

## Roschelle L. Fritz

### Curriculum Vitae

#### I. BIOGRAPHICAL INFORMATION

##### 1. Contact information

College of Nursing  
 Washington State University  
 14204 NE Salmon Creek Ave  
 Vancouver, WA 98686  
 Phone: (360) 546-9623  
 FAX: (360) 546-9398  
 Email: [shelly.fritz@wsu.edu](mailto:shelly.fritz@wsu.edu)

##### 2. Education and Licensure

2012 – 2015	Ph.D. Nursing, Washington State University (WSU), Spokane, WA
2009 – 2011	M.S.N. (Education), Walden University, Minneapolis, MN
1988 – 1992	B.S.N., Walla Walla University, College Place, WA

##### *Licensure*

1992 – present	Registered Nurse Washington (current); California and Idaho (former)
1993 – 1996	Public Health Nurse, State of California

##### 3. Professional Experience

2015 – present	Assistant Professor, College of Nursing, WSU, Vancouver, WA
2012 – 2015	Interdisciplinary Doctoral Fellow (National Science Foundation Integrative Graduation Education Research and Training), WSU, Pullman, WA
2012 – 2015	Assistant Professor, Centralia College, Centralia, WA
2011 – 2012	Adjunct Professor, Centralia College, Centralia, WA
2010 – 2012	Arbor Health Hospital and Clinics, Director Clinical Staff Development, Director Employee Health, Morton, WA
2000 – 2006	Staff Nurse Emergency Department, St. Luke's Meridian Medical Center, Meridian, ID

2004 – 2005	Nursing Program Development (core member start-up company), Idaho Home Infusion, Boise, ID
1997 – 2000	Self-employed (private nursing case management), Boise, ID
1996 – 1997	School Nurse, Valley View School District, Caldwell, ID
1993 – 1996	Public Health Nurse II, Kern County Health Department, Ridgecrest, CA
1992 – 1993	Charge Nurse (mother-baby, pediatrics), Ridgecrest Community Hospital, Ridgecrest, CA

#### **4. Professional Leadership**

2019 – present	Foresite Advisory Board. Invited member.
2018 – 2019	Hoya Health Advisory Board. Invited member.
2016 – 2020	Lewis County Hospital District 1, Washington, Publicly Elected Commissioner. Board Chair 2017-2020.
2015 – present	Centralia College Nursing Advisory Committee. Chair since 2018.
2011 – 2016	Washington State Nurse Action Coalition, Washington Center for Nursing. Invited member.

#### **5. Honors and Awards**

2020	Fellow of the American Academy of Nursing
2019	Faculty Excellence in Research Award, College of Nursing, WSU
2018	Granger Cobb Institute for Senior Living Faculty Fellow
2018	Research Excellence Award, Delta Chi Chapter-at-Large, Sigma Theta Tau, International Nursing Honor Society
2018	Regional Geriatric Nursing Research Award for a New Researcher, Western Institute of Nursing
2017	Best Gerontology Research Presentation, Western Institute of Nursing Gerontological Special Interest Group
2017, 2020	WSU Honors Faculty Fellow. Re-appointed 2020
2015	Outstanding PhD Student, College of Nursing, WSU
2012 – 2015	Integrative Graduate Education Research and Training (IGERT) Fellowship. National Science Foundation
1992	Who's Who in American Colleges and Universities, School of Nursing, Walla Walla University

#### **Nominated**

2020	Brilliant New Investigator Award – Council on the Advancement of Nursing Science
2019	Emerging Nurse Researcher/ Scholar Award – Sigma Theta Tau International

- 2019 President's Award – Friends of National Institute for Nursing Research  
2018 Faculty Excellence in Research Award – WSU College of Nursing

## **6. Professional Memberships**

Academy of Nursing  
International Society of Gerontechnology  
Delta Chi Chapter-at-Large, Sigma Theta Tau International  
Western Institute of Nursing  
Council for the Advancement of Nursing Science  
American Nurses Association

---

## **II. RESEARCH AND SCHOLARLY ACTIVITIES**

---

### **1. Nature and Significance of Research**

My research is conducted between the domains of nursing and computer science and merges high tech smart environments with intentional high touch nursing care. I directed the expansion of a health-assistive smart home project to include engineered support for self-management of chronic conditions. Although prototype smart environments are already monitoring daily activities, computer scientists and clinicians know little about how to use information collaboratively to manage chronic conditions. I lead our team's work to improve health self-management by developing smart environments that perform "information triage." I translate sensor data into design graphics allowing clinicians to care for greater numbers of individuals through automated remote monitoring and allowing timely, individualized interventions. The primary objective is to partner smart environments with traditional clinical assessment and intervention to create smart homes that can assess well-being, detect health events, precisely intervene, and determine intervention impact. The driving hypothesis of my research and its translation is that machine learning algorithms can be trained with clinician assistance to perform automated individualized assessments and interventions. The end-goal is to create a healthcare-connected (clinician-in-the-loop) smart home that can be used to assist with managing chronic conditions, care transitions, aging-in-place, and the move to value-based care.

## 2. Research Funding: Current, Pending, Completed

*Role definitions: Primary Investigator (PI); Multiple PI (MPI); one of the PIs on a multiple PI grant (Co-PI); Co-Investigator (Co-I)*

<b>Dates</b>	<b>Role</b>	<b>Agency</b>	<b>Title</b>	<b>Amount</b>	<b>Status</b>
2021	PI	Consumer Technology Association	Telehealth Weight Scale Prototype	\$27,200	Under review
2021-2023	PI/ Fellow	UC Davis; Nurse Leader Innovator Fellowship	Community-Based Smart Health System for Community-Dwelling Older Adults	\$450,000	Under review
2020-2021	Co-PI	NIH;NINR R01 Supp; MPI	A Clinician-in-the-loop Smart Home to Support Health Monitoring and Intervention for Chronic Conditions: Supplement to Focus on Alzheimer's and/ or Other Dementias	\$366,710	Current
2020-2021	PI	WSUV COVID-19	Impact and Efficacy of Homemade Masks in a Pandemic	\$8,000	Current
2017-2022	Co-PI	NIH, NINR R01; MPI	A Clinician-in-the-loop Smart Home Technology to Support Health Monitoring and Intervention for Chronic Conditions	\$1,770,000	Current
2017-2020	Co-I	NIH, OBSSR R25	Development of an Online Course Suite of Tools for Analysis of Sensor-Based Behavioral Health Data (AHA!)	\$911,651	Current
2017-2021	Co-I	WSUV RFP	Vancouver Campus Computing Infrastructure	\$70,000	Current
2016-2020	PI	Touchmark Foundation	Clinician-in-the-Loop of the Health-Assistance	\$80,000	Current

			Smart Home's Machine Reasoning		
2016-2022	PI	Linblad Scholarship	Smart Home Technology Development for the Care of Older Adults	\$17,000	Current
2018-2019	Co-PI	WSUV Mini-grant	Discovering the influence of culture on health-assistive smart home adoption by Asian immigrant older adults for infusion in artificial intelligence: Community-engaged research	\$4,000	Completed
2017-2018	Co-PI	STTI Beta Psi Chapter	Influence of Culture on Adoption of Smart Home Monitoring for Health Assistance by Asian American Adults and Older Adults	\$2,000	Completed
2017-2019	PI	Sister's of St. Mary of Oregon	Sensor Detected Motion Patterns in Advance Dementia	\$5,000	Completed
2016-2017	PI	WSUV Mini-grant	Smart Home Technology to Support Healthy Aging: Adding a Clinician in-the-Loop	\$4,800	Completed
2015-2016	PI	WSUV External Mentor	Mentor: Diane Cook	\$3,810	Completed
<b>Total amount: \$3,242,971</b>					
<b>Total amount I receive (including F&amp;A): \$844,696</b>					

### 3. Publications

**Context Statement:** In the nursing discipline first author is desirable. Last author is often the PI or senior researcher and is a desirable position with a maturing career. Sole authorship is acceptable but no more desirable than collaborations. My research is heavily multidisciplinary. Publications are in respective discipline's peer-reviewed journals, multidisciplinary journals, and methods journals. I am often the sole nursing co-author.

**Manuscripts Under Review:** <sup>1</sup> co-first authors, <sup>2</sup> graduate students, <sup>3</sup> undergraduates, <sup>4</sup> community members, <sup>5</sup> senior scientist

1. **Fritz, R.L.**, <sup>2</sup>Berry, S., & <sup>2</sup>Thomas, J. Maintaining rigor in interdisciplinary inter-methodological technology research. [*denied by Qualitative Health Research; preparing to submit to International Journal of Qualitative Methods*]

### **Invited Publications**

22. **Fritz, R.L.**, Wilson, M., & Brow, S. (2020). Homemade Respirator Masks in a Pandemic. *American Nurse*. <https://www.myamericannurse.com/a-measure-of-last-resort-homemade-respirator-masks-in-a-pandemic/> [peer-reviewed]
21. **Fritz, R.L.** & Wilson, M. (2018). Evidence Based Practice. In Phelps, S., Kane, K., & Planchon, J. *The Intersection: Where Evidence Based Nursing and Information Literacy Meet*. Cambridge, MA: Chandos Publishing.
20. <sup>2</sup>Braley, R., **Fritz, R.**, Van Son, C., Schmitter-Edgecombe, M. (2018). Prompting technology and persons with dementia: The significance of context and communication. *The Gerontologist*, 59(1), 101-111. doi:10.1093/geront/gny071 [peer-reviewed]
19. Cook, D., Duncan, G., Sprint, G., & **Fritz, R.** (2018). Using smart city technology to make healthcare smarter. *Proceedings of Institute of Electrical and Electronics Engineers (IEEE)*, 106(4), 78-722. doi:10.1109/JPROC.2017.2787688 [peer-reviewed]

**Publications (Peer-Reviewed)** <sup>1</sup> co-first authors, <sup>2</sup> graduate students, <sup>3</sup> undergraduates, <sup>4</sup> community members, <sup>5</sup> senior scientist

18. **Fritz, R.L.**, Wilson, M., Dermody, G., Schmitter-Edgecombe, M., & Cook, D. (2020). Automated smart home assessment to support pain management. *Journal of Medical Internet Research*, 22(11):e23943. doi: 10.2196/23943
17. Sprint, G., Cook, D., & **Fritz, R.L.** (2020). Behavioral health differences between subject groups identified using smart homes and change point detection. *IEEE Journal of Biomedical and Health Informatics*. doi:10.1109/JBHI.2020.2999607
16. **Fritz, R.L.**, & Dermody, G. (2020). Interpreting health events in big data using qualitative traditions. *International Journal of Qualitative Research*. In press. doi: 10.1177/1609406920976453
15. <sup>1</sup>**Fritz, R. L.**, <sup>1</sup>Nguyen-Truong, C. K. Y., <sup>3</sup>Lau, C., <sup>3</sup>Lee, J., <sup>3</sup>Le, C., <sup>3</sup>Kim, J., <sup>3</sup>Wong, K., <sup>3</sup>Leung, J., <sup>3</sup>Nguyen, T. H., <sup>3</sup>Le, T. V., <sup>2</sup>Nevers, J. I., & <sup>3</sup>Truong, A. M. (2020). Older Asian immigrants' perceptions on adoption of health-assistive smart homes. *Gerontechnology*. 19(4).

*Awarded Best Paper by Asian & Pacific Islander Caucus for Public Health (APIC), a sub-committee of the American Public Health Association.*

14. Nguyen-Truong, C. K. Y., <sup>2</sup>Closner, M., & **Fritz, R. L.** (2019). Culturally safe didactic dialogue circles: Student and cultural community leader engagement. *Journal of Nursing Education*, 58(4), 251-252. doi:10.3928/01484834-20190321-15
13. <sup>1</sup>Nguyen-Truong, C. & **Fritz, R.** (2019). Health-assistive smart homes for aging in place: Leading the way for integration of the Asian immigrant voice. *Asian Pacific Island Nursing Journal*, 3(4), 154-159. doi:10.31372/20180304.1087 [Special Issue Technology and Health]
12. **Fritz, R.**, & Dermody, G. (2019). A nurse-driven method for developing artificial intelligence in “smart” homes for aging in place. *Nursing Outlook*, 67(2), 140-153. doi:10.1016/j.outlook.2018.11.004
11. Dermody, G., & **Fritz, R.** (2018). A conceptual framework for clinicians working with artificial intelligence and health-assistive smart homes. *Nursing Inquiry*, 26(1), e12267. doi:10.1111/nin.1226
10. <sup>1</sup>Nguyen-Truong, C. K. Y., **Fritz, R. L.**, <sup>4</sup>Lee, J., <sup>4</sup>Lau, C., <sup>4</sup>Le, C., <sup>4</sup>Kim, J., <sup>4</sup>Leung, H., <sup>4</sup>Nguyen, T. H., <sup>4</sup>Leung, J., <sup>4</sup>Le, T. V., <sup>4</sup>Truong, A. M., Postma, J., Hoeksel, R., & Van Son, C. (2018). Interactive co-learning for research engagement and education (I-COREE) curriculum to build capacity between community partners and academic researchers. *Asian/Pacific Island Nursing Journal*, 3(4), 126-138. doi:10.31372/20180304.1030. [Special Issue Technology and Health]
9. <sup>2</sup>Ghods, A., <sup>2</sup>Caffrey, K., <sup>2</sup>Lin, B., <sup>2</sup>Fraga, K., **Fritz, R.**, Schmitter-Edgecombe, M., Hundhausen, C. & Cook, D. (2018). Iterative design of visual analytics for a clinician-in-the-loop smart home. *IEEE Journal of Biomedical and Health Informatics*, 23(4), 1742-1748. Featured on cover. doi:10.1109/JBHI.2018.2864287
8. **Fritz, R.L.**, & Cook, D. (July 2017). Identifying varying health states in smart home sensor data: An expert-guided approach. Conference paper. *World Multi-Conference of Systemics, Cybernetics and Informatics: WMSCI 2017*. Orlando, FL. Indexed Scopus.
7. **Fritz, R.L.**, & Vandermause, R. (2017). Data collection via in-depth email interviewing: Lessons from the Field. *Qualitative Health Research*, 28(10), 1640-1649. doi:10.1177/1049732316689067
6. Bolkan, C., & **Fritz, R.** (2017, July 26). Gerontechnology across the continuum: From independent to assisted living. Symposium Abstract. *International Association of Gerontology and Geriatrics, IAGG2017*. San Francisco, CA. doi.org/10.1093/geroni/igx004.2436
5. **Fritz, R.**, Schmitter-Edgecombe, M., Crandall, A., & Cook, D. (2017, July 26). Health-assistive smart homes with a clinician-in-the-loop. Abstract. *International Association of Gerontology and Geriatrics, IAGG2017: Innovation in Aging*. San Francisco, CA. doi.org/10.1093/geroni/igx004.2437

4. <sup>2</sup>Sprint, G., Cook, D., **Fritz, R.**, Schmitter-Edgecombe, M. (2016). Using smart homes to detect and analyze health events. *Computer*, 49(11), 29-37. Featured article. doi:10.1109/MC.2016.338  
  
**Cover feature article.** *This article reports on three health events recognized by our machine learning algorithm.*
3. Sprint, G., Cook, D., **Fritz, R.**, Schmitter-Edgecombe, M. (2016). Detecting health and behavior change by analyzing smart home sensor data. Conference Paper. 2016 *IEEE International Conference on Smart Computing (SMARTCOMP)*. doi:10.1109/SMARTCOMP.2016.7501687
2. **Fritz, R.L.**, Corbett, C.L., Vandermause, R., & Cook, D. (2016). The influence of culture on older adults' adoption of smart home monitoring. *Gerontechnology*, 14(3), 146-156. doi:10.4017/gt.2016.14.3.010.00
1. Vandermause, R., Barbosa-Leiker, C., & **Fritz, R.** (2014). Innovations in research education: Findings from a study of teaching/learning research using multiple analytical perspectives. *Journal of Nursing Education*, 53(12), 673-677. doi:10.3928/01484834-20141120-02

#### 4. Presentations

##### Invited NIH Presentations

1. **Fritz, R.**, & Cook, D. (2019, December 6). *ICT-Driven Healthcare for Personal and Population Health*. [Invited Keynote Speaker]. National Institute of Behavioral and Social Science Research. Bethesda, Maryland.
2. **Fritz, R.**, & Cook, D. (2019, July 16). *Managing (your) health with (your) smart home*. Precision Health: Smart Technologies, Smart Health. [Invited Keynote Speaker]. National Institute of Nursing Research. Bethesda, Maryland.
3. **Fritz, R.**, & Cook, D. (2019, July 16). *Ambient and wearable sensor data analysis for precision health applications*. [Invited Expert Trainer]. Workshop. Precision Health: Smart Technologies, Smart Health. National Institute of Nursing Research. Bethesda, Maryland.
4. **Fritz, R.** (2018, July 26). *Managing chronic conditions with (your) smart home*. Precision Health: Smart Technologies, Smart Health. [Invited Keynote Speaker]. National Institute of Nursing Research. Bethesda, Maryland.
5. **Fritz, R.**, & Cook, D. (2018, July 26). *Sensor data analysis: Environmental and wearable*. [Invited Expert Trainer]. Workshop. Precision Health: Smart Technologies, Smart Health. National Institute of Nursing Research. Bethesda, Maryland.



**Other Invited Presentations (Audience Sizes ~25 – 950 Persons)**

1. **Fritz, R.** (2019, May 28). *Encoding care into technology. Coding Caring Workshop.* [Panelist]. Stanford University Arrillaga Alumni Center. Stanford, California.  
*Audience primarily academics from across the globe, industry start-up founders and entrepreneurs, ~25 persons (attendance by invitation only).*
2. **Fritz, R.** (2019, April 6). *Smart technology: Educating NP students for practice.* [Keynote Speaker]. National Organization of Nurse Practitioner Faculty (NONPF) – 45<sup>th</sup> NONPF Annual Conference. Atlanta, Georgia.  
*Audience primarily nurse practitioner faculty (academics and clinicians), ~950 persons attended presentation.*
3. **Fritz, R.** (2019, April 4). *Managing chronic conditions using health-assistive smart homes.* [Keynote Speaker]. Rantz/Skubic Labs. University of Missouri, Columbia.  
*Audience all academics from multiple disciplines, ~25 persons attended presentation.*
4. **Fritz, R.,** Cook, D., & Schmitter-Edgecombe, M. (2019, March 19). *Smart technology.* [Panelist]. Women in STEM. Pullman, Washington.  
*Audience primarily undergraduate students and faculty.*
5. **Fritz, R.** (2019, February 8). *Sensor and technology for pressure detection: Environmental and wearable.* [Keynote Speaker]. Association for Advancement of Wound Care (AAWC) Pressure Ulcer International Summit. Atlanta, Georgia.  
*Audience primarily clinical persons with some academics, ~300 persons attended presentation.*
6. **Fritz, R.** (2019, February 6). *Aging, chronic conditions, and your (smart) home.* [Keynote Speaker]. UTACONHI Clinical Translational Research Forum Series. University of Texas, Arlington. CEUs offered.  
*Audience all academics from multiple disciplines, ~50 persons attended presentation.*
7. Berry, S., & **Fritz, R.** (2018, October 18). *Looking to the future: Implications of smart technology for the aging population.* [Keynote Speaker; Research Assistant Shandeigh Berry presented on behalf of Fritz]. Minnesota Home Care Association Conference. Minneapolis, Minnesota.  
*Audience primarily clinical and home health industry business leaders, ~150 persons attended presentation.*
8. **Fritz, R.,** & Berry, S. (2018, March 4). *Ethics of patient generated sensor data. Home Health Technology Summit.* [Keynote Speaker; Research Assistant Shandeigh Berry presented on behalf of Fritz]. New Orleans, Louisiana.  
*Audience primarily clinical and home health industry business leaders, ~75 persons attended presentation.*

9. **Fritz, R.,** Van Son, C., Nguyen-Truong, C., Berry, S., & Wuestney, K. (2018, September 11). *Lunch and learn: Smart assistive home research project.* [Keynote Speaker]. Touchmark Foundation Corporate Headquarters. Aurora, Oregon.  
*Audience primarily senior living industry business leaders and contractors, ~200 persons attended presentation.*
10. **Fritz, R.** (2018, June 18). *Automated assessment and intervention in (your) smart home.* [Keynote Speaker]. Greater Spokane Inc. Spokane, WA.  
*Audience primarily business leaders in the Spokane, WA area, ~30 persons attended presentation.*
11. **Fritz, R.** (2018, May 22). *Clinician-in-the-loop: An expert-guided approach to machine learning.* [Keynote Speaker]. Washington State University RN-BSN Program Seminar. Vancouver, Washington.  
*Audience all RN-BSN students from across Washington state and their faculty, ~150 persons attended presentation.*
12. Berry, S., & **Fritz, R.** (2018, June 13). *Clinician-in-the-loop: Assisting older adults to age in place using smart home technology.* [Keynote Speaker; Virtual Presentation]. Sacramento Community Gerontology Nurse Practitioner Group.  
*Audience all nurse practitioners with a clinical practice, ~25 persons attended presentation.*
13. **Fritz, R.** (2017, December 12). *Smart Homes, Future eHealth, and a Clinician-in-the-Loop.* [Keynote Speaker]. LanePowell Attorneys at Law. Seattle, Washington.  
*Audience all lawyers with national and international practices focusing on elder law, ~30 persons attended presentation.*
14. **Fritz, R.** (2017, November 9). *Healthcare + AI Northwest.* [Panelist]. Xconomy. Seattle, Washington.  
*Audience primarily technology founders, entrepreneurs, investors, ~175 persons attended presentation. Other panelists included: Oren Etzioni, CEO Allen Institute of AI; Peter Lee, VP AI & Research Microsoft; Alice Zhang, CEO Verge Genomics; Harjinder Sandhu, CEO Saykara.*
15. **Fritz, R.** (2017, May 2). *Parkinson's special interest group.* [Keynote Speaker]. Touchmark Foundation. Vancouver, Washington.  
*Audience primarily persons with Parkinson's and their families, ~50 persons attended presentation.*
16. **Fritz, R.** (2017, March 13). *Lunch and learn: The future of aging and health-assistive technologies.* [Keynote Speaker]. Touchmark Foundation. Beaverton, Oregon.  
*Audience primarily senior living industry administrative and leadership staff, ~50 persons attended presentation.*

17. **Fritz, R.** (2016, November 3). *The future of aging: Smart health smart technologies*. [Keynote Speaker]. Touchmark Foundation. Vancouver, Washington.  
*Audience primarily families from the Pacific Northwest with elderly parents and with an interest senior living technologies, ~175 persons attended presentation.*
18. **Fritz, R.** (2015, November 11). *Influence of technology on the future of healthcare*. [Keynote Speaker]. Centralia College Lyceum Series. Centralia, Washington.  
*Audience primarily community members and college students, ~150 persons attended presentation.*
19. **Fritz, R.** (2015, September 25). *Use of technology in nursing for the care of older adults*. [Keynote Speaker]. Washington State University College of Nursing. Spokane, Washington.  
*Audience primarily WSU nursing alumni, ~50 persons attended presentation.*
20. **Fritz, R.** (May 6, 2015). *Technology and nursing: A look at the future*. [Keynote Speaker]. Providence Southwest Region Nurse Day 2015. Olympia, Washington.  
*Audience primarily Providence administrative and staff nurses, ~150 persons attended presentation.*

**Conference Presentations** <sup>1</sup> co-first authors, <sup>2</sup> graduate students, <sup>3</sup> undergraduates, <sup>4</sup> community members, <sup>5</sup> senior scientist

- Dermody, G., **Fritz, R.**, Glass, C. Dunham, M. (2020, November). *Readiness to adopt health smart home technology in Australian older adults*. [Virtual Presentation]. Australian Association of Gerontology (AAG), 52<sup>nd</sup> AAG conference, Perth, Australia.
- <sup>2</sup>Berry, S., <sup>2</sup>Thomas, J., & <sup>3</sup>**Fritz, R.L.** (2020, April 17). *Qualitative rigor in applied research for technology development*. [Podium Presentation; virtual due to COVID-19]. Western Institute of Nursing, Portland, OR.
- <sup>2</sup>Wuestney, K., & <sup>5</sup>**Fritz, R.L.** (2020, April 16). *Complexity in big data: Unifying nursing theory with twenty-first century methodology*. [Poster Presentation; virtual due to COVID-19]. Western Institute of Nursing, Portland, OR.
- Wuestney, K., Van Son, C., & <sup>5</sup>**Fritz, R.** (2019, May 10). *Dynamic sleep patterns in older adults living in residential memory care: An exploratory case study*. [Poster Presentation]. American Geriatrics Society 2019 Annual Scientific Meeting. Portland, Oregon.
- Dermody, G., & **Fritz, R.** (2019, May). *Conceptual framework for clinician-in-the-loop smart home predictive analytics*. [Podium presentation]. International Congress on Innovations in Nursing, Perth, Australia.
- Nguyen-Truong, C. K. Y., Lau, C., Lee, J., Le, C., Kim, J., Wong, K., Leung, J., Nguyen, T. H., Le, T. V., Nevers, J. I., Truong, A. M., & <sup>5</sup>**Fritz, R.** (2019, April 12). *Smart home adoption by older*

*Asian immigrants: A culturally safe care context.* [Podium Presentation]. Western Institute of Nursing. San Diego, CA.

**Fritz, R.,** & Vandermause, R. (2018, April 14). *Conceptual frameworks for clinicians working with smart homes.* [Podium Symposium Chair and Co-discussant]. Western Institute of Nursing Research Conference. Spokane, WA.

Dermody, G., & <sup>5</sup>**Fritz, R.** (2018, April 14). *Conceptual framework for clinician-in-the-loop smart home predictive analytics.* [Podium Presentation]. Western Institute of Nursing Research Conference. Spokane, WA.

<sup>2</sup>Wuestney, K., Corbett, C. & <sup>5</sup>**Fritz, R.** (2018, April 14). *A theoretical model of sleep disturbance in dementia to guide smart home research.* [Podium Presentation]. Western Institute of Nursing Research Conference. Spokane, WA.

Nguyen-Truong, C., Tuong, V.L., & <sup>5</sup>**Fritz, R.** (2018, April 14). *Conceptual framework for smart home research and practice with minority older adults.* [Podium Presentation]. Western Institute of Nursing Research Conference. Spokane, WA. [Selected as the **2018 Best Gerontology Research Presentation** by Western Institute of Nursing Gerontological Special Interest Group (WINGSIG).]

**Fritz, R.,** <sup>2</sup>Braley, R., Van Son, C., & Schmitter-Edgecombe, M. (2017, April 20). *Auto-prompting for task completion in persons with dementia.* [Poster Presentation]. Western Institute of Nursing Research Conference. Denver, Colorado. [Selected as the **2017 Best Gerontology Research Presentation** by Western Institute of Nursing Gerontological Special Interest Group (WINGSIG).]

<sup>3</sup>Dammeyer, K., <sup>3</sup>Robinson, B., <sup>2</sup>Braley, R., <sup>5</sup>**Fritz, R.,** Schmitter-Edgecombe, M. (2017, March 22). *Aiding everyday activities with prompting technology: A qualitative analysis of dementia participants' experiences.* [Poster Presentation]. Academic Showcase. Pullman, Washington. [Selected for **Gray Award**.]

<sup>2</sup>Braley, R., **Fritz, R.,** Van Son, C., & Schmitter-Edgecombe, M. (2017, March 22). *The importance of context: Capturing a person with dementia's experience with prompting technology.* [Poster Presentation]. Academic Showcase, Pullman, WA.

Hinderlie, E., <sup>5</sup>**Fritz, R.** (2016, April 22). *Use of scenario repetition in training pre-licensure nursing students.* [Poster Presentation]. Western Institute of Nursing Research Conference. Anaheim, California.

#### **Presentations during my PhD training:**

**Fritz, R.,** & Vandermause, R. (2015, April) *Data collection via in-depth email interviews.* [Podium Presentation]. Western Institute of Nursing Research Conference. Albuquerque, New Mexico.

- Fritz, R.,** Vandermause, R., Corbett, C., & Cook, D. (2015, April). *The influence of culture on older adults' adoption of smart home monitoring*. [Poster Presentation]. Western Institute of Nursing Research Conference. Albuquerque, New Mexico.
- Fritz, R.,** Vandermause, R., & Altman, M. (2014, March). *Cultural influences on older adults' adoption of smart home monitoring*. [Poster Presentation]. Washington State University Academic Showcase. Pullman, Washington.
- Fritz, R.,** Doty, K., Ngizambote, M., Schmitter-Edgecombe, M., & Cook, D. (2013, October). *Detecting cognitive decline using smart home technology*. [Poster Presentation]. Washington State Public Health Association. Wenatchee, Washington.
- Fritz, R.,** Doty, K., Ngizambote, M., Schmitter-Edgecombe, M., & Cook, D. (2013, June). *Detecting cognitive decline using smart home technology*. [Poster Presentation]. Northwest Biomechanics Symposium. Moscow, Idaho.
- Vandermause, R., Barbosa-Leiker, C., & **Fritz, R.** (2013, June). *Infusing phenomenological influences in research-focused doctoral programs*. [Podium Presentation]. The Institute for Hermeneutic Phenomenology Conference: Contemporary Interpretive Scholarship Sessions. Indiana University School of Nursing Center for Research in Nursing Education. Indianapolis, Indiana.
- Fritz, R.,** Vandermause, R., Altman, M. (2013, April). *Cultural influences on older adults' adoption of smart home monitoring*. [Poster Presentation]. Western Institute of Nursing Research Conference. Seattle, Washington.
- Fritz, R.,** Doty, K., Ngizambote, M., Schmitter-Edgecombe, M., & Cook, D. (2013, April). *Detecting cognitive decline using smart home technology*. [Poster Presentation]. Western Institute of Nursing Research Conference. Anaheim, California.
- Vandermause, R., Barbosa-Leiker, C., & **Fritz, R.** (2013, January). *New doctoral education: Combining multiple analytic perspectives in teaching and learning research*. [Podium Presentation]. American Association Colleges of Nursing Doctoral Education Conference. San Diego, California.

## 6. Media Coverage, Interviews, Contributions

Washington State University Insider News. (July 9, 2020). *Cloth mask tested by nursing faculty shows promise*. <https://news.wsu.edu/2020/07/09/cloth-mask-tested-wsu-college-nursing-faculty-shows-promise-better-protection>

College of Nursing Newsletter. (July 6, 2020). *Cloth mask tested by nursing faculty shows promise*. <https://nursing.wsu.edu/2020/07/06/cloth-mask-tested-by-wsu-nursing-faculty-could-offer-more-protection>

IEEE Spectrum. (June 23, 2020). *Smart home devices can reveal behaviors associated with dementia*. <https://spectrum.ieee.org/tech-talk/biomedical/devices/smart-home-devices-can-reveal-the-health-status-of-individuals>

- East County Journal. (April 29, 2020). *Commissioner thoughts on the pandemic*. Print only.
- Fast Company. (April 7, 2020). *'This could get Orwellian really fast': COVID-19 could end privacy as we know it*. <https://www.fastcompany.com/90482264/this-could-get-orwellian-really-fast-covid-19-could-end-privacy-as-we-know-it/>
- Washington State University Insider News. (January 2019). *Dialogue circles build bridges between nursing students, communities of color*. <https://news.wsu.edu/2019/01/23/dialogue-circles-build-bridges-nursing-students-communities-color/>
- College of Nursing Newsletter. (January 2019). *Dialogue circles build bridges between nursing students, communities of color*. <https://nursing.wsu.edu/2019/01/18/dialogue-circles-help-build-bridges-between-nursing-students-and-communities-of-color/>
- Washington State University Insider News. (July 2018). *WSU smart home research expanding*. <https://news.wsu.edu/2018/07/09/ws-smart-home-research-expanding/>
- Washington State University College of Nursing. (July 2018). *WSU smart home research expanding*. Focus on Nursing. <https://nursing.wsu.edu/focus-2018/>
- Xconomy. (October 23, 2017). *WSU researchers team sensors, clinicians, algorithms for senior care*. <http://www.xconomy.com/seattle/2017/10/23/ws-researchers-team-sensors-clinicians-algorithms-for-senior-care/>
- College of Nursing Vancouver Community Advisory Newsletter. (Fall 2017). *Dr. Connie K.Y. Nguyen-Truong and Dr. Shelly Fritz Attended the 2017 Asian Health & Service Center Conference*.
- The Reflector. (October 11, 2017). *WSU Vancouver puts together 'Smart Home' research team: \$1.77 million grant award for study of health monitoring equipment*. [http://www.thereflector.com/eedition/page\\_6dbcdc40-b18c-5dc8-95b6-71be52b5660f.html](http://www.thereflector.com/eedition/page_6dbcdc40-b18c-5dc8-95b6-71be52b5660f.html)
- WSU Spokane Research Roundup. (October 2017). *Smart home research to help older adults manage health*. <https://spokane.wsu.edu/communications/ws-spokane-magazine/research-roundup-2/>
- Health Facilities Management: American Hospital Association Publication. (September 27, 2017). *Scientists develop smart sensors to help patients age in place*. <https://www.hfmmagazine.com/articles/3124-tech-talk-smart-sensors-patient-engagement-and-virtual-rehab>
- The Chronicle. (September 26, 2017). *Mossyrock native part of WSU 'smart home' research team: \$1.77 million grant awarded for study of health-monitoring equipment*. [http://www.chronline.com/news/mossyrock-native-part-of-wsu-smart-home-research-team/article\\_2c110c40-a2ea-11e7-a200-07970978991d.html](http://www.chronline.com/news/mossyrock-native-part-of-wsu-smart-home-research-team/article_2c110c40-a2ea-11e7-a200-07970978991d.html)
- Home Health Technology News. (September 26, 2017). *Grant expands WSU 'clinician-in-the-loop' research*. <http://www.homehealthtechnologynews.com/general-news/grant-expands-wsu-clinician-in-the-loop-research/>

LeadingAge News. (September 20, 2017). *New study explores smart home tech in retirement communities*. <https://www.leadingage.org/cast/new-study-explores-smart-home-tech-retirement-communities>

WSU Vancouver Research Now News. (September 19, 2017). *Aging in place through technology*. <https://wsuvresearchnow.com/highlights/>

The Spokesman. (September 18, 2017). *WSU grant expands smart-home research at Spokane facility*. <http://www.spokesman.com/stories/2017/sep/18/wsu-grant-expands-smart-home-research-at-spokane-f/>

American Association of Colleges of Nursing News Watch Weekly Addition. (September 13, 2017). *New partnerships and grant funded initiatives*. <http://www.aacnursing.org/News-Information/News/View/ArticleId/20588/News-Watch-9-13-17>

McKnight's Senior Living with Lois A. Bowers, Senior Editor. (September 12, 2017) *\$1.8 million grant funds study of 'smart' tech in senior living*. <http://www.mcknightsseniorliving.com/news/18-million-grant-funds-study-of-smart-tech-in-senior-living/article/687960/>

Washington State University News. (August 28, 2017) *\$1.77M NIH grant funds WSU professors' smart-home technology research*. <https://news.wsu.edu/2017/08/28/nih-funds-smart-home-research/>

Washington State University College of Nursing News. (July 28, 2017). *WSU college of nursing faculty present at major gerontology conference*. <https://nursing.wsu.edu/2017/07/28/wsu-nursing-faculty-gerontology-iagg/>

The Columbian. (May 3, 2017). *Washington state university faculty fellow*. <http://www.columbian.com/news/2017/may/03/applause-67/>

HealthCallings.com with Marcia Frellick. (July 2013) *Is the Nursing Doctorate Worth the Time and Money?* <http://career-news.healthcallings.com/2013/07/25/is-the-nursing-doctorate-worth-the-time-money/>

## **7. International Collaborations**

Gordana Dermody, Ph.D., R.N. and Davina Porock, Ph.D., R.N., and Naeem JanJua, Ph.D. (computer science) – Edith Cowan University, Perth, Australia. Tracy Risling, Ph.D., R.N., University of Saskatchewan, Canada. Masi Mohammadi, Ph.D. (architecture) Eindhoven University of Technology, Netherlands.

---

**III. TEACHING**


---

**1. Teaching Experience**

<u>Year</u>	<u>% Effort</u>	<u>Role</u>	<u>Course Credit</u>	<u>Course</u>
2021	100%	Faculty	2-10	Dissertation Credit (NURS 800); Spring, Summer, Fall
2021	100%	Faculty	3	Research Seminar: Grant Writing and Critique (NURS 534); Spring
2020	100%	Faculty	3	Nursing Practice: Advanced Clinical Practicum (NURS 495); Fall
2020	100%	Faculty	3	Independent Graduate Studies (NURS 598) Changed from Research Seminar: Grant Writing and Critique (NURS 534) for Nexus Student; Spring
2020	100%	Faculty; Committee Chair	3	Independent Graduate Studies (NURS 598); Spring; smart home data analytics & ground truth
2020	100%	Faculty; Committee Chair	2-10	Dissertation Credit (NURS 800); Spring, Summer, Fall
2019	100%	Faculty	3	Nursing Practice: Advanced Clinical Practicum (NURS 495); Summer, Fall
2019	100%	Faculty	3	Research Seminar: Grant Writing and Critique (NURS 534); Spring
2019	100%	Faculty; Committee Chair	2+ varied	Dissertation Credit (NURS 800); Spring, Summer, Fall
2018	100%	Faculty; Committee Chair	2+ varied	Dissertation Credit (NURS 800); Spring, Summer, Fall
2018	100%	Faculty	3	Nursing Practice: Advanced Clinical Practicum (NURS 495); Spring, Fall
2018	100%	Faculty	3	Cultural Safety and Social Justice in Global Society (NURS 455); Summer
2017	100%	Faculty	3	Nursing Practice: Advanced Clinical Practicum (NURS 495); Spring, Fall



2017	100%	Faculty; Committee Chair	2+ varied	Dissertation Credit (NURS 800); Summer
2017	100%	Faculty; Committee Chair	1	Master's Clinical Project (NURS 702); Spring
2017	33%	Faculty	3	Information Management for Clinical Practice (NURS 565); Fall; Innovative interdisciplinary project created between nursing students and CPTS 485 computer science students to design relevant visual analytics of smart home sensor data for clinicians.
2016	100%	Faculty; Committee Chair	2+ varied	Dissertation Credit (NURS 800); Fall
2016	100%	Faculty; Committee Chair	1	Master's Clinical Project (NURS 702); Fall
2016	100%	Faculty	3	Nursing Practice: Advanced Clinical Practicum (NURS 495); Fall
2016	5%	Faculty	3	Population Health Theory (NURS 440); Spring
2016	100%	Faculty	3	Research, Evidence-based Practice, and Informatics (NURS 400); Summer
2015	100%	Faculty	3	Nursing Practice: Community and Psychiatric Mental Health (NURS 465); Fall
2015	50%	Faculty	3	Population Health Theory (NURS 440); Fall

### **Invited Guest Lectures**

2020	Seattle University – Advanced Practice Nursing Roles (NURS 6009); ~80 students
2019	University of Missouri, Columbia, Nurse Practitioner Program Summer Orientation; ~150 students
2019	Foundations of Methodological Applications for Health Sciences (NURS 524)
2015-2020	Information Management for Clinical Practice (NURS 565); Fall semester each year (2016-2020). In addition, Spring 2017.
2017	Gerontechnology I (CPTS 485)

**Course Development**

- 2016 – 2019 NURS 495 RN-BSN Capstone Course. Updated to reflect industry and market needs. Changed from clinical to practice-based practicum experience, based on 4 RN-BSN pillars: Evidence-based practice, Informatics, Leadership/Management, Population Health. Curriculum change sent to university-wide Undergraduate Curriculum Committee for final approval Spring 2020.
- 2017 “Online Course Suite: Tools for Analysis of Sensor-Based Behavioral Health Data.” Multidisciplinary course designed to train researchers of health-assistive smart environments. Multidisciplinary online learning modules. Authors include Drs. Diane Cook, Maureen Schmitter-Edgecombe, Anantharaman Kalyanaraman, Gina Sprint, **Roschelle Fritz**. [National Institutes of Health Award R25EB024327.] New online course.

**Certified Nursing Education (CNE) Development**

- 2020 Masking for practice during COVID-19 (invited; planning phase)

**2. Graduate Students Advised****Current** (17 total)

Stacey Wright	DNP – FNP	2020 – present
Lindsey Karlsen	DNP – FNP	2020 – present
Jennifer Nevers	PhD Nursing	2019 – present (Chair)
Katherine Wuestney	PhD Nursing	2016 – present (Chair)
<sup>1</sup> Samuel Josephsen	Medical Student	2018 – present
Kelsey Eidem	DNP – FNP	2020 – present
Ivy Seaburg	DNP – FNP	2020 – present
Rashida Ullah	DNP – FNP	2019 – present
Andrew Worley	DNP – FNP	2019 – present
Dustin Carlson	DNP – FNP	2019 – present
Britney Allison	DNP – FNP	2019 – present
Oksana Solovyanchik	DNP – FNP	2016 – present
<sup>2</sup> Brittany Hammer	DNP – FNP	2016 – 2017
<sup>2</sup> Katrina Goth-Collins	DNP – FNP	2016 – 2018
<sup>3</sup> Rashida Ullah	DNP – Population Health	2019 – present
Suzanne Lowe	MN – Population Health	2020 – present

Laurie Flora	MN-Population Health	2019 – present
CarolAnn VinZant	MN-Population Health	2017 – present

<sup>1</sup>Sam Josephsen is conducting 100% of his research project under my guidance using data from my smart home participants and analyzing using the Fritz Method, which I developed.

<sup>2</sup>Brittney Hammer and Katrina Groth-Collins moved to advisors with expertise in their DNP project areas.

<sup>3</sup>Rashida Ullah switched degrees in 2020.

### Graduated (5 total)

Heather Carey	MN – Population Health	2015 – 2017
Stephanie Barlow	MN – Population Health	2016 – 2017
Rashida Ullah	MN – Population Health	2017 – 2018
<sup>4</sup> Rachel Braley	Master’s Psychology	2017 – 2018
<sup>5</sup> Jessamyn Dahmen	PhD Computer Science	2019 (Comm Member)
Grace Mwangi	DNP – FNP	2016 – 2020
Caroline Dutchess	DNP – FNP	2020 – 2020
Jessica Sanata	DNP – FNP	2020 – present
Elizabeth Wankowicz	DNP – FNP	2016 – present

<sup>4</sup>Rachel Braley was a student of Dr. Maureen Schmitter-Edgecombe located on the Pullman campus.

<sup>5</sup>Jessamyn Dahmen was Dr. Diane Cook’s PhD computer science student on the Pullman campus. Dissertation committee member.

### **3. Undergraduate Students Mentored (9 total)**

<sup>1</sup>Julia Damon (2020-present) – topic TBD and to include smart homes

<sup>1</sup>Kaylene Kuykendall (2020-present) – Cognitive assistive technologies for older adults

<sup>1</sup>Katie Saylor (2019 – present) – Recognizing depression using sensor-based in-home monitoring

Amanda Leatherwood (Summer 2019) – Sensor-based identification of colitis exacerbations

Jennifer Nevers (Spring 2018) – Smart home adoption by Asian immigrant older adults

Christina Backus (Spring 2017) – Smart home technology to aid with fall detection

<sup>2</sup>Brittany Robinson (2016 – 2017) – Prompting technology for dementia

<sup>2</sup>Kelsey Danmeyer (2016 – 2017) – Prompting technology for dementia

<sup>1</sup>Karri Furlong (2016 – 2017) – Detecting cognitive decline using smart home sensors  
 Jenessah Loughran (Summer 2016) – Teaching in online and hybrid environments

<sup>1</sup> Honor’s College students

<sup>2</sup> Kelsey Danmeyer and Brittany Robinson received the 2017 Gray Award from WSU for their poster, presented at Academic Showcase in Pullman.

---

#### IV. PROFESSIONAL AND COMMUNITY SERVICE

---

Service is an important aspect of the nursing profession. It is considered part of patient and health ‘advocacy,’ which is in our professional code of ethics.

##### **Service to Professional Community**

*Besides the board level and professional leadership positions listed on page 2, I served in the following capacities.*

2021	<i>International Journal of Qualitative Methods</i> . Title: Conducting Qualitative Research to Respond to COVID-19 Challenges: Reflections for the Present and Beyond	Peer-reviewer
2020, 2021	<i>International Journal of Qualitative Methods</i> . Title: Visual and Statistical Methods to Calculate Inter-Coder Reliability for Time-Resolved Naturalistic Observational Research	Peer-reviewer; re-review
2020	<i>Journal of Medical Informatics Research (JMIR)</i> . Title: Perceptions of Technologies to Help Community-Dwelling Older Adults Remain at Home: A Qualitative Study	Peer-reviewer
2020	<i>International Journal of Qualitative Methods</i> . Title: Asynchronous email interviews are an underutilized research method for health research: an overview of advantages, disadvantages, and gleanings from a research study	Peer-reviewer
2020	<i>The Gerontologist</i> . Title: Co-designing technology for ageing in place: A systematic review	Peer-reviewer
2019	<i>Journal of Medical Informatics Research (JMIR)</i> . Title: U.S. Older Adults’ Willingness to Use Emerging Technologies that can Support Quality of Life and Aging in Place	Peer-reviewer
2019	Council of Advancement Nursing Science	Peer-reviewer of conference Abstracts
2019	Stanford’s Global Report (AI100), sub-committee “Coding Caring: Human Values for an Intimate AI”	Invited to a work group generating sub-section for the updated AI100 report

2018	<i>Qualitative Health Journal</i> (multidisciplinary). Title: Engaging a Community Leader to Enhance Preparation for Depth Interviews with Community Members	Peer-reviewer
2017	<i>Sensors</i> (an engineering journal). Title: Smart Care Home System: A platform for eAssistance	Peer-reviewer
2016	American Academy of Nursing, Expert Panel on Aging	Invited to comment on technology and privacy policies for 2017 National Agenda
2016	<i>Computer IEEE</i> (professional engineering journal). Title: Machine learning in cardiac health monitoring and decision support	Peer-reviewer

### **Service to WSU College of Nursing**

2021	Canvas Course Design Template	Developed and recommended course design template to Faculty Organization
2019-present	Graduate Curriculum Committee	2019 elected member, 2-year term; 2020 elected Chair
2019-present	PhD Advisory Committee	Faculty and program committee member; admissions evaluator
2019-2020	Dean Search Committee	Invited member
2019	RN-BSN Curriculum Plan for Intensive Revision – to present to UCC committee & nursing FGO	Co-created updated curriculum plan (included state-wide dual enrollment plan & aligned with WSU BSN student learning outcomes) with Program Director Williams-Gilbert; obtained UCC & FGO approval Dec 2019
2018	Linblad Advisory Committee	Advised on building on gerontology research center
2017	Communications Taskforce	Advised Dean Griffin-Sobel on cloud data storage, naming conventions, The Daily
2016	UCORE Capstone Seminar, Pullman	Attendee; invited to architect of new N495 capstone course
2016-2019	RN-BSN Curriculum Update	Revised N495 capstone course & project curriculum with Program Director Williams-Gilbert (aligned with UCORE, ATL, responsive to clinical industry collaborators); obtained UCC & FGO approval Dec 2019

2016	Lead for RN-BSN All-Courses On-campus Day	Substituted for RN-BSN Director
2016	Manatt Focus Group, Invited	Invited attendee; discussion on Faculty Organization
2016	RN-BSN Faculty Committee; Online Orientation Course	Consulted on course development. Provided content ideas, editing.
2015-2016	Faculty Professional Development Committee	Member
2015-2016	Grand Challenge, Smart Systems and Sustaining Health	Invited member, College of Nursing Interdisciplinary Representative
2015-2016	Strategic Planning, Spokane Teaching and Health Center	Invited member
2015-present	Touchmark and Touchmark Foundation	Builder and sustainer of community stakeholder partnership

#### **Service to WSU Vancouver Campus**

2020	Research presentation to Advisory Council Summit	Program of Research
2020	IT Data Storage of PHI	Consultant
2017	Open Educational Resource Grant Proposal Review Committee	Review proposals and make recommendation for granting projects
2016 - present	Vancouver Department of Nursing Events Planning	Lead coordinator of social gatherings (e.g., retirement parties)
2016, 2017	Vancouver Campus New Faculty Orientation	Invited to be a tenure-track faculty panelist presenter to 1 <sup>st</sup> year faculty
2016	Vancouver Campus RFP Grand Challenge Committee	Invited member, smart systems committee

#### **Service to University**

2020	Ad Hoc, University-wide IT, PHI Data Storage	Consulted regarding needs of WSU researchers managing PHI
------	--	---

---

**V. CONFERENCE ATTENDANCE AND CONTINUING EDUCATION**


---

**Dates****Conference**

*Note: In 2020, due to the COVID-19 pandemic and resulting travel and social distancing restrictions, many conferences and continuing education opportunities have been canceled to date (May 31, 2020).*

October 6-9, 2020	International Society of Gerontechnology (Virtual); Trondheim, Norway
April 14-17, 2020	Western Institute of Nursing (Virtual); Portland, Oregon
February 11, 2020	Basic Life Support Red Cross; Vancouver, Washington
December 6, 2019	National Institutes of Health Office of Behavioral and Social Sciences Research Festival; Bethesda, Maryland
October 17, 2019	Washington State Hospital Association Annual Member Meeting and Governance Day; Renton, Washington
July 15-19, 2019	National Institute of Nursing Research Precision Health: Smart Health Smart Technologies Boot Camp; Bethesda, Maryland
June 23-26, 2019	Washington State Hospital Association 42 <sup>nd</sup> Annual Rural Hospital Leadership Conference; Chelan, Washington
April 10-13, 2019	Western Institute of Nursing Research, San Diego, California
October 11-12, 2018	Washington State Hospital Association Annual Member Meeting and Governance Day; Seattle, Washington
July 23-27, 2018	National Institute of Nursing Research Precision Health: Smart Health Smart Technologies Boot Camp; Bethesda, Maryland
June 24-27, 2018	Washington State Hospital Association 41 <sup>st</sup> Annual Rural Hospital Leadership Conference; Chelan, Washington
April 11-14, 2018	Western Institute of Nursing Research, Spokane, Washington
February 9, 2018	Basic Life Support Red Cross; Vancouver, Washington
October 12-13, 2017	Washington State Hospital Association Annual Member Meeting and Governance Day; Seattle, Washington
May 9-12, 2017	National Rural Health Association; San Diego, California
May 15, 2017	Suicide Training, Online, Mandatory Washington State Nursing Commission
June 22-25, 2016	Washington State Hospital Association 40 <sup>th</sup> Annual Rural Hospital Leadership Conference; Chelan, Washington

April 6-9, 2016	Western Institute of Nursing Research Conference; Anaheim, California
February 29, 2016	National Science Foundation New Career Awards Conference; Portland, Oregon
February 11, 2016	Basic Life Support Red Cross; Vancouver, Washington
April 22-25, 2015	Western Institute of Nursing Research Conference; Albuquerque, New Mexico

**Last updated February 1, 2021**