Nai-Ching Chi, PhD, RN
Associate Professor
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Updated 2024-11

EDUCATION

Year	Degree	Field of Study	Institution & Location
2017	PhD	Biobehavioral Nursing and Health Informatics	University of Washington (UW) Seattle, Washington
2016	MS	Clinical Informatics and Patient-Centered Technologies	University of Washington (UW) Seattle, Washington
2012	MSN	Nursing	University of California San Francisco (UCSF) San Francisco, California
2004	BSN	Nursing	Tzu Chi University Hualien, Taiwan

PhD Dissertation (Advisor: Dr. George Demiris)
Challenges in Pain Management Faced by Family Caregivers in Hospice Care: An Exploratory Study and Utility Test of an Educational Tool to Support Pain Managements

MS Project (Advisor: Dr. George Demiris)
Perceived Utility and Acceptance of a Tablet-based Digital Pet Companion for Older Adults

LICENSURE

2018 - Present	RN, State of Iowa, #150441
2010 - Present	RN, State of California, #788993

CERTIFICATION

2012 - Present	CNS, State of California

PROFESSIONAL EXPERIENCE

Academic Appointments

2023 – Present	Associate Professor, The University of Iowa College of Nursing Iowa City, Iowa United States
2017 - 2023	Assistant Professor, The University of Iowa College of Nursing Iowa City, Iowa United States
2015 - 2016	Research Assistant, University of Washington Seattle, Washington United States
2014 - 2015	Teaching Assistant, University of Washington Seattle, Washington United States
2011 - 2012	Research Assistant, University of California San Francisco (UCSF) San Francisco, California United States

HONORS AND AWARDS

2024	Teaching Excellence Award, College of Nursing, University of Iowa
2023	Faculty Scholarship Award, College of Nursing, University of Iowa
2022	**Emerging Leaders Award, Hospice and Palliative Nurses Foundation (HPNF) (National award)**
2021	Leader Scholarship, Hospice and Palliative Nurses Foundation (HPNF) (National award)
2021	End-of-Life Nursing Education Consortium (ELNEC) Scholarship, Hospice and Palliative Nurses Foundation (HPNF) ((National award, one of 4 recipients in 2021)
2021	**Scholar, NIH/NIA Butler-Williams Scholars Program (National selection)**
2021	Scholar, Palliative Care Research Cooperative Group (PCRC), Dementia Palliative Care Clinical Trials Intensive (National and interdisciplinary selection)
2021	Outstanding Publication Award, Palliative & End-of-life Care Research Interest Group, Midwest Nursing Research Society (MNRS) (Regional award)
2021	**Scholar, NIH/NIA-funded Advancing Geriatrics Infrastructure and Network Growth, AGING The Aging Initiative MCCs Scholars Program** (National and interdisciplinary selection, one of 12 scholars in 2021)
2020	**Research Scholar Award, Hospice and Palliative Nurses Association (HPNA) (National award, one of 3 scholars in 2020)**
2020	New Investigator Award, Palliative & End-of-life Care Research Interest Group, Midwest Nursing Research Society (MNRS) (Regional award)
2020	Scholar, NIH/NCI-funded R25 Research Training: Harvard Medical School Workshop on Research Methods in Supportive Oncology (RMSO) (National and interdisciplinary selection)
2017	Outstanding Doctoral Graduate, University Commencement, University of Washington
2016	Retirement Association Scholarship in Aging, University of Washington (One of 6 scholars across graduate schools; $4000)
2014	Washington State King County Nurses Association Scholarship Award (Regional award, one of 12 recipients; $2,500)
2013	Top Scholar Award, University of Washington School of Nursing ($27,000)
2007	Excellent Nurse Award, Taiwan Hualien County Nurses Association
2004	Excellent Student Award, Tzu Chi University
2001-2004	Tzu Chi University Presidential Award, Tzu Chi University
2003	Award of Excellent Clinical Performance, Nanly Hsu, Dean's Scholarship, Tzu Chi University

Scientific and Educational Research Grants

Extramural Research Grants

Federal

1. 2025-2030, Dementia Pain Management: A Conversational AI Solution for Family Caregivers. NIH/NIA, GRANT14299871, Nai-Ching, Chi, **Principal Investigator**. (30% for 5 years), $3,810,770. (A favorable score of 43 in 2023. Resubmitted in 11/12/2024).

2. 2025-2030, AI Model to Predict and Mitigate Multi-Chronic Conditions Risk in ADRD Patients. NIH/NIA R01, GRANT13934020, Nai-Ching, Chi, **Co-Investigator**. (20% for 4 years), $3,076,669. (Resubmitting in 2025).

3. 2020-2022, Multimorbidity in Patients with Alzheimer's Disease and Association with Pain and Health Care Utilization: A Big Data Approach. NIH DHHS, P20 NR018081- Administrative Supplement Grant - Exploratory Center of Excellence for Advancing Multimorbidity Science (CAMS) (Gardner & Rakel, MPI), Nai-Ching, Chi, **Project Lead** (20% for 2 years), $374,683. (Funded)

4. 2018-2023, Center for Advancing Multimorbidity Science: Profiling risk and symptom expression to develop customized therapies for adults with multiple chronic conditions (CAMS). NIH/NINR (National Institute of Nursing Research), P20 NR018081(Gardner & Rakel, MPI), Nai-Ching, Chi, **Center Faculty Associate**, $2,226,995. (Funded)

International Organization
1. 2022-2025, E-Tailored Pain Management Support for Dementia Family Caregivers. Alzheimer's Association, Research Grant, AARGD-22-929062, Nai-Ching, Chi, **Principal Investigator** (20% for the first 2 years and 2% for the third year), $136,363. (Funded)

2. 2017, Pain Management Challenges for Family Caregivers in Hospice Care: An Exploratory Study and Utility Test of an Educational Tool to Support Pain Management, Nai-Ching Chi, **Principal Investigator**, Sigma Theta Tau International-Psi at-Large Chapter, $650. (Completed)

Intramural Research Grants
1. 2019 - 2020, HOspice and palliative care Pain management Enhancement, Nai-Ching Chi, **Principal Investigator**, Old Gold Summer Fellowship, University of Iowa, $6,000. (Completed)

2. 2018 - 2021, Development of Caregivers' Barriers to Pain Management Screening Questions and Revision of the Educational Material in the Caregiver Pain Management Manual, Nai-Ching Chi, **Principal Investigator**, Csomay Center for Gerontological Excellence, Woodrow W. Morris Gerontology Research Award for Faculty, $10,000. (Completed)

3. 2015 - 2017, Pain Management Challenges for Family Caregivers in Hospice Care: An Exploratory Study and Utility Test of an Educational Tool to Support Pain Management, Nai-Ching Chi, **Principal Investigator**, Hester McLaws Dissertation Funds, University of Washington, School of Nursing, $3,500. (Completed)

Extramural Training Grants
1. 2014 – 2017, Technologies Incubation Scholarship/ a Three-year Training Grant, Nai-Ching Chi, **Principal Investigator**, Taiwan Ministry of Education, $116,550. (Completed)

Intramural Training Grants (Scholarship and Fellowship)
1. 2017, Nursing Scholarship Fund, Nai-Ching Chi, recipient, University of Washington, School of Nursing, $1,000
2. 2016, Retirement Association Scholarship in Aging, Nai-Ching Chi, recipient, University of Washington, 4,000
3. 2016, Jeanne Q. Benoliel Endowed Fellowship, Nai-Ching Chi, recipient, University of Washington, School of Nursing, $4,000
4. 2016, Peter S. and Rose M. Christie Endowed Fund, Nai-Ching Chi, recipient, University of Washington, School of Nursing, $360
5. 2016, The de Tornyay Healthy Aging Center Travel Scholarship, Nai-Ching Chi, recipient, University of Washington, School of Nursing, $500
6. 2015, Benoliel Fellowship, Nai-Ching Chi, recipient, University of Washington, School of Nursing, $4,000
7. 2015, Pascoe Scholarship, Nai-Ching Chi, recipient, University of Washington, School of Nursing, $3,000
8. 2013, Hoffman Fellowship, Nai-Ching Chi, recipient, University of Washington, School of Nursing, $3,750
9. 2012, Shattuck Family Fellowship, Nai-Ching Chi, recipient, University of Washington, School of Nursing, $7,500
10. 2012, Top Scholar Award, Nai-Ching Chi, recipient, University of Washington, School of Nursing, $27,000

SCHOLARSHIP
Publications
N=38 publications, 21 data-based, 13 first authored, 9 second authored, 3 senior authored
Google scholar citation as of 11/18/2024 = 1,170, h-index = 17, i10-index = 26
Scopus citations as of 2/27/2024 = 724, h-index = 13
[KEY: * = data-based paper; bold = my authorship; underline = student author; [1] = senior author, IF=Impact Factor]

Peer Reviewed Papers

1. Zhang, M., [1]**Chi, N. C.**, Gardner, S. E., & Moon, C. (2025). Rest-activity rhythm and cognitive function in older adults: A scoping review and integrative framework. *Geriatric Nursing*, 61, 80-90. (Impact Factor = 2.5) https://www.sciencedirect.com/science/article/pii/S0197457224003926

2. ***Chi, N. C**., Nguyen, K., Shanahan, A., Demir, I., Fu, Y. K., Chi, C. L., Perkhounkova, Y., Hein, M., Buckwalter, K., Wolf, M., Walliams, K., Herr, K. (2024). Usability Testing of the PACE-App to Support Family Caregivers in Managing Pain for People with Dementia. *Gerontologist.* https://doi.org/10.1093/geront/gnae163   (Online ahead of print) (5-year Impact Factor = 5.0)

3. ***Yew, P. Y.**, Deverab, R., Liang Y., Razan., A. E. K., Sun, J., **Chi, N. C**., Chou Y. C., Tonellato, P. J., Chi, C. L. (2024). Unraveling the Complex Patterns of Multiple Chronic Conditions Among Alzheimer Disease and Related Dementias (ADRD) Patients- A Machine Learning Approach to Incorporate Synergistic Interactions. *Alzheimer's & Dementia*. (2024 IF: 16.655) https://doi.org/10.1002/alz.13923

4. **Chi, N.-C.**, Han, S., Lin, S.-Y., Fu, Y.-K., Nakad, L., & Demiris, G. (2024). Resilience-Enhancing Interventions for Family Caregivers: A Systematic Review. *Chronic illness, 20*(2), 199-220. (2021 IF=1.43) https://pubmed.ncbi.nlm.nih.gov/37259541/

5. Tonkikh, O., **Chi, N. C.**, Herr, K. A., Fishman, S. M., & Young, H. M. (2024). Supporting the Health and Well-Being of Caregivers of Persons with Pain. *Home Healthcare Now*, *42* (2), 103-109.

6. Zhang, M., Zhu, L., Lin, S.-Y., Herr, K., Chi, C.-L., Demir, I., Lopez D. K., [1]**Chi, N.-C.** (2023). Using Artificial Intelligence to Improve Pain Assessment and Pain Management: A Systematic Review. *Journal of the American Medical Informatics Association. 30*(3), *570-587.* (2021 IF=7.942) (**Editor's choice, featured**) https://academic.oup.com/jamia/article/30/3/570/6865111

7. Zhai, S., Chu, F., Tan, M., [1]**Chi, N.-C.**, [1]Ward, T., & [1]Weichao, Y. (2023). Digital Health Tools Assisted Interventions to Support Family Caregivers: An Updated Systematic. *Digital Health;* 9: 205552076231171967. doi: 10.1177/20552076231171967. eCollection 2023 Jan-Dec (2022 IF=4.687) https://pubmed.ncbi.nlm.nih.gov/37223775/

8. Tonkykh, O., **Chi, N.-C.**, Herr, K., Young, H., Fishman, S. (2023). Supporting the Health and Well-Being of Family Caregivers of Persons with Pain. *American Journal of Nursing*; *123*(6):55-61. (2022 IF=2.577) https://pubmed.ncbi.nlm.nih.gov/37233141/

9. ***Chi, N.-C.**, Nakad, L., Han, S., Washington, K., Hagiwara, Y., Riffin, C., Parker Oliver, D., Demiris, G. (2023). Family Caregivers' Perceived Challenges to Cancer Pain Management for Patients in Palliative Care. *American Journal of Hospice and Palliative Medicine, 40*(1), 43-51. (5-year IF=2.379) https://pubmed.ncbi.nlm.nih.gov/35503240/

10. Liebzeit, D., Krupp, A., Bunch, J., Tonelli, S., Griffin, E., McVeigh, S., **Chi, N.-C.**, Jaboob, S., Nakad, L., Arbaje, A., Buck, H. (2023). Empiric Literature on the Rural Age-Friendly Ecosystem: An International Scoping Review. *Health Science Reports*; *6*(5), 55-6. e1241. (2021 IF=1.95) https://pubmed.ncbi.nlm.nih.gov/37152222/

11. **Chi, N.-C.**, Fu, Y.-K., Nakad, L., Barani, E., Gilbertson-White, S., Tripp-Reimer, T., & Herr, K. (2022). Challenges That Family Caregivers Face in Providing Pain Management for Patients with Advanced Illnesses: A Systematic Review. *Journal of Palliative Medicine;25*(12):1865-1876. (2021 IF=2.947) https://pubmed.ncbi.nlm.nih.gov/36178473/

12. *Kamalumpundi, V., Saeidzadeh, S., **Chi, N.-C.,** Nair R., Gilbertson-White, S. (2022). The Efficacy of Web or Mobile Based Interventions to Alleviate Emotional Symptoms in People with Advanced Cancer: A Systematic Review and Meta-Analysis. *Supportive Care in Cancer, 30:* 3029–3042. (5-year IF=3.677) https://link.springer.com/article/10.1007/s00520-021-06496-z

13. *Saeidzadeh, S., Kamalumpundi, V., **Chi, N.-C.,** Nair R., Gilbertson-White, S. (2021). Web and mobile-based symptom management interventions for physical symptoms of people with advanced cancer: A systematic review and meta-analysis. *Palliative Medicine*; *35*(6): 1020-1038. (5-year IF=6.021) https://journals.sagepub.com/doi/full/10.1177/02692163211006317

14. **Chi, N.-C.**, Barani, E., Fu, Y.-K., Nakad, L., Gilbertson-White, S., Herr, K., & Saeidzadeh, S. (2020). Interventions To Support Family Caregivers In Pain Management: A Systematic Review. *Journal of Pain and Symptom Management*. *60*):630-656. (2021 IF=5.576) https://www.sciencedirect.com/science/article/pii/S0885392420302104

15. *Langer, S., Yi, J., **Chi, N.-C.**, & Lindhorst, T. (2020). Psychological Impacts and Coping Strategies Reported by Spousal Caregivers of Hematopoietic Cell Transplant Recipients. *Biology of Blood and Marrow Transplantation*. *26*(4):764-77. (2022 IF= 5.742) https://www.sciencedirect.com/science/article/pii/S108387911930816X

16. Kearns, W., **Chi, N.-C.**, Choi, Y., Lin, S.-Y., Thompson, H., & Demiris, G. (2019). A Systematic Review of Health Dialog Systems. *Methods of Information in Medicine*. *8*(6): 179-193. (2021 IF=2.176) https://www.thieme-connect.com/products/ejournals/abstract/10.1055/s-0040-1708807

17. *Joseph, L., Bair, H., Moorhead, S., Hanrahan, K., Butcher, H., Williams, M., & **Chi, N.-C.** (2019). Health Care Innovations Across Practice and Academia: A Conceptual Model. *Nursing Outlook*. *67*(5):596-604. (2022 IF=3.315) https://www.sciencedirect.com/science/article/pii/S0029655418305864

18. *Han, S., **Chi, N.-C.**, Washington, K., Parker Oliver, D., & Demiris, G. (2019). Adapting the Resilience Framework for Family Caregivers of Hospice Patients with Dementia. *American Journal of Alzheimers Disease & Other Dementias, 34*(6), 399-411. (5-year IF=2.9) https://journals.sagepub.com/doi/full/10.1177/1533317519862095

19. ***Chi, N.-C.**, Han, S., Barani, E., Parker Oliver, D., Washington, K., Lewis, F., . . . Demiris, G. (2019). Development and Preliminary Evaluation of a Pain Management Manual for Hospice Providers to Support and Educate Family Caregivers. *American Journal of Hospice & Palliative Medicine, 36*(3), 207-215. (5-year IF=2.379) https://journals.sagepub.com/doi/full/10.1177/1049909118804984

20. *Cheng, C., **Chi, N.-C.**, Williams, E., & Thompson, H. (2018). Examining age-related differences in functional domain impairment following traumatic brain injury *International Journal of Older People Nursing, 13*(4): e12208. (2021 IF=2.471) https://onlinelibrary.wiley.com/doi/full/10.1111/opn.12208

21. *Le, T., **Chi, N.-C.**, Chaudhuri, S., Thompson, H. J., & Demiris, G. (2018). Understanding Older Adult Use of Data Visualizations as A Resource for Maintaining Health and Wellness. *Journal of Applied Gerontology, 37*(7), 922-939. (5-year IF=2.956) https://journals.sagepub.com/doi/full/10.1177/0733464816658751

22. *Walker, A. J., Lewis, F. M., Al-Mulla, H., Alzawad, Z., & **Chi, N. C.** (2018). Being Fully Present: Gains Patients Attribute to a Telephone-delivered Parenting Program for Child-rearing Mothers with Cancer. *Cancer Nursing, 41*(4), E12-E17. (5 year IF=3.043) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5720933/

23. ***Chi, N.-C.**, Demiris, G., Pike, K. C., Washington, K., & Parker, O. D. (2018). Exploring the Challenges that Family Caregivers Faced When Caring for Hospice Patients with Heart Failure. *Journal of Social Work in End-of-Life & Palliative Care*, *14*(2-3): 162–176. (2020 IF=1.7) https://www.tandfonline.com/doi/full/10.1080/15524256.2018.1461168

24. *Han, C., **Chi, N.-C.**, Han, S., Demiris, G., Parker Oliver, D., Washington, K., . . . Ellington, L. (2018). Communicating Caregivers' Challenges with Cancer Pain Management: An Analysis of Home Hospice Visits. *Journal of Pain and Symptom Management, 55*(5), 1296-1303. (2021 IF=5.576) https://www.sciencedirect.com/science/article/pii/S0885392418300113

25. ***Chi, N.-C.**, Demiris, G., Pike, K. C., Washington, K., & Parker, O. D. (2018). Pain Management Concerns from the Family Caregivers' Perspective. *American Journal of Hospice and Palliative Medicine, 35*(4), 601-611. (5-year IF=2.379) https://journals.sagepub.com/doi/full/10.1177/1049909117729477

26. *Joe, J., Hall, A., **Chi, N. C.**, Thompson, H., & Demiris, G. (2018). IT-based Wellness Tools for Older Adults: Design Concepts And Feedback. *Informatics for Health and Social Care, 43*(2), 142-158. (2021 IF=3.017) https://www.tandfonline.com/doi/full/10.1080/17538157.2017.1290637

27. ***Chi, N. C.**, Sparks, O., Lin, S. Y., Lazar, A., Thompson, H. J., & Demiris, G. (2017). Pilot Testing a Digital Pet Avatar for Older Adults. *Geriatric Nursing, 38*(6), 542-547. (2022 IF=2.252) https://www.sciencedirect.com/science/article/pii/S0197457217301064

28. **Chi, N. C.**, & Demiris, G. (2017). Family caregivers' pain management in end-of-life care: A systematic review. *American Journal of Hospice and Palliative Medicine, 34*(5), 470-485. (5-year IF=2.379) https://journals.sagepub.com/doi/full/10.1177/1049909116637359

29. *Lewis, F. M., Alzawad, Z., Griffith, K., Almulla, H., Wu, P.-C., **Chi, N.-C.**, . . . Shands, M. E. (2017). Taking Care of Her: A Pilot Feasibility Study of a Caregiver Intervention for Women with Advanced Stage Ovarian Cancer. *Journal of Cancer Therapy, 8*(05), 472-489. https://scirp.org/journal/PaperInformation.aspx?PaperID=76513

30. *Lewis, F. M., Griffith, K. A., Walker, A., Lally, R. M., Loggers, E. T., Zahlis, E. H., . . . **Chi, N. C.** (2017). The Enhancing Connections-telephone Study: A Pilot Feasibility Test of a Cancer Parenting Program. *Supportive Care in Cancer, 25*(2), 615-623. (5-year IF=3.677) https://link.springer.com/article/10.1007/s00520-016-3448-z

31. **Chi, N. C.**, Demiris, G., Lewis, F. M., Walker, A. J., & Langer, S. L. (2016). Behavioral And Educational Interventions to Support Family Caregivers In End-of-life Care: A Systematic Review. *American Journal of Hospice and Palliative Medicine, 33*(9), 894-908. (5-year IF=2.379) https://journals.sagepub.com/doi/full/10.1177/1049909115593938

32. Backonja, U., **Chi, N. C.**, Choi, Y., Hall, A. K., Le, T., Kang, Y., & Demiris, G. (2016). Visualization approaches To Support Healthy Aging: A Systematic Review. *Journal of Innovation in Health Informatics, 37*(7), 922-939. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5222528/

33. *Chung, J., Chaudhuri, S., Le, T., **Chi, N. C.**, Thompson, H. J., & Demiris, G. (2015). The Use Of Think-aloud To Evaluate A Navigation Structure For A Multimedia Health And Wellness Application For Older Adults And Their Caregivers. *Educational Gerontology, 41*(12), 916-929. (2021 IF=1.36) https://www.tandfonline.com/doi/full/10.1080/03601277.2015.1071586

34. **Chi, N. C.**, & Demiris, G. (2015). A Systematic Review of Telehealth Tools and Interventions to Support Family Caregivers. *Journal of Telemedicine and Telecare, 21*(1), 37-44. (2021 IF=6.23) https://journals.sagepub.com/doi/full/10.1177/1357633X14562734

35. *Chen, J.-L., Kwan, M., Mac, A., **Chin, N.-C.**, & Liu, K. (2013). iStart Smart: A Primary-Care Based and Community Partnered Childhood Obesity Management Program for Chinese-American Children: Feasibility Study. *Journal of Immigrant and Minority Health, 15*(6), 1125-1128. (2021 IF= 2.015) https://link.springer.com/article/10.1007/s10903-013-9830-8

Invited Paper, Journal

November 2024

36. <u>Nakad, L.</u>, Booker, S., Gilbertson-White, S., <u>Shaw, S.</u>, **Chi, N-C.**, Herr, K. (2020). Pain and Multimorbidity in Late Life. *Current Epidemiology Reports*. 7:1-8. (2022 IF=2.593)
https://link.springer.com/article/10.1007/s40471-020-00225-6

37. **Chi, N. C.**, & Demiris, G. (2017). The Roles of Telehealth Tools In Supporting Family Caregivers: Current Evidence, Opportunities, and Limitations. *Journal of Gerontological Nursing*, *43*(2), 3-5. (2020 IF=1.254)
https://journals.healio.com/doi/abs/10.3928/00989134-20170111-04

Editorials, Journal
38. Maus, M., Belza, B., **Chi, N.-C.**, Hunter, R., Mullen, S., & Satariano, W. A. (2016). Wayfinding Technologies for Older Adults with Visual Impairments: Ideas for Future Directions. *Journal of Visual Impairment & Blindness (JVIB), 110 (6)*, 447–448. (5-year IF: 1.268)
https://journals.sagepub.com/doi/abs/10.1177/0145482X1611000613

Published Abstracts
1. ***Chi, N. C.**, <u>Shanahan, A.</u>, <u>Nguyen, K.</u>, Demir, I., Fu, Y. K., Herr, K. (2023). Usability Testing of The Pace App to Support Family Caregivers In Managing Pain For People With Dementia. Innovation in aging 7 (Suppl 1), 857

2. ***Chi, N.-C.**, <u>Lozier, P.</u>, Street, N., Buckwalter K., Gardner, S., Rakel, B., Perkhounkova, Y., Hein, M. (2023). Multimorbidity patterns in people with Alzheimer's disease. Alzheimer's & dementia 19, e064414.

3. <u>Zhang M.</u>, <u>Zhu L.</u>, Lin S., Herr K., [1]**Chi, N.-C**. (2021). Using Artificial Intelligence to Improve Pain Assessment and Pain Management: A Scoping Review. Innovation in Aging *5* (Suppl 1), 636. (2022 IF=6.06)

4. *<u>Kamalumpundi V.</u>, <u>Saeidzadeh, S.</u>, **Chi, N.-C.**, Nair R, Gilbertson-White, S. (2021). The Efficacy of Web and Mobile-Based Interventions to Alleviate Physical Symptoms in People with Advanced Diseases: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Journal of Pain and Symptom Management, 60 (1), 275. (2021 IF=5.576)

5. ***Chi, N.-C.**, <u>Nakad, L.</u>, <u>Fu, Y.-K.</u>, Demir, I., Gilbertson-White, S., Herr, K., Demiris, G., Burnside, L. (2020). Tailored Strategies and Shared Decision-making for Caregivers Managing Patients' Pain: A Web App. Innovation in Aging, *4* (Suppl 1), 153. (2022 IF=6.06)

6. **Chi, N.-C.**, <u>Han, S.</u>, <u>Fu, Y.-K.</u>, <u>Nakad, L</u>, & Demiris, G (2020). Interventions to Enhance Resilience Among Family Caregivers. Innovation in Aging *4* (Supplement_1), 151-152. (2022 IF=6.06)

7. **Chi, N.-C.**, <u>Barani, E.</u>, <u>Fu, Y.-K</u>. (2019). A Critical Review of Pain Management Training Programs for Family Caregivers. Innovation in Aging, 3(Suppl 1), S717. (2022 IF=6.06)

8. **Chi, N.-C.**, <u>Fu, Y.-K.</u>, <u>Barani, E.</u>, <u>Summerson, E.</u> (2019). Identify the Barriers that Family Caregivers Face in Managing Patients' Pain: A Literature Review. Innovation in Aging, 3(Suppl 1), S717. (2022 IF=6.06)

9. *Cheng, C., **Chi, N.-C.**, Williams, E., & Thompson, H. (2017). Examining Relationship Between Pre-injury Pain and Functional Status Following Traumatic Brain Injury, *Journal of Neurotrauma*, *13* (34), A139–140. (2020 IF=4.869)

10. ***Chi, N.**, Demiris, G., Thompson, H., Lazar, A., & Lin, S. (2016). The Usability of a Digital Companion Pet for Older Adults with Mild Cognitive Impairment. *Gerontologist,* 56, 566–566. (2020 IF=3.286)

Research and Clinical Presentations [KEY: * = data-based paper; bold = my authorship; <u>underline</u> = student author; [1] = senior author]

International

November 2024

1. ***Chi, N.-C.,** <u>Lozier, P.</u>, Street, N., Buckwalter K., Perkhounkova, Y., Hein, M., Rakel, B., Gardner, S. (2022). Leveraging Electronic Health Dataset to Identify Co-existing Multimorbidity Patterns in Individuals with Alzheimer's Disease in the US Midwest Area. The Alzheimer's Association International Conference, July 31- August 4, 2022, San Diego, California, United States. Poster Presentation.

National
2. ***Chi, N. C**., <u>Shanahan, A.</u>, <u>Nguyen, K.</u>, Demir, I., Fu, Y. K., Herr., K. (2023). Usability Testing of the PACE-App to Support Family Caregivers in Managing Pain for People with Dementia. Gerontological Society of America (GSA) 2023 Annual Scientific Meeting, November 8-12, 2023, Tampa, Florida. United States. Poster Presentation.

3. **Chi, N. C**. (2021). Existing Interventions to Support Family Caregivers in Providing Pain Management. Translational Research Institute on Pain in Later Life. Weill Cornell Medical College. TRIPLL 2021 Pain and Dementia Webinar Series, May 24th, Invited Speaker.

4. <u>Zhang, M. N.</u>, <u>Zhu, L. Z.</u>, Lin, S. Y., Herr, K., & [1]**Chi, N. C**. (2021). Using Artificial Intelligence to Improve Pain Assessment and Pain Management: A Scoping Review. Gerontological Society of America (GSA) 2021 Annual Scientific Meeting, November 10-14, 2021, Phoenix, Arizona. United States. Poster Presentation.

5. ***Chi, N.-C.,** <u>Lozier, P.</u>, Street, N., Perkhounkova, Y., Buckwalter K., Rakel, B., Gardner, S. (2021). Common Multimorbidity Patterns in Patients with Alzheimer's Disease: Big Data Approaches. 2021 Claude D. Pepper Older Americans Independence Centers (OAICs) Annual Virtual Meeting, United States. Poster Presentation.

6. ***Chi, N.-C.**, <u>Nakad, L.</u>, <u>Fu, Y.-K.</u>, Demir, I., Gilbertson-White, S., Herr, K., Demiris, G., Burnside, L. (2020). Tailored Strategies and Shared Decision-making for Caregivers Managing Patients' Pain: A Web App. The Gerontological Society of America 2020 Annual Virtual Scientific Meeting, Philadelphia, Pennsylvania, United States. Poster Presentation.

7. **Chi, N.-C.**, <u>Han, S.</u>, <u>Fu, Y.-K.</u>, <u>Nakad, L</u>, & Demiris, G. (2020). Interventions to Enhance Resilience Among Family Caregivers: A Systematic Review. The Gerontological Society of America 2020 Annual Virtual Scientific Meeting, Philadelphia, Pennsylvania, United States. Poster Presentation.

8. ***Chi, N.-C.**, <u>Nakad, L.</u>, <u>Fu, Y.-K.</u>, Demir, I., Gilbertson-White, S., Herr, K., Demiris, G., Parker Oliver, D., Hagiwara, Y. (2020). Shared Decision-making for Family Caregivers Managing Patients' Pain in Hospice Care: A Web App Approach. American Medical Informatics Annual Virtual Symposium, American Medical Informatics Association, Chicago, Illinois United States. Poster Presentation.

9. *Gilbertson White, S., <u>Kamalumpundi, V.</u>, <u>Saeidzadeh, S.</u>, **Chi, N.-C.**, Nair, R. (2020). Personal Informatics Interventions to Alleviate Emotional Symptoms in People with Advanced Cancer: A Meta-Analysis. American Medical Informatics Annual Symposium, American Medical Informatics Association, Chicago, Illinois United States. Poster Presentation.

10. *<u>Kamalumpundi, V.</u>, <u>Saeidzadeh, S.</u>, **Chi, N.-C.**, Nair, R., Gilbertson White, S. (2020). The Efficacy of Web and Mobile-Based Interventions to Alleviate Physical Symptoms in People with Advanced Diseases: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. State of the Science in Hospice and Palliative Care, The Annual Assembly of Hospice and Palliative Care, San Diego, California. Poster. (Conference canceled).

11. **Chi, N.-C.**, <u>Fu, Y.-K.</u>, <u>Barani, E.</u>, <u>Nakad, L.</u>, Gilbertson-White, S., Herr, K., Summerson, E. (2019). Challenges of Family Caregivers in Managing Patients' Pain: A Systematic Review. The Gerontological Society of America 2019 Annual Scientific Meeting, Austin, Texas United States. Poster Presentation.

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12. **Chi, N.-C.**, <u>Barani, E.</u>, <u>Fu, Y.-K.</u>, <u>Nakad, L.</u>, Gilbertson-White, S., Herr, K. (2019). Pain Management Interventions for Family Caregivers: A Systematic Review. The Gerontological Society of America 2019 Annual Scientific Meeting, Austin, Texas, United States. Poster Presentation.

13. *Cheng, C., **Chi, N. -C.**, Williams, E., Thompson, H. (2017). Examining relationship between pre-injury pain and functional status following traumatic brain injury. Annual National Neurotrauma Symposium, Snowbird, Utah, United States. Poster Presentation.

14. **Chi, N. -C.**, Demiris, G. (2016). Informatics tools to support family caregivers' pain management in end-of-life care: Current evidence and opportunities. American Medical Informatics Association Conference, Chicago, Illinois, United States. Poster Presentation.

15. ***Chi, N. -C.**, Demiris, G., Thompson, H., Lazar, A., Lin, S. Y. (2016). The usability of a digital companion pet for older adults with mild cognitive impairment. The Gerontological Society of America 69th Annual Scientific Meeting, New Orleans, Louisiana United States. Poster Presentation.

16. *Langer, S., **Chi, N. -C.**, Lindhorst, T., Yi, J. (2016). What do spousal caregivers think and feel about treatment and recovery? Cancer Survivorship Research Conference, Washington, District of Columbia United States. Poster Presentation.

17. *Kwan, M., Chen, J. L., Lam, A., **Chi, N. -C**. (2012). Istart smart-a unique partnership between primary care, academic and community centers to promote health and weight management in Chinese american immigrant children. American Academy of Pediatrics National Conference and Exhibition, American Academy of Pediatrics, New Orleans, Louisiana United States. Poster Presentation.

State/Regional
18. ***Chi, N.-C**. (2023). Leverage Technology and Data Science to Enhance Dementia Care, Multimorbidity, Pain Management & Caregiving. Presentation for Trainees of Weill Cornell Medicine's NIA-funded T32 Post-Doctoral Training Program in Behavioral Geriatrics, New York City, New York, United States. Invited Speaker.

19. ***Chi, N.-C**. (2022). Leverage Technology and Data Science to Enhance Dementia Care, Multimorbidity, Pain Management & Caregiving. Presentation for Mary S. Easton Center for Alzheimer's Research and Care at UCLA, Los Angeles, California, United States. Invited Speaker.

20. ***Chi, N.-C**. (2022). Leveraging Electronic Health Dataset to Identify Co-existing Multimorbidity Patterns in Individuals with Alzheimer's Disease. 2022 Northwestern University Pepper Center Rounds Presentation, Chicago, Illinois, United States. Invited Speaker.

21. **Chi, N.-C**. (2022). Pain Assessment in Persons with Dementia. 2022 Midwestern Conference on Health Care in the Older Adult, Iowa City, Iowa, United States. Invited Speaker.

22. ***Chi, N.-C.**, <u>Lozier, P.</u>, Street, N., Buckwalter K., Perkhounkova, Y., Hein, M., <u>Zhang, M.</u>, Rakel, B., Gardner, S. (2022). Multimorbidity in Patients with Alzheimer's Disease: Big Data Approaches. Midwest Nursing Research Society (MNRS), Schaumburg, Illinois, United States. Guaranteed Symposium Session. Oral Presentation.

23. ***Chi, N.-C.** (2021). Engage Family Caregivers Managing Pain for Patients with Dementia, Annual Virtual East Central Iowa Chapter Meeting, Hospice and Palliative Nurses Association, Iowa City, Iowa, United States. Invited Speaker.

24. ***Chi, N.-C.** (2019). HOspice and palliative care Pain management Enhancement (HOPE): Development of a Decision-making Tool to Support Family Caregivers in Pain Management. Joint Conference of Hospice and Palliative Care Association of Iowa (HPCAI) and the Iowa Alliance in Home Care (IAHC), Des Moines, Iowa, United States. Oral Presentation.

25. ****Chi, N.-C.**, Han, S., Barani, E., Demiris, G., Lewis, F., Walker, A., Washington, K., Parker Oliver, D. (2018). Evaluation of the Utility of a Pain Management Education Tool for Hospice Care Providers. Midwest Nursing Research Society (MNRS), Cleveland, Ohio, Oral Presentation.

26. *Alzawd, Z., Mulla, H. A., **Chi, N. -C.**, Walker, A. J., M, L. F. (2016). Mothers with cancer: Gains from the enhancing connections telephone program. Western Institute of Nursing (WIN) Research Conference, Anaheim, California, United States. Poster Presentation.

27. **Chi, N. -C.**, Belza, B., Satariano, W. (2014). Strategies for conducting a systematic review: The HAN wayfinding community project. Western Institute of Nursing (WIN) Research Conference, Seattle, Washington, United States. Poster Presentation.

28. Baik, D. W., **Chi, N. -C.**, Lee, M. K., Park, S. E., Williams, E., Voss, J. G. (2013). Paradigm shifts: Evolution of the UW PhD Nursing Program. Western Institute of Nursing (WIN) Research Conference, Anaheim, California United States. Poster Presentation.

29. ****Chi, N. -C.**, Demiris, G. (2016). Examination of the validity of a code book describing family caregivers' pain management challenges in hospice care. HMC Palliative Care Conference, Seattle, Washington United States. Poster Presentation.

30. ****Chi, N. -C.**, Demiris, G., Pike, K. C., Parker, O. D., Washington, K. T. (2015). Studying caregivers of hospice patients with dementia. HMC Palliative Care Conference, Seattle, Washington United States. Poster Presentation.

31. **Chi, N. -C.**, Belza, B., Satariano, W. (2014). Wayfinding technology for mobility in older adults: A CDC-HAN wayfinding project. Elder-Friendly Futures Conference, Seattle, Washington United States. Poster Presentation.

SERVICE

Editorial Board
2021-Present   Frontiers in Pain Research: Editorial Board of Geriatric Pain

Journal Manuscript Review

Year	Journal
2024	Western Journal of Nursing Research
2024	Frontiers in Pain Research: Editorial Board of Geriatric Pain
2023	Journal of the American Geriatrics Society
2020	Social Work in Health Care
2019-Present	American Journal of Hospice and Palliative Medicine®
2019	Journal of Applied Gerontology
2019	Evaluation & the Health Professions
2018	Heart & Lung: The Journal of Acute and Critical Care
2016, 2019	Journal of Pain and Symptom Management
2016, 2019	British Medical Journal
2015	Journal of Telemedicine and Telecare

Grant Reviewer

Year	Organization
2023	University of Iowa, College of Nurisng, Internal Grants
2022-Present	Alzheimer's Association, Research Grants
2021	Center for Nursing Classification and Clinical Effectiveness (CNC), Pilot Grants

2017   Csomay Center of Gerontological Excellence, Reviewer, Grant Proposals

Professional Membership, Service and Leadership
  Informatics
2021-2022   **Alliance for Nursing Informatics** (ANI)
               2021-2022, Member, Health & Nursing Informatics Policy Committee
2016-Present   **American Medical Informatics Association** (AMIA), Member
               2016-2020, Conference Reviewer
2016-2017   **Healthcare Information & Management Systems Society** (HIMSS), Member
               2016, Conference Reviewer

  Gerontology
2016-Present   **The Gerontological Society of America** (GSA), Member
               2020, Conference Reviewer

  Palliative Care
2019-Present   **American Academy of Hospice and Palliative Medicine** (AAHPM)
               2019, Conference Reviewer
2019-Present   **Palliative Care Research Cooperative Group** (PCRC), Member
               2021-2023, Co-chair, Early Career Investigator SIG
2019-Present   **Hospice and Palliative Nurse Association** (HPNA), Member
               2020-Present, Member, Award Selection Committee
  Nursing
2017-Present   **Midwest Nursing Research Society** (MNRS), Member
               2020-2021, Member, Palliative Care & End of Life RIIG, Award Selection Committee
               2021-2022, Member, Engagement Committee
               2021-Present, Co-Chair, Health Systems, Policy and Informatics RIIG
2016-2018   **Sigma Theta Tau International Nursing Organization** (STTI), Member

Advisory Panel
2023-Present   Safety Officer, NIA-funded R21 (1R21AG078544-01, PI: Jao) - The Effect of Smart
               Ambient Bright Light for Nursing Home Residents with Alzheimer's Disease and Related
               Dementias
2018   Scientific Advisory Committee, NINR-funded R01(R01NR012213, PI: Demiris) –
               A Problem-Solving Intervention for Hospice Caregivers, University of Pennsylvania

University Service
2023-Present   Research Council, University of Iowa
2021-2024   Family Issues Charter Committee, University of Iowa

Collegiate Service
2023-Present   CON-Technology Committee, interim Co-Chair
2021-Present   CON - Council on Faculty, Member
2019-2022   CON - BSN Admission Committee, Member

Faculty Mentoring
2019   Lynette Cooper, Teaching Mentor for NURS: 3518-0EXW, Pathology
2020-2021   Young-Eun Cho, Teaching Mentor for NURS: 3518-0EXW, Pathology

Community Service - Health related community organizations and groups

2016-2017	Nursing Home Visit & Homeless Shelter Service, Tzu Chi International Foundation, Seattle, Washington, United States, Volunteer
2014-2017	Tzu Chi International Medical Association, Taiwan, Medical volunteer
2011-2012	Free Health Screening Service, UCSF Asian Health Institute, San Francisco, California, United States, Medical volunteer
2009	Typhoon Morakot Flooding, TIMA, Taiwan, Medical volunteer
2009	Free Clinic Service, TIMA, Fuchien, China, Medical volunteer
2008	Sichuan Earthquake, TIMA, Sichuan, China, Medical volunteer
2006	Jave Earthquake, TIMA, Jave, Indonesia, Medical volunteer
2005	Free Clinic Service, TIMA, Green Island, Taiwan, Medical volunteer
2004	Hospice care unit, Tzu Chi Hospital, Hualien, Taiwan, Volunteer
2000	Taiwan 921 Earthquake Relief Program, Tzu Chi International Foundation, Taiwan, Volunteer

TEACHING

Course Instruction

| Fall 2018 - Present | NURS: 3518-0EXW, Pathology | Primary instructor |
| Fall 2017 - Spring 2018 | NURS: 3518-0EXW, Pathology | Team-teacher |

Mentoring and Advisement *(N=23)*

Undergraduate students (n=6)

Name	Advisement	Outcomes
Nursing		
Kristy Nguyen (2022-present)	Participating in my research team	Co-authoring 1 databased manuscript in my pain app study (revision)
Zilin Zhu (2019-2021)	Participated in my research team	Co-authored and published 1 review manuscript in family caregiving
Elizabeth Scott (2019)	Participated in my research team	-
Elizabeth Summerson (2019)	Participated in my research team	Co-authored 1 poster presentation in the national GSA conference (2019)
Madison Conrad (2018)	Participated in my research team	-
Social Work		
Emma McWherter (2022)	Participating in my research team	-

Graduate students (n=15)
University of Washington

Name	Advisement	Outcomes
MS students in Clinical Informatics		
Emelia Barani (2017-2019)	Advised in MS thesis; participated in my pain app research	Completed thesis defense; co-authored 2 review manuscripts, 1 databased manuscript, and 2 abstracts in pain and caregiving (all published)
Olivia Sparks (2017)	Advised in MS thesis; participated in my digital pet research	Completed thesis defense; co-authored 1 databased study in my digital pet study (all published)
Jeff Wong (2017)	Advised in MS thesis	Completed thesis defense
Nursing PhD students		
Shumenghui Zhai (2019-2023)	Advising caregiving research	1 student-led review manuscript in using technology to support caregiving (published)

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Frances Chu (2019-2023)	Advising caregiving research	1 student-led review manuscript in using technology to support caregiving (published)
Soojeong Han (2017-2019)	Participated in my pain management and caregiving research	1 student-led databased manuscript (published); co-authored 3 databased manuscripts in pain management and caregiving (published) and 1 review manuscript (published)

University of Iowa

Name	Advisement	Outcomes
MS students in Informatics and Computer Science		
Patrick Lozier (2020-present)	Participating in my EHR research	Co-authoring 1 databased manuscripts in EHR research (under review); and co-authored 3 conference presentations in national AAIC and NIH meetings, and regional MNRS conference (presented)
Muneeb Shahid (2020-2021)	Participated in my pain app research	Co-authoring 1 databased manuscript in my pain app research (work in progress)
Education PhD students		
Victoria Maneev (2020)	Participated in my pain app research	-
Nursing PhD students		
Dadriane Fice (2023-present)	Participating in my pain app research	Co-authoring 2 manuscripts (1 pain management in dementia caregivers; 1 multimorbidity patterns in dementia)
Angela Shanahan (2022-present)	Participating in my pain app research	Co-authoring 2 databased manuscripts; 1 poster presentation for the national GSA meeting
Meina Zhang (2020-present)	Participating in my pain app and EHR research	1 student-led review paper in AI published in the *Journal of the American Medical Informatics Association (JIMA*; impact factor 7.9); co-authored 2 poster presentations in national GSA and regional MNRS meetings (presented)
Brooke Porter (2020-present)	I serve as a co-advisor with Dr. Keela Herr	-
Lynn Nakad (2019-2021)	Participated in my pain app and caregiving research	Co-authored 1 databased manuscript and 3 review manuscripts (published); 2 published abstracts in GSA; co-authored and published 1 review manuscript; co-authoring 1 databased manuscript in my pain app study (under review)
Saeidzadeh Seyedehtanaz (2019-2020)	Participated in my pain management and caregiving research	Co-authored 2 meta-analysis manuscripts and 1 review manuscript (all published); co-authored 1 published abstract in national AAHPM conference

Commitment Member: PhD Dissertation & DNP Capstone Project (N=5)

Name	Project Name	Outcomes
College of Education, PhD		
Victoria Maneev (2020-present)	Exploring the needs in counseling for family caregivers of patients with dementia	Approved dissertation proposal
College of Nursing, PhD		

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Yo-Jen Liao (2023-present) (Pennsylvania State University)	Healthcare Workers' Pain Management Competency Among Residents with Dementia in Long-term Care	Approved dissertation proposal
Meina Zhang (2022-present)	The Association of Rest-Activity Rhythm and Healthy Aging	Approved dissertation proposal
Alaa Albashayreh (2019-2022)	Evaluating Patient-Centered Outcomes in Palliative Care and Advanced Illness Using Natural Language Processing and Big Data Analytics	Completed defense
College of Nursing, DNP		
Megan Riedsel (2019-2020)	Pilot testing a pain management intervention in a retirement community	Completed DNP project

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