

Curriculum Vitae

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Current appointment:

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Education:

1992-1996	B.A.	Chang Gung University, Taiwan	Medical Technology
1996-1998	MSc.	Chang Gung University, Taiwan	Tumor immunology
1998-2005	Ph.D.	Chang Gung University, Taiwan	Biochemistry

Postdoctoral training:

2005-2006	Department of Cell and Molecular Biology, Chang Gung University
2006-2008	Proteomics Core Laboratory, Chang Gung University

Professional experience:

2008-2010	Research assistant professor Molecular Medicine Research Center, Chang Gung University
2010-2014	Assistant professor Department of Medical Biotechnology and Laboratory Science, Chang Gung University
2014-2019	Associate professor Department of Medical Biotechnology and Laboratory Science, Chang Gung University
2019-present	Professor Department of Medical Biotechnology and Laboratory Science, Chang Gung University

Research articles:

1. Yen, W. C., Wu, Y. H., Wu, C. C., Lin, H. R., Stern, A., Chen, S. H., Shu, J. C., and Chiu, D. T. (2020) Impaired inflammasome activation and bacterial clearance in G6PD deficiency due to defective NOX/p38 MAPK/AP-1 redox signaling. *Redox Biol* 28, 101363
2. Chung, I. C., Chen, L. C., Tsang, N. M., Chuang, W. Y., Liao, T. C., Yuan, S. N., OuYang, C. N., Ojcius, D. M., Wu, C. C., and Chang, Y. S. (2020) Mitochondrial oxidative phosphorylation complex regulates NLRP3 inflammasome activation and predicts patient survival in nasopharyngeal carcinoma. *Mol. Cell. Proteomics* 19, 142-154
3. Wu, K. A., Wu, C. C., Liu, Y. C., Hsueh, P. C., Chin, C. Y., Wang, C. L., Chu, C. M., Shih, L. J., and Yang, C. Y. (2019) Combined serum biomarkers in the noninvasive diagnosis of complicated parapneumonic effusions and

- empyema. *BMC Pulm. Med.* 19, 108
4. 4. Wu, C. C., Chang, S. C., Zeng, G. Y., Chu, H. W., Huang, Y., and Liu, H. P. (2019) Proteome analyses reveal positive association of COL2A1, MPO, TYMS, and IGFBP5 with canine mammary gland malignancy. *Proteomics Clin. Appl.* 13, e1800151
5. 5. Wang, L. J., Wu, C. C., Lee, M. J., Chou, M. C., Lee, S. Y., and Chou, W. J. (2019) Peripheral brain-derived neurotrophic factor and contactin-1 levels in patients with attention-deficit/hyperactivity disorder. *J Clin Med* 8, 1366
6. 6. Lee, C. J., Wu, C. C., Chou, W. J., Lee, M. J., Chou, M. C., Lee, S. Y., and Wang, L. J. (2019) Mitochondrial-associated protein biomarkers in patients with attention-deficit/hyperactivity disorder. *Mitochondrion* 49, 83-88
7. 7. Huang, K. Y., Ong, S. C., Wu, C. C., Hsu, C. W., Lin, H. C., Fang, Y. K., Cheng, W. H., Huang, P. J., Chiu, C. H., and Tang, P. (2019) Metabolic reprogramming of hydrogenosomal amino acids in *Trichomonas vaginalis* under glucose restriction. *J. Microbiol. Immunol. Infect.* 52, 630-637
8. 8. Hsu, C. W., Chen, Y. T., Hsieh, Y. J., Chang, K. P., Hsueh, P. C., Chen, T. W., Yu, J. S., Chang, Y. S., Li, L., and Wu, C. C. (2019) Integrated analyses utilizing metabolomics and transcriptomics reveal perturbation of the polyamine pathway in oral cavity squamous cell carcinoma. *Anal. Chim. Acta* 1050, 113-122
9. 9. Hsu, C. W., Chang, K. P., Huang, Y., Liu, H. P., Hsueh, P. C., Gu, P. W., Yen, W. C., and Wu, C. C. (2019) Proteomic profiling of paired interstitial fluids reveals dysregulated pathways and salivary NID1 as a biomarker of oral cavity squamous cell carcinoma. *Mol. Cell. Proteomics* 18, 1939-1949
10. 10. Chu, H. W., Chang, K. P., Hsu, C. W., Chang, I. Y., Liu, H. P., Chen, Y. T., and Wu, C. C. (2019) Identification of salivary biomarkers for oral cancer detection with untargeted and targeted quantitative proteomics approaches. *Mol. Cell. Proteomics* 18, 1796-1806
11. 11. Chen, P. J., Ko, I. L., Lee, C. L., Hu, H. C., Chang, F. R., Wu, Y. C., Leu, Y. L., Wu, C. C., Lin, C. Y., Pan, C. Y., Tsai, Y. F., and Hwang, T. L. (2019) Targeting allosteric site of AKT by 5,7-dimethoxy-1,4-phenanthrenequinone suppresses neutrophilic inflammation. *EBioMedicine* 40, 528-540
12. 12. Wang, L. J., Lin, P. Y., Lee, Y., Huang, Y. C., Wu, C. C., Hsu, S. T., Chen, C. C., Chong, M. Y., Lin, C. H., and Hung, C. F. (2018) Increased serum levels of cysteine in patients with schizophrenia: A potential marker of cognitive function preservation. *Schizophr. Res.* 192, 391-397
13. 13. Lin, Y. H., Wu, C. C., Peng, Y. S., Wu, C. W., Chang, Y. T., and Chang, K. P. (2018) Detection of anti-p53 autoantibodies in saliva using microfluidic chips for the rapid screening of oral cancer. *RSC Advances* 8, 15513-15521
14. 14. Lin, M. H., Li, C. C., Shu, J. C., Chu, H. W., Liu, C. C., and Wu, C. C. (2018) Exoproteome profiling reveals the involvement of the foldase PrsA in the cell surface properties and pathogenesis of *Staphylococcus aureus*. *Proteomics* 18, e1700195
15. 15. Li, H. P., Peng, C. C., Wu, C. C., Chen, C. H., Shih, M. J., Huang, M. Y., Lai, Y. R., Chen, Y. L., Chen, T. W., Tang, P., Chang, Y. S., Chang, K. P., and Hsu, C. L. (2018) Inactivation of the tight junction gene CLDN11 by aberrant hypermethylation modulates tubulins polymerization and promotes cell migration in nasopharyngeal carcinoma. *J. Exp. Clin. Cancer Res.* 37, 102
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17. 17. Lee, C. C., Hsieh, Y. J., Chen, S. W., Fu, S. H., Hsu, C. W., Wu, C. C., Han, W., Li, Y., Huan, T., Chang, Y. S., Yu, J. S., Li, L., Chang, C. H., and Chen, Y. T. (2018) Bretschneider solution-induced alterations in the urine metabolome in cardiac surgery patients. *Sci. Rep.* 8, 17774
 18. 18. Kuo, R. L., Chen, C. J., Tam, E. H., Huang, C. G., Li, L. H., Li, Z. H., Su, P. C., Liu, H. P., and Wu, C. C. (2018) Interactome analysis of NS1 protein encoded by influenza A H7N9 virus reveals an inhibitory role of NS1 in host mRNA maturation. *J. Proteome Res.* 17, 1474-1484
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 20. 20. Chu, C. S., Li, D. J., Chu, C. L., Wu, C. C., and Lu, T. (2018) Decreased IL-1ra and NCAM-1/CD56 serum levels in unmedicated patients with schizophrenia before and after antipsychotic treatment. *Psychiatry Investig.* 15, 727-732
 21. 21. Chu, C. S., Chu, C. L., Wu, C. C., and Lu, T. (2018) Serum nerve growth factor beta, brain- and glial-derived neurotrophic factor levels and psychopathology in unmedicated patients with schizophrenia. *J. Chin. Med. Assoc.* 81, 577-581
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 23. 23. Wu, K. A., Wu, C. C., Chen, C. D., Chu, C. M., Shih, L. J., Liu, Y. C., Wang, C. L., Lin, H. H., and Yang, C. Y. (2017) Proteome profiling reveals novel biomarkers to identify complicated parapneumonic effusions. *Sci. Rep.* 7, 4026
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Patent and technology transfer

1. 余兆松、張雅婷、吳治慶、石宜銘、張玉生。胰臟癌之血清生物檢測標誌及其應用(A serological marker for detecting pancreatic cancer and a method for using the serological marker)。中華民國專利發明第 I408370 號，專利權期間：2013/9/11~2031/5/18。

Conference paper and book/chapter

1. Wu CC, Chang YS, Chow KP. The immunogenicity of tumor cells that express Epstein-Barr virus encoded LMP1 isolated from NPC in immunocompetent mice. The 10th international congress of immunology. 1998, 1257-1261, India.
2. Chen YT, Parker CE, Chen HW, Chen CL, Domanski D, Smith DS, Wu CC, Chung T, Liang KH, Chen MC, Chang YS, Borchers CH, Yu JS. Chapter 10: A Pipeline that Integrates the Discovery and Verification Studies of Urinary Protein Biomarkers Reveals Candidate Markers for Bladder Cancer in Comprehensive Biomarker Discovery and Validation for Clinical Application. Peter Horvatovich, Rainer Bischoff, David E. Thurston (Editors), Royal Society of Chemistry (RSC), 2013.

Honors and awards

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