

伍哲緯 助理教授

伍哲緯老師任職於元培醫事科技大學食品科學系，過去曾在成功大學與高雄醫學大學擔任博士後研究員，專長於外泌體，幹細胞與軟骨組織工程學研究，專長的學科為細胞生物學、生理學、生物化學、營養學等學科，曾在外交部駐外單位受訓與服務，因此擅長國際交流，並有日文口譯之技能。

工作經驗

2022 年 8 月-2024 年 7 月

博士後研究員/於高雄醫學大學骨科學研究中心擔任博士後研究員，從事粒線體，細胞外泌體，脂肪幹細胞，軟骨組織工程等研究工作

2022 年 1 月 – 2022 年 7 月

博士後研究員/於成功大學材料科學及工程學系擔任博士後研究員，從事細胞外泌體之分離、鑑定與生物活性之研究，並負責指導碩士學生進行研究與撰寫學位論文。

2021 年 9 月 – 2021 年 12 月

博士後研究員/於高雄醫學大學骨科學研究中心擔任博士後研究員，負責執行科技部個人型研究計畫，進行脂肪幹細胞之外泌體用於軟骨組織工程等研究工作。

2017 年 6 月 – 2021 年 8 月

研究助理/於高雄醫學大學骨科學研究中心擔任國科會整合型計畫研究助理，從事脂肪幹細胞用於軟骨再生與軟骨組織工程等研究工作

2010 年 3 月 – 2011 年 5 月

品管部組長/於馬來西亞的 TAIWAN FRUCTOSE (M) SDN BHD(環泰公司)擔任品質管理部的組長，負責果糖，葡萄糖，麥芽糖與麥芽胡精之品質檢驗工作，發行報告書。

2008 年 12 月 – 2009 年 11 月

技師助理/於台灣駐瓜地馬拉農業技術團擔任技師助理，協助進行當地之衛生教育與營養教育，農產品開發與農業廢棄物再利用。

學歷

2017 年 3 月：日本筑波大學 生命環境科學專攻 (2021 年取得農學博士)

2008 年 7 月：國立嘉義大學 食品科學系暨研究所 保健營養組 生命科學碩士

2006 年 7 月：國立宜蘭大學 食品科學系 農學學士

2004 年 6 月：中華醫事科技大學 食品營養科 副學士

專長

營養學與膳食療養學

人體生理學:專長於心血管與骨骼

抗氧化酵素與抗老化研究

細胞生理學與組織工程學

幹細胞與再生醫學

日文口譯

研究成果 ORCID : 0000-0001-6464-8525

1. *Che-Wei Wu*, Yao-Hui Huang; Pei-Lin Shao; Ling-Hua Chang; Cheng-Chang Lu; Chung-Hwan Chen; Yin-Chih Fu; Mei-Ling Ho; Je-Ken Chang; Shun-Cheng Wu (2025, Aug). Umbilical Cord Mesenchymal Stem Cell-Derived Extracellular Vesicles Enhance Chondrocyte Function by Reducing Oxidative Stress in Chondrocytes . International Journal of Molecular Sciences . (SCI, 72/319, BIOCHEMISTRY & MOLECULAR BIOLOGY). NSTC 114-2314-B-264-002.本人為第一作者.
2. Ling-Hua Chang, Shu-Chun Chuang, Shun-Cheng Wu, Yin-Chih Fu, Jhen-Wei Chen, *Che-Wei Wu*, Yi-Shan Lin, Cyong-Yue Liu, Yu-Hsuan Chung, Je-Ken Chang, Chung-Hwan Chen, Mei-Ling Ho (2025, Aug). Comparisons of miRNA profiles of exosomes derived from human iPSCs, ADSCs, and BMSCs and effects on chondrocyte function. Bone & Joint Research , 14(8), 696-671. (SCI, 6/139, ORTHOPEDICS).
3. Chih-Yun Lee, Swathi Nedunchezian, Sung-Yen Lin, Yu-Feng Su, *Che-Wei Wu*, Shun-Cheng Wu, Chung-Hwan Chen, Chih-Kuang Wang (2023, Nov). Bilayer osteochondral graft in rabbit xenogeneic transplantation model comprising sintered 3D-printed bioceramic and human adipose-derived stem cells laden biohydrogel. Journal of Biological Engineering . (SCI, 7/85, BIOCHEMICAL RESEARCH METHODS).
4. Han Lee, Jiunn-Der Liao, Tak-Wah Wong, *Che-Wei Wu*, Bo-Yao Huang, Shun-Cheng Wu, Pei-Lin Shao, Yu-Han Wei, Ming-Hsien Cheng (2023, Nov). Detection of micro-plasma-induced exosomes secretion in a fibroblast-melanoma co-culture model. . (SCI, 11/106, CHEMISTRY, ANALYTICAL).
5. Ling-Hua Chang, Shun-Cheng Wu, Chung-Hwan Chen, Jhen-Wei Chen, Wan-Chun Huang, *Che-Wei Wu*, Yi-Shan Lin, Yu-Ju Chen, Je-Ken Chang, Mei-Ling Ho (2023, Aug). Exosomes Derived from Hypoxia-Cultured Human Adipose Stem Cells Alleviate Articular Chondrocyte Inflammation and Post-Traumatic Osteoarthritis Progression . International Journal of Molecular Sciences . (SCI, 25/174, BIOCHEMISTRY & MOLECULAR BIOLOGY).
6. Mei-Ling Ho; Chin-Jung Hsu; *Che-Wei Wu*, Ling-Hua Chang; Jhen-Wei Chen; Chung-Hwan Chen; Kui-Chou Huang; Je-Ken Chang; Shun-Cheng Wu; Pei-Lin Shao (2022, Jul). Enhancement of Osteoblast Function through Extracellular Vesicles Derived from Adipose-Derived Stem Cells. Biomedicine, Biomedicine 2022, 10(7), 1752. (SCI, 54/136, MEDICINE, RESEARCH & EXPERIMENTAL).

7. Swathi Nedunchezian; *Che-Wei Wu*, Shung-Cheng Wu; Chung-Hwan Chen; Je-Ken Chang; Chih-Kuang Wang (2022, May). Characteristic and Chondrogenic Differentiation Analysis of Hybrid Hydrogels Comprised of Hyaluronic Acid Methacryloyl (HAMA), Gelatin Methacryloyl (GelMA), and the Acrylate-Functionalized Nano-Silica Crosslinker . *Polymers, Polymers* 2022, 14(10),2003. (SCI, 16/86, POLYMER SCIENCE).
8. Shun-Cheng Wu, Chih-Hsiang Chang, Ling-Hua Chang, *Che-Wei Wu*, Jhen-Wei Chen, Chung-Hwan Chen, Yi-Shan Lin, Je-Ken Chang, Mei-Ling Ho. (2021,May). Simvastatin Enhances the Chondrogenesis But Not the Osteogenesis of Adipose-Derived Stem Cells in a Hyaluronan Microenvironment. *Biomedicines*,9(5), 559. (SCI, 62/139, MEDICINE, RESEARCH & EXPERIMENTAL).
9. Swathi Nedunchezian, Parikshit Banerjee, Chih-Yun Lee, Su-Shin Lee, Che-Wei Lin, *Che-Wei Wu*, Shun-Cheng Wu, Je-Ken Chang, Chih Kuang Wang. (2021,May). Generating adipose stem cell-laden hyaluronic acid-based scaffolds using 3D bioprinting via the double crosslinked strategy for chondrogenesis.*Materials Science and Engineering: C*, 124:112072. (SCI, 57/214, MATERIALS SCIENCE, MULTIDISCIPLINARY).
10. *Che Wei Wu*, Yoshihiro Nakamoto, Takumaru Hisatome, Shigeki Yoshida,Hitoshi Miyazaki. (2020, Jul). Resveratrol and its dimers ϵ -viniferin and δ -viniferin in red wine protect vascular endothelial cells by a similar mechanism with different potency and efficacy.. *The Kaohsiung Journal of Medical Sciences*, 36(7):535-542. (SCI, 93/140, MEDICINE, RESEARCH & EXPERIMENTAL). 本人為第一作者.
11. Ming-Wei Hung, *Che-Wei Wu*, Daichi Kokubu, Shigeki Yoshida, Hitoshi Miyazaki. (2019, Jan). ϵ -Viniferin is More Effective than Resveratrol in Promoting Favorable Adipocyte Differentiation with Enhanced Adiponectin Expression and Decreased Lipid Accumulation.. *Food Science and Technology Research*, 25(6): 817-826. (SCI, 125/139, FOOD SCIENCE & TECHNOLOGY).
12. Shun-Cheng Wu, Pei-Yi Huang, Chung-Hwan Chen, Benjamin Teong, Jhen-Wei Chen, *Che-Wei Wu*, Je-Ken Chang, Mei-Ling Ho. (2018, Sep). Hyaluronan microenvironment enhances cartilage regeneration of human adipose-derived stem cells in a chondral defect model.*International Journal of Biological Macromolecules*, 119:726-740. (SCI, 52/299,BIOCHEMISTRY &MOLECULAR BIOLOGY)
- 13 Houda Zrelli, *Che Wei Wu*, Nahla Zghonda, Hidehisa Shimizu, Hitoshi Miyazaki.(2013,Aug). Combined treatment of hydroxytyrosol with carbon monoxide-releasing molecule-2 prevents TNF α -induced vascular endothelial cell dysfunction through NO production with subsequent NF κ B inactivation. *BioMed Research International*, 2013,912431. (SCI,107/163, MEDICINE, RESEARCH & EXPERIMENTAL).