification of candidate nasopharyngeal carcinoma serum biomarkers by cancer cell secretome and tissue transcriptome analysis: potential usage of cystatin A for predicting nodal stage and poor prognosis. **Proteomics** 2010, 10(14), 2644-60. (*equal contribution)

C. Patent and Technology Transfer

1. Yu JS, Chang YT, **Wu CC**, Shyr YM, Chang YS. A serological marker for detecting pancreatic cancer and a method for using the serological marker • ID: I408370, Date: 2013/9/11~2031/5/18.

D. Research Support

Ongoing Research Support

Project name	Funding or commissioning organization	Y/M of project start and end	Work performed within project	Total funding
利用肺組織與肋膜積液定量蛋白質體鑑定與分析和非小細胞肺癌轉移相關的蛋白質標記(101-2320-B-182-035-MY3)	Ministry of Science and Technology	2012/08/01~2015/07/31	Co-PI	5,520,000
以已建立之分泌與組織蛋白質體資料庫為基礎，尋找口腔癌病患體液與組織中有效之偵測與轉移生物標誌(102-2628-B-182A-012-MY3)	Ministry of Science and Technology	2013/08/01~2016/07/31	Co-PI	3,600,000
探討 LSD1 在人類上皮性卵巢癌所扮演的角色(102-2628-B-182-016-MY3)	Ministry of Science and Technology	2013/08/01~2016/07/31	Co-PI	4,620,000
以蛋白質體學策略探討 TNFAIP2 之分子功能及其與鼻咽癌轉移之關聯(102-2320-B-182-029-MY3)	Ministry of Science and Technology	2013/08/01~2016/07/31	PI	3,660,000
利用高通量多重生物標的分析技術平台快速有效驗證癌症體液生物標誌—(子計畫三)建立高通量多重自體抗體標的分析技術平台快速有效驗證癌症體液自體抗體生物標誌(3/3)(103-2325-B-182-007-)	Ministry of Science and Technology	2014/05/01~2015/04/30	PI	1,850,000
連結基因體、蛋白質體、代謝體之分子改變探討口腔癌致病機轉與轉譯醫學應用(1/3)(103-2632-B-182-001-)	Ministry of Science and Technology	2014/08/01~2015/07/31	Co-PI	7,000,000

Completed Research Support

Project name	Funding or commissioning organization	Y/M of project start and end	Work performed within project	Total funding
利用高通量多重生物標的分析技術平台快速有效驗證癌症體液生物標誌—(子計畫三)建立高通量多重自體抗體標的分析技術平台快速有效驗證癌症體液自體抗體生物標誌(2/3)(102-	Ministry of Science and Technology	2013/05/01~2014/04/30	PI	2,135,000

2325-B-182-014-)				
利用高通量多重生物標的分析技術平台快速有效驗證癌症體液生物標誌—(子計畫三)建立高通量多重自體抗體標的分析技術平台快速有效驗證癌症體液自體抗體生物標誌(1/3)(101-2325-B-182-014-)	Ministry of Science and Technology	2012/05/01~2013/04/30	PI	2,120,000
利用肺組織與肋膜積液定量蛋白質鑑定與分析和非小細胞肺癌轉移相關的蛋白質標記(100-2320-B-182-025-)	Ministry of Science and Technology	2011/08/01~2012/07/31	Co-PI	1,120,000