

CURRICULUM VITAE

PERSONAL

NAME(姓名，含英譯)

徐千彝 Chien-Yi Hsu



PROFESSIONAL APPOINTMENT (現職，含英譯)

1. 臺北醫學大學附設醫院心臟內科專任主治醫師
 2. 臺北醫學大學附設醫院研究部副主任
 3. 臺北醫學大學附設醫院心臟內科心臟衰竭組主任
 4. 臺北醫學大學專任副教授
 5. 教育部部定副教授 (副字第 151134 號)
 6. 台灣動脈硬化暨血管病醫學會 TSAVD 理事(第十屆)
 7. 中華民國血脂及動脈硬化學會 TSLA 副秘書長(第十一屆)
 8. 台灣心肌梗塞學會 TAMIS 副秘書長(第二屆)，國際委員會主任委員(第二屆)
 9. 臺灣介入性心臟血管醫學會 TSCI 研究暨登錄委員會委員(第十屆)，公共醫療政策委員會委員 (第十屆)
 10. 內科專科醫師甄審委員會資格審查小組委員 (2021, 2022, 2023, 2024)
 11. 歐洲心臟學會會士 (FESC, Fellow of European Society of Cardiology)
 12. 亞太心臟學會會士 (FAPSC, Fellow of Asian Pacific Society of Cardiology)
- 國際腫瘤心臟學會會員 (Member of International Cardio-Oncology Society, ICOS)

EDUCATION(學歷)

1. 國立陽明大學醫學士 (M.D., Faculty of Medicine, National Yang-Ming University, Taipei, Taiwan)
2. 國立陽明大學臨床醫學研究所博士 (Ph.D. Institute of Clinical Medicine, National Yang-Ming University, Taipei, Taiwan)

WORKING EXPERIENCE (經歷)

1. 台北榮民總醫院內科部住院醫師、住院總醫師、內科部主治醫師
2. 台北榮民總醫院玉里分院心臟內科主治醫師
3. 台北榮民總醫院心臟內科特約醫師
4. 國立陽明大學內科學系兼任講師
5. 美國加州大學聖地牙哥分校 (UCSD) 短期進修醫師
6. 史瓦帝尼王國 (Kingdom of Eswatini) 王室醫療團醫師
7. 臺北醫學大學附設醫院特等病房主任、君蔚國際病房主任

8. 中華民國心臟學會 TSOC 青年工作小組主任委員(第二十八屆)
9. 台灣高血壓學會 THS 理事(第八屆、第九屆), 教育委員會委員(第七屆、第八屆、第九屆), 學術委員會委員(第八屆), 教育委員會執行秘書(第八屆)
10. 台灣心肌梗塞學會 TAMIS 學術委員會委員(第一屆)
11. 臺灣介入性心臟血管醫學會 TSCI 編輯暨登錄委員(第九屆)

MAJOR RESEARCH AREA(研究領域)

1. 臨床心臟科 (冠狀動脈疾病、週邊動脈疾病、心腎症候群的治療)
2. 血管生物學 (內皮功能與動脈粥狀硬化的分子機制)
3. 介入性心臟病學 (經皮冠狀動脈介入治療)
4. 心血管疾病流行病學與預防醫學

PUBLICATION (In the nearest 5 years) (發表、出版物)

1. Chen CW, Lin YC, Lin SH, Chang CL, Huang CY, Chen JW, Lin SJ, Shao YH*, **Hsu CY***. Impact of Multiple Cardiovascular Events on Long-Term Outcomes and bleeding risk in Patients with Acute Coronary Syndrome -A Nationwide Population-Based Cohort Study. *J Am Heart Assoc.* 2025, *in press*. [*** as corresponding author**]
2. Lin TY, Leu HB, Wu YW, Tseng WK, Lin TH, Yeh HI, Chang KC, Wang JH, Yin WH, Wu CC, Huang CY, Lin SJ, **Hsu CY***, Chen JW*. Prognostic utility of neutrophil gelatinase-associated lipocalin (NGAL) levels for cardiovascular events in patients with stable coronary artery disease treated with percutaneous coronary intervention: a prospective longitudinal cohort study. *Biomark Res.* 2025;13(1):24. doi:10.1186/s40364-025-00737-7 [*** as corresponding author**]
3. **Hsu CY**, Chung FP, Chao CJ, Chen YJ, Wu CK, Wu YW, Huang JL, Chu PH, Jia-Yin Hou C, Chang HY, Hung CL. Efficacy of Sacubitril-Valsartan on Survival and Cardiac Remodeling in Hypotensive Heart Failure With Reduced Ejection Fraction: A Multicenter Study. *Mayo Clin Proc.* 2024 Jun;99(6):940-952. doi: 10.1016/j.mayocp.2023.07.023.
4. Chang TW, Hung CL, Ko SL, Liao CT, **Hsu CY**, Huang N, Mebazaa A, Chang HY. Bridging the STRONG Gap: Call to Optimize Heart Failure Treatment After Hospitalization in Women and Men in Taiwan. *Am J Cardiol.* 2024 May 17;223:52-57. doi: 10.1016/j.amjcard.2024.05.015.
5. Sung KT, Chang HY, Hsu NW, Huang WH, Lin YH, Yun CH, Hsiao CC, **Hsu CY**, Tsai SY, Chen YJ, Tsai CT, Su CH, Hung TC, CJ Hou, HI Yeh, Hung CL. Penalized model-based Unsupervised Phenomapping unravels Distinctive HFrEF phenotypes with Improved Outcomes Discrimination from Sacubitril/ Valsartan treatment Independent of MAGGIC Score. *J Am Heart Assoc.* 2023 Sep 19;12(18):e028860.
6. Chang TW, Chen YT, Su YW, Chang CC, Lin YC, Huang CY, Huang PH, Chen JW, Lin SJ, **Hsu CY***. Beta-blocker Therapy and Future Risk of Lower Limb Amputation in Patients with Diabetes and Peripheral Artery Disease. *J Taiwan Cardiovasc Interv.*

2023;14:67-76 [*** as corresponding author**]

7. Sung HP, **Hsu CY**, Lee YH, Lin PL, Liao CT, Chung FP, Ko SL, Huang CY, Lin KC, Chang HY. Iron deficiency in Taiwanese patients with heart failure and reduced ejection fraction. *J Chin Med Assoc.* 2023 Aug 1;86(8):725-731.
8. **Hsu CY**, Huang CY, Shih CM, Lin YW, Huang PH, Lin SJ, Liu CW, Lin CY, Lin FY. Tumor Necrosis Factor Superfamily 14 (LIGHT) Restricts Neovascularization by Decreasing Circulating Endothelial Progenitor Cells and Function. *Int J Mol Sci.* 2023;24:6997.
9. Chang HY, Lin CC, Chao CJ, Lin YC, Wang YC, Liao CT, Huang JL, Lee YH, Huang CY, Chien LN, **Hsu CY***. Real-world experience of angiotensin receptor–neprilysin inhibition in reduced ejection fraction heart failure patients with advanced kidney disease. *Mayo Clin Proc.* 2023 Jan 1;98(1):88-99. [*** as corresponding author**]
10. Liao CT, Toh HS, Yang CT, **Hsu CY**, Wei D, Melgarejo JD, Chang WT, Chen ZC, Chang HY, Strong C, Zhang ZY. Economic evaluation of New Blood Pressure Target for Hypertensive Patients in Taiwan According to the 2022 Hypertension Clinical Practice Guidelines: A simulation modelling study. *Hypertens Res.* 2023 Jan;46(1):187-199.
11. Ou SM, Chao CJ, Tsai MT, Lee KH, Tseng WC, Bin PJ, Lin YP, **Hsu CY***, Tarng DC*. Echocardiographic features of left ventricular dysfunction and outcomes in chronic kidney disease. *Heart.* 2022 Dec 22;109(2):134-142. [*** as corresponding author**]
12. Huang HT, Huang JL, Lin PL, Lee YH, **Hsu CY**, Chung FP, Liao CT, Chiou WR, Lin WY, Liang HW, Chang HY. Clinical impacts of sacubitril/valsartan on patients eligible for cardiac resynchronization therapy. *ESC Heart Fail.* 2022 Dec;9(6):3825-3835.
13. **Hsu CY**, Chang HY, Chao CJ, Chiou WR, Lin PL, Chung FP, Lin WY, Huang JL, Liang HW, Liao CT, Lee YH. Utility of PREDICT-HF Score in High-Risk Asian Heart Failure Patients Receiving Sacubitril/Valsartan. *Front Cardiovasc Med.* 2022 Jul 25;9:950389.
14. **Hsu CY**, Vo TTT, Lee CW, Chen YL, Lin WN, Cheng HC, Vo QC, Lee IT. Carbon monoxide releasing molecule 2 ameliorates angiotensin II-induced IL-6/Jak2/Stat3-associated inflammation by inhibiting NADPH oxidase- and mitochondrial-derived ROS in human aortic smooth muscle cells. *Biochem Pharmacol.* 2022 Feb 23;198:114978.
15. Lee YH, Chiou WR, **Hsu CY**, Lin PL, Liang HW, Chung FP, Liao CT, Lin WY, Chang HY. Different left ventricular remodeling patterns and clinical outcomes between non-ischemic and ischemic etiologies in heart failure patients receiving sacubitril/valsartan treatment. *Eur Heart J Cardiovasc Pharmacother.* 2022 Feb 16;8(2):118-129.
16. Chang HY, Hung PL, Liao CT, **Hsu CY**, Liao YC, Lu KH, Wang CC. Assessing the Facilities and Healthcare Services for Heart Failure: Taiwan versus European countries. *J Formos Med Assoc.* 2022 Jan;121(1 Pt 2):258-268.
17. Chien SC, **Hsu CY***, Liu HY, Lin CF, Hung CL, Huang CY, Chien LN. Cardiogenic

- Shock in Taiwan from 2003 to 2017 (CSiT-15 Study). *Critical Care*. 2021 Nov 18;25(1):402. [* as co-first author]
18. Vo TTT, Hsu CY*, Wee Y, Chen YL, Cheng HC, Wu CZ, Lin WN, Lee IT. Carbon Monoxide-Releasing Molecule-2 Ameliorates Particulate Matter-Induced Aorta Inflammation via Toll-Like Receptor/NADPH Oxidase/ROS/NF- κ B/IL-6 Inhibition. *Oxid Med Cell Longev*. 2021 Jul 13;2021:2855042. [* as co-first author]
 19. Chang SC, Hsu CY*, Liu LK, Lu YW, Tsai YL, Chou RH, Huang PH, Chen LK, Lin SJ. The association between serum activin A levels and albuminuria among community-dwelling middle-aged and older adults in Taiwan. *Sci Rep*. 2021 Oct 8;11(1):20032.
 20. Liao CT, Huang JL, Liang HW, Chung FP, Lee YH, Lin PL, Chiou WR, Lin WY, Hsu CY, Chang HY. The association between ivabradine and adverse cardiovascular events in acute decompensated HFrEF patients. *ESC Heart Fail*. 2021 Oct;8(5):4199-4210.
 21. Lin WY, Chung FP, Liao CT, Huang JL, Liang HW, Lee YH, Lin PL, Chiou WR, Hsu CY, Chang HY. Treatment with angiotensin receptor neprilysin inhibitor for Taiwan heart failure patients: Rationale and baseline characteristics of the TAROT-HF study *J Chin Med Assoc*. 2021 Sep 1;84(9):833-841.
 22. Chen CW, Lin YC, Shih CM, Chen WT, Lin FY, Bi WF, Kao YT, Chiang KH, Chan CS, Hsu CY, Yang TL, Hsiao CY, Hsiao BY, Chien LN, Huang CY. Association of multiple preventive therapies postdischarge and long-term health outcomes after acute myocardial infarction. *J Chin Med Assoc*. 2021 Dec 1;84(12):1084-1091.
 23. Yang TY, Huang L, Malwade S, Hsu CY, Chen YC. Diagnostic Accuracy of Ambulatory Devices in Detecting Atrial Fibrillation: Systematic Review and Meta-analysis. *JMIR Mhealth Uhealth*. 2021 Apr 9;9(4):e26167.
 24. Lin YC, Chen BL, Shih CM, Lin FY, Chen CW, Hsu CY, Kao YT, Bi WF, Chen LY, Chien LN, Fang TC, Huang CY. Effectiveness and safety of rivaroxaban versus warfarin in Taiwanese patients with end-stage renal disease and nonvalvular atrial fibrillation: A real-world nationwide cohort study. *PLoS One*. 2021 Apr 8;16(4):e0249940.
 25. Lee YH, Lin PL, Chiou WR, Huang JL, Lin WY, Liao CT, Chung FP, Liang HW, Hsu CY, Chang HY. Combination of ivabradine and sacubitril/valsartan in patients with heart failure and reduced ejection fraction. *ESC Heart Fail*. 2021 Apr;8(2):1204-1215.
 26. Liang HW, Liao CT, Lin WY, Chung FP, Huang JL, Lee YH, Lin PL, Chiou WR, Hsu CY, Chang HY. The evolution of treatment in recently decompensated HFrEF patients: Medical expenses and clinical outcomes following the adoption of sacubitril/valsartan. *J Chin Med Assoc*. 2021 Jun 1;84(6):588-595.
 27. Yeh JS, Hsu CY, Huang CY, Chen WT, Hsieh YC, Chien LN. The effect of de-escalation of P2Y₁₂ receptor inhibitor therapy after acute myocardial infarction in patients undergoing percutaneous coronary intervention: a nationwide cohort study. *PLoS One*. 2021 Jan 25;16(1):e0246029.

28. Tang X, Miao Y, Luo Y, Sriram K, Qi Z, Lin FM, Gu Y, Lai CH, **Hsu CY**, Peterson KL, Van Keuren-Jensen K, Fueger PT, Yeo GW, Natarajan R, Zhong S, Chen ZB. Suppression of Endothelial AGO1 Promotes Adipose Tissue Browning and Improves Metabolic Dysfunction. *Circulation*. 2020 Jul 28;142(4):365-379.
29. Wang WJ, **Hsu CY**, Chiou JF, Huang Y. Cardiac metastasis from non-visceral sarcoma. *Lancet Oncol*. 2020 Jan;21(1):e66.
30. Elbatreek MH, Sadegh S, Anastasi E, Guney E, Nogales C, Kacprowski T, Hassan AA, Teubner A, Huang PH, **Hsu CY**, Schiffrers PMH, Janssen GM, Kleikers PWM, Wipat A, Baumbach J, De Mey JGR, Schmidt HHHW. NOX5-induced uncoupling of endothelial NO synthase is a causal mechanism and theragnostic target of an age-related hypertension endotype. *PLoS Biol*. 2020 Nov 10;18(11):e3000885.
31. Lin HJ, Wang TD, Yu-Chih Chen M, **Hsu CY**, Wang KL, Huang CC, Hsieh MJ, Chiu YW, Chiang LT, Chuang WP, Hsu PF, Wu CH, Hung CS, Chen KC, Wu CC, Wang YC, Chou PC, Yap HY, Cheng HM. 2020 Consensus Statement of the Taiwan Hypertension Society and the Taiwan Society of Cardiology on Home Blood Pressure Monitoring for the Management of Arterial Hypertension. *Acta Cardiol Sin*. 2020 Nov;36(6):537-561.
32. Kao YT, Hsieh YC, **Hsu CY**, Huang CY, Hsieh MH, Lin YK, Yeh JS. Comparison of the TIMI, GRACE, PAMI and CADILLAC risk scores for prediction of long-term cardiovascular outcomes in Taiwanese diabetic patients with ST-segment elevation myocardial infarction: From the registry of the Taiwan Society of Cardiology. *PLoS One*. 2020 Feb 13;15(2):e0229186.
33. Lee YH, Chen YT, Chang CC, **Hsu CY**, Su YW, Li SY, Huang CC, Leu HB, Huang PH, Chen JW, Lin SJ. Risk of Ischemic Stroke in Patients with End-Stage Renal Disease Receiving Peritoneal Dialysis with New-Onset Atrial Fibrillation. *J Chin Med Assoc*. 2020 Dec;83(12):1066-1070.

糖心腎症候群的臨床應用及整合：心臟科醫師的觀點
Clinical Application and Integration of Cardiorenal-Metabolic Syndrome:
Cardiologist's Perspectives

徐千彝
台北醫學大學附設醫院

隨著糖尿病盛行率逐年攀升，越來越多研究顯示糖尿病不僅是一個單一代謝性疾病，更是一個牽動全身器官系統的慢性進展性疾病。特別是在心血管與腎臟的交互影響下，「糖心腎症候群」（Cardiorenal-Metabolic Syndrome, CRM Syndrome）已成為現代臨床醫學必須正視的重要挑戰。從心臟科的觀點來看，糖尿病患者的血管風險往往被低估，許多無症狀的心臟結構或功能異常（如心臟肥厚、舒張功能障礙、早期心衰竭徵兆）在糖尿病照護中常被忽略。此外，腎功能惡化又會進一步惡化心臟與血管負擔，形成惡性循環。

近年來，以 SGLT2 抑制劑、GLP-1 受體促效劑、non-steroidal MRA（非類固醇類礦物皮質酮受體拮抗劑）等藥物為核心的「糖心腎」整合治療策略，已被國際指引廣泛推薦。然而，台灣在臨床落實上仍面臨多重挑戰，包括醫療分科壁壘、照護團隊協作不足、以及病人個別化治療的需求。因此，本場演講將以心臟科醫師的角度，探討如何在日常臨床中識別高風險病患、善用跨專科合作、並推動以病人為中心的整合性糖心腎照護模式。期盼透過本次交流，能為糖尿病、心血管與腎臟領域的專業人員提供實務經驗分享與臨床整合應用的具體建議，共同提升病人照護品質與預後。

With the rising prevalence of diabetes worldwide, growing evidence suggests that diabetes is not merely a metabolic disorder but a progressive systemic disease affecting multiple organ systems. In particular, the interplay between cardiovascular and renal dysfunction has highlighted the emerging clinical importance of the Cardiorenal-Metabolic (CRM) Syndrome. From a cardiologist's perspective, cardiovascular risk in patients with diabetes is often underestimated. Many asymptomatic cardiac abnormalities—such as left ventricular hypertrophy, diastolic dysfunction, and early signs of heart failure—are frequently overlooked in routine diabetes care. Furthermore, declining renal function may accelerate cardiovascular deterioration, forming a vicious cycle.

In recent years, integrated treatment strategies centered on SGLT2 inhibitors, GLP-1 receptor agonists, and non-steroidal mineralocorticoid receptor antagonists (nsMRAs) have been widely recommended by international guidelines. However, several implementation challenges persist in Taiwan, including healthcare fragmentation, insufficient interdisciplinary collaboration, and the need for

personalized care. This lecture will provide insights from a cardiologist's viewpoint on identifying high-risk patients, promoting team-based care, and implementing patient-centered CRM management in clinical practice. Through this sharing, we hope to offer practical recommendations for diabetes, cardiovascular, and renal care professionals, aiming to improve patient outcomes and care quality through multidisciplinary integration.