ERH-CHI HSU

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Education

Doctor of Philosophy in Nursing

Johns Hopkins University, MD, U.S.

Master of Public Health

Sep 2021 - Jun 2023

Sep 2023 - Present

University of Washington, WA, U.S.

Thesis: A qualitative study about the experiences and perceptions of Asian American dementia caregivers during the COVID-19 pandemic.

- Wrote the IRB protocol as a student PI and obtained IRB approval independently.
- Conducted 17 one-on-one in-depth interviews with dementia caregivers in the International Community Health Services (ICHS) in Mandarin, Cantonese, and English mixed.

Bachelor of Science in Nursing

Aug 2014 - Jan 2019

National Yang-Ming University, Taipei, Taiwan

• Nursing practicum (1216 hrs) in medical, surgical, gynecological, psychiatric wards, and communities.

Experiences

Research Residency

School of Nursing, Johns Hopkins University, Baltimore, MD

July 2024 - Present

Project: <u>Memory Care in Assisted Living</u> (PI: Dr. Kali Thomas)

- Health services regulatory analysis and policy coding on states' regulation for assisted living.
- Spatial analysis to explore the long term care market changes using ArcGIS.

Research Residency

School of Nursing, Johns Hopkins University, Baltimore, MD

Oct 2023 - Jun 2024

Project: The Sound Study (PI: Dr. Junxin Li)

- Examined the effect of Music/40 Hz/40Hz + Music on sleep and cognition of older adults.
- Conducted analysis using linear mixed-effect model for three crossover groups with 3 longitudinal data collection points each by R and R studio.
- Prepared the initial outcomes for the next stage of grant writing.

Research Assistant

Department of Health System and Population Health, SPH, UW

Sep 2022 - Jun 2023

Project: <u>The Emergency Cardiac and Stroke (ECS) System Evaluation</u> (PI: Dr. Amber Sabbatini)

- Literature review on stroke registries by state, extracted states with time-sensitive diagnosis registry.
- Analyzed state-level stroke care quality data and reported the outcome to the ECS advisory board.
- Disseminated quality improvement surveys regarding the ECS system to EMS personnel through RedCap and analyzed results.
- Worked with Washington State Department of Health and composed an ECS assessment report to legislature.

Research Assistant

Center of Health Innovation and Policy Science (CHIPS), SPH, UW

Sep 2022 - Jun 2023

Project: Determining Tobacco Use with Medicaid Data (ASTHO/CDC) (PI: Dr. Amber Sabbatini)

- Literature review on tobacco cessation interventions and identify tobacco-related ICD/CPT codes.
- Shared the methodology of this project which could be generalized to other states in identifying tobacco users enrolled in Medicaid.
- Shared findings and considerations regarding tobacco use trends on demographics, comorbidity, and cessation attempts in Washington State.

Research Assistant

Center of Health Innovation and Policy Science (CHIPS), SPH, UW

Jun 2022 - Sep 2022

Project: Evaluation of a web-based social needs referral platform through quantitative phone surveys with patients (PI: Dr. Jerome Dugan)

- Literature review on process and outcome evaluation of social needs screening and referral platform.
- Accessed Personal Health Information complying with HIPAA and IRB regulations.

- Made 484 outreach phone calls and got 33 valid records with a 7% response rate, collected quantitative data through REDCap, and analyzed them with ANOVA test by RStudio Version 1.4.1717.
- Weekly discussion with the multidisciplinary team and preparing manuscripts for journal submission.

Registered Nurse Mar 2019 - Apr 2021

Geriatric Ward, Taipei Veterans General Hospital, Taipei, Taiwan.

- Managed acute and chronic health issues and made care plans through Comprehensive Geriatric Assessment for the elderly with multi-comorbidity.
- Collaborated with multidisciplinary teams, promoted patients' rehabilitation, and planned discharge.
- Wrote an evidence-based nursing practice report related to the effects of low-density oxygen delivery for COPD patients on exercise tolerance with the PICO approach.

Research Assistant Sep 2018 - Jan 2019

Taoyuan General Hospital, Ministry of Health and Welfare, Taoyuan City, Taiwan.

Project: Coverage and Repeatability of Fall Prevention Interventions and Patient Education Regarding Falls Among Health Workers in the Physical Medicine and Rehabilitation Departments of Hospitals.

- Literature review of fall prevention interventions and patient education.
- Analyzed and interpreted data from self-assessed questionnaires by SPSS.
- Manuscript preparation and translation from Mandarin to English.

Publications

Huang, J., Spira, A. P., Perrin, N. A., Ellis, A., **Hsu, E. C.**, Kaufmann, C. N., & Li, J. (2025). Latent classes of sleep problems and subjective cognitive decline among middle-aged and older adults in the United States. Archives of Gerontology and Geriatrics, 129, 105657. https://doi.org/10.1016/J.ARCHGER.2024.105657

Sabbatini, A. K., Parrish, C., Duber, H. C., Weaver, M., & **Hsu, E. C.** (2023). Report to the Legislature Emergency Cardiac and Stroke System Assessment. https://app.leg.wa.gov/ReportsToTheLegislature/Home/GetPDF?fileName=ECS%20Report%20(Chapter%2058%20Laws%20of%202022)_8c782540-b0f4-48b7-813d-fe1155f84d2a.pdf

Hsu, E. C., Tsai, J. H. C., Spigner, C., & Chim, K. (2023). Perceptions and Experiences of Family Caregivers of Older First-Generation Chinese Americans with Dementia. *Innovation in Aging*, 7(Suppl 1), 882. https://doi.org/10.1093/geroni/igad104.2839

Presentations

- **Hsu, E. C.**, Jutkowitz, E., & Thomas, K. (2024, November). *The Association Between Digital Technology Activities and Cognitive Domains of Community Dwelling Older Adults* [Poster presentation]. 2024 Annual Scientific Meeting of the Gerontological Society of America. Seattle, WA, United States.
- Li, J., He, R., **Hsu, E. C.**, & Li, J. (2024, November). *Key Instrumental Activities of Daily Living and Cognitive Domains in Non-demented Older Adults: A Network Analysis* [Poster presentation]. 2024 Annual Scientific Meeting of the Gerontological Society of America. Seattle, WA, United States.
- **Hsu, E. C.**, Szanton, S., Pantelyat, A., Kang, K., Huang, J., & Li, J. (2024, June). *Effects of 40 Hz Auditory Interventions on Sleep and Cognition in Older Adults with Mild Cognitive Impairment* [Oral presentation]. 8th Annual Johns Hopkins Sleep & Circadian Research Day. Baltimore, MD, United States.
- Huang, J., Spira, A. P., Perrin, N. A., Ellis, A., **Hsu, E. C.**, & Li, J. (2024, June 1-5). *Latent Classes of Sleep Problems and Subjective Cognitive Decline Among U.S. Middle-Aged and Older Adults* [Oral presentation]. SLEEP 2024, Houston, TX, United States.
- **Hsu, E. C.**, Tsai, J. H. C., Spigner, C., & Chim, K. (2023, November). *Perceptions and Experiences of Family Caregivers of Older First-Generation Chinese Americans with Dementia* [Poster presentation]. 2023 Annual Scientific Meeting of the Gerontological Society of America. Tampa, FL, United States.
- Wang, C., **Hsu, E. C.**, Li, M., Huang, J., Tufa, Y., & Li, J. (2023, November). *Lifelong Learning and Self-Efficacy of Physical Activity Engagement in Sedentary Older Adults: A Qualitative Study* [Poster presentation]. 2023 Annual Scientific Meeting of the Gerontological Society of America. Tampa, FL, United States.

Core Qualifications

- Registered Nurse, New York State Education Department, License#817035-01
- Basic Life Support (BLS), American Heart Association (AHA) certification

- Statistical Software: ArcGIS, Dedoose, Microsoft Office programs, R, REDCap, R Markdown, SAS, Stata, and Tableau.
- Language: Mandarin (native), English and Cantonese (proficient), Japanese (N3 level)

Teaching Activities

Teaching Assistant

School of Nursing, Johns Hopkins University, Baltimore, MD

Jan 2024 - Aug 2024

The Research Process and Its Application to Evidence-Based Practice

NR.210.608.8301, Spring 2024, 21 students (DNP Program)

NR.210.608.8101, Summer 2024, 81 students (MSN Program)

Volunteer

Data Analyst & Lecturer

HeartSmiles, Baltimore, MD

Oct 2023 - Dec 2023

GitHub: BCDS HeartSmiles 2023

- Applied critical service learning with a non-profit community-based organization through the course *Baltimore Community Data Science*.
- Built a dashboard by R *flexdashboard* package presenting the summer and yearly program outcomes for HeartSmiles's staff for grant writing.
- Taught low-income high school students in Baltimore bi-weekly regarding technology information.