



Name Chao-Jung Chen, PhD
Current Positions Professor, Graduate institute of integrated medicine,
China Medical University
91, Hsueh-Shih Road
Taichung 40402
Taiwan

Telephone +886-4-22053366 Ext. 1541 or 1542
E-mail cjchen@mail.cmu.edu.tw
E-Portfolio Website http://webap.cmu.edu.tw/TchEportfolio/index_1/cjchen
Personal Website

Education

Ph.D. in Chemistry, National Taiwan University, Taipei, Taiwan (2004-2007).
Postdoctoral training in Academia Sinica, Taipei, Taiwan (2009-2010).

Expertise

Analytical chemistry	Mass spectrometry	Proteomics
Metabolomics	Sample preparation for LC-MS	Herbal medicine analysis
Disease biomarker discovery	Cancer biomarkers	
Drug screen by mass spectrometry		

Research Interests

My research interests are in the development of novel analytical methods in liquid chromatography-mass spectrometry (LC-MS), and use clinical proteomics and metabolomics approaches to discover disease biomarkers. Current research works focus on three main aspects: (1) Novel sample purification plate for protein and peptide purification. (2) Discovering protein and metabolite biomarker of stroke, urothelial carcinoma, diabetic nephropathy. (3) Development of MS-based methods for rapid screening of active compounds in Chinese medicine.

Selected Grants:

Development of online fractionation chromatography-mass spectrometry, antibody/protein plate technology and metabolite platforms for discovery and rapid detection of biomarkers and screening of the biomarker's inhibitor. Ministry of science and technology. MOST 109-2113-M-039-001

Selected Publications

1. Chia-Hsin Lee, Hui-Chi Huang, Mei-Chun Tseng, **Chao-Jung Chen***, An extractive nano electrospray ionization-mass spectrometry method for Chinese herbal medicine authentication, JOURNAL OF FOOD AND DRUG ANALYSIS, 2021 Jun, Accepted, SCI,(IF:6.079)
2. **Chao-Jung Chen***, Che-Yi Chou, Kuo-Hsiung Shu, Hung-Chun Chen, Ming-Cheng Wang, Chia-Chu Chang, Bang-Gee Hsu, Mai-Szu Wu, Yuan-Lung Yang, Wen-Ling Liao, Chieh Yang, Yu-Tien Hsiao, Chiu-Ching Huang*, Discovery of Novel Protein Biomarkers in Urine for Diagnosis of Urothelial Cancer Using iTRAQ Proteomics, JOURNAL OF PROTEOME RESEARCH, 2021 May, 20(5):2953-2963 (IF:4.466)
3. Yu-Ching Liu, Jang-Jih Lu, Lee-Chung Lin, Hsiao-Chuan Lin, Chao-Jung Chen*, Protein Biomarker Discovery for Methicillin-sensitive, Heterogeneous Vancomycin-Intermediate, and Vancomycin-intermediate Staphylococcus aureus Strains using Label-Free Data-Independent Acquisition Proteomics, JOURNAL OF PROTEOME RESEARCH, 2021 Jan 1;20(1):164-171. (IF:4.466)

4. Chiz-Tzung Chang, Ming-Yi Shen, Ju-Yi Hsieh, Chia-Ming Chang, Hsin-Yi Liao, Fang-Yu Chen, Chung Y. Hsu, Chao-Yuh Yang, Chao-Jung Chen*, Increased electronegativity of high-density lipoprotein in uremia patients impairs its functional properties and is associated with the risk of coronary artery disease, *Atherosclerosis*, 2018, 278:147-155. (IF:5.162)
5. Yu-Ching Liu, Fuu-Jen Tsai, Chao-Jung Chen*, A rapid, multiplexed kinase activity assay using 8-plex iTRAQ labeling, SPE, and MALDI-TOF/TOF MS. *ANALYST*, 2020 , 145(3):992-1000 (IF: 4.616)

Selected Patents

1. Method for Diagnosing Whether a Subject is at High Risk for Developing Atherosclerotic Vascular Disease. (2016)US 9360451 B2, Chao-Jung Chen, Chiz-Tzung Chang, Chao-Yuh Yang.
2. Robust and low backpressure on-column tunneled frit for nano-UPLC-MS applications. (2011)US9267927B2, Chao-Jung Chen, Mei-Chun Tseng, Yet-Ran Chen.