



姚在府博士現任國立清華大學教育學院副教授、教育與心智科學研究中心副主任，兼任台灣心理學會副秘書長，並擔任 Biological Psychology 諮詢編輯與 Frontiers in Aging Neuroscience 「Neurocognitive Aging and Behavior」領域審議編輯。姚博士於荷蘭阿姆斯特丹大學取得腦與認知科學博士學位，其研究專長為教育神經科學、空間與執行功能、情緒與韌性，以及多模態腦影像與認知建模。他的研究計畫強調人類行為的複雜性與跨族群差異，結合功能性與結構性磁共振造影 ( fMRI、DTI )、腦電圖與事件相關電位 ( EEG/ERP )、腦網絡分析，以及數學化的認知行為模型 ( cognitive modeling )，建構跨層級及跨尺度的的分析方法。研究對象涵蓋資優學生、奧運等級運動員、童年逆境經驗者與高齡族群，用以探討學習、訓練與環境如何影響大腦功能與適應進而形塑不同的神經迴路。其研究對象涵蓋多元人群，包括：資賦優異學生 ( 發現其在地圖式視角轉換與導航中的特殊額頂葉動態 )、奧運等級運動員 ( 發現其在工作記憶與抑制控制歷程中的專化腦網絡調節 )、童年逆境經驗者 ( 透過統合分析證實杏仁核在情緒處理上的過度反應 )，以及高齡族群 ( 探索韌性與認知老化的功能階層化的神經機制 )。近期，姚博士結合基因資訊、腦影像與行為資料，嘗試建構跨層級的大型資料庫，探索長期運動訓練如何改變腦功能並與基因調控交互作用。這些成果不僅深化教育神經科學的理論，也為課程設計、週期化訓練及心理健康介入提供實務依據。過去幾年，姚博士已在國際 期刊發表三十餘篇論文，展現跨教育、心理、神經科學、運動科學與公共衛生等領域的合作成果。

Zai-Fu Yao, Ph.D., is an Associate Professor in the College of Education at National Tsing Hua University and Deputy Director of the Research Center for Education and Mind Sciences. He also serves as Deputy Secretary-General of the Taiwanese Psychological Association, Consulting Editor for Biological Psychology, and Review Editor for Frontiers in Aging Neuroscience (Neurocognitive Aging and Behavior). He earned his Ph.D. in Brain and Cognition from the University of Amsterdam. His research focuses on educational neuroscience, spatial and executive functions, emotion and resilience, employing multimodal neuroimaging techniques such as fMRI, DTI, and EEG/ERP, along with brain network analysis and cognitive modeling. His work spans diverse populations—including gifted adolescents, Olympic-level athletes, individuals with childhood adversity, and older adults—aiming to uncover how learning, training, and environmental factors shape brain plasticity and neural adaptation. Recently, he has begun integrating genetic data with imaging and behavioral measures to construct a multilevel database that investigates training-related neurogenetic mechanisms. Dr. Yao has published more than thirty peer-reviewed articles in international journals, advancing interdisciplinary collaborations across education, psychology, neuroscience, sports science, and public health.