

# SUN Yuanlu (April)

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## EDUCATION

- 06/2012-05/2018 Doctor of Philosophy (Ph.D.)** University of Missouri-Columbia  
Major in Nursing, Sinclair School of Nursing  
Ph.D. Minor in Statistics, Department of Statistics
- 09/2007-07/2011 Bachelors of Science in Nursing** School of Nursing, Sun Yat-sen University

## LICENSE/CERTIFICATION

- U.S. Registered Nurse License** (MO\_NLC #2018038621, NY #741192);  
**Certified Lymphedema Therapist** (Norton #201505205);  
**Basic Life Support Certification for Provider** (AHA);  
**Chinese Registered Nurse License** (License #201144007222);

## MAJOR APPOINTMENTS

08/2022-present	Assistant professor (Tenure-track)	University of Iowa
01/2019-07/2022	Assistant Professor (Tenure-track)	University of Missouri-St. Louis
08/2018-12/2018	Research Specialist	American Lymphedema Framework Project
06/2012-05/2018	Teaching and Research Assistant	University of Missouri-Columbia
07/2011-05/2012	Registered Nurse/Research Nurse	Sun Yat-sen University Cancer Center
<u>Other appointments</u>		
09/2022-present	Associate Faculty	UI Center for Advancing Multimorbidity Science
12/2022-present	Adjunct Faculty	UIHC Dept of Nur Services & Pt Care
01/2020-present	Graduate Faculty (courtesy)	University of Missouri-Columbia
09/2018-12/2018	Statistics & Nursing SI	Columbia College

## LANGUAGE

**Mandarin** (native), **English** (full professional proficiency), **Cantonese** (intermediate), **Spanish** (beginner)

## TEACHING EXPERIENCE

Year	Role	Course name	Mode	Level	Institution/Notes
2023F	Instructor (team)	N6826 Doctor of Nursing Practice Project I	Asynchronous Online	DNP	Uiowa/Mary Dirks course lead. Developed assignment. Syllabus
2023Sp	Instructor	N5010 Clinical Data Mgt	Asynchronous Online	DNP	Uiowa/Ken Culp co-instr, N=39 students
2022Sp	Instructor	N7870 Special Topic in Scientific Research: Cancer Survivorship Care	Independent study	PhD	UMSL/Ann Strebeck
2022Sp 2021F 2020F 2019F	Instructor & Course developer (2019S)	N3040 Concepts of Evidence-based Practice	Asynchronous Online Hybrid 80% online (2019)	BSN	UMSL/7 series EBP tools Florence Nightingale's notebook/EBP&informatics Start with New canvas shell <i>New online course</i>
2021Sp	Instructor	N3020 Nursing fundamental lab & COVID-19 vaccinator trainer	In-person lecture & demonstration, skill checks	BSN	UMSL/Concept mapping bubble app (e.g., <a href="#">infection control content</a> ); Covid19 vaccine administration training during IM injection

2022Sp 2021Sp 2020SP	Instructor & <i>Designer</i>	N7495 Mixed Methods Research in Health Care	Asynchronous Online	PhD	Re-designed course, students from three campuses (UMSL, UMKC, MUN8002). N=17('22)
2020F	Instructor	N3035 health assessment lab	In-person lecture & demonstration	Accel. BSN	UMSL/skill checks, case study, N=6
10/3/19	Guest Lecturer	Quantitative Study Critique/Nurse3807 Research and Evidence- based Practice	In-person lecture	BSN	UMSL/instr. <i>Julie Bertam &amp; Loyd Vanessa</i>
2019Sp	Co- Instructor	N3206 Adult health II 00A	In-person lectures, simulation	BSN	UMSL/N=54, Med-surg, course lead Roxanne Reid
2019Sp	Co- instructor	N3205 Adult Health I OA2&OA8	Clinical group	BSN	UMSL/N=8, Meg-surg (Course lead Roxanne Reid) site: SSM health DePaul
4/16/19	Guest Lecturer	Qualitative data coding, and manuscript structuring/ N9420 Qualitative Methods	Synchronous Online	PhD	Mizzou/ Instr. Dr. Jane Armer
2018F	Suppl. instructor	Statistics & nursing/ BIOL/PSYC/SOCI324 Quantitative Statistics for the Behavioral and Natural Sciences; NURS301 Med-Surg Nurs. Assessment & Mgt of Clinical Problems	In-person tutoring	RN- BSN, BS	Columbia College/ Guided study, responded to students' questions in weekly assignments, etc.
2018Sp	Co- Instructor	NURSE 3170 Nursing Skills Technologies and Simulation	In-person demonstration, skill check	BSN	Mizzou/Course lead Drs. Pamela Evans-Smith & Lea Wood/team teaching
2018Sp	Facilitato r	Interprofessional Quality and Safety Simulations (A series of 7 scenarios)	In-person discussion, practice, debrief	BSN	Mizzou/Students: RN, MD, Pharmacy, Respiratory Therapy, Health Management; Program lead Gretchen Gregory
2016F	Teaching Assistant	NURSE 8020 Intermediate Statistical Methods for Health Researchers	Synchronized online	PhD	Mizzou/Assisted students SPSS and assignments Instr. Dr. Chelsea Deroche
2016F	Teaching shadow	NURSE 4970 Community Health Nursing	In-person lecture	BSN	Mizzou/Facilitate discussion Section instr. Jane Armer
2016S	Statistic Software assistant	SPSS Summer students' orientation	In-person demonstration	PhD, DNP	Mizzou/Assisted students SPSS and assignments
2010- 2011	Intern, clinical educator	Nursing education and internship/Sun Yat-sen University	In-person presentations	Staff, patient s	SYSU/Prepared seminars at each department during clinical rotations.

## ADVISING & MENTORSHIP

2021-2022	Co-Chair	PhD student (Nora Strebeck) cancer & caregiver
2021-2022	Co-Chair	PhD student (Ann Stratton) childhood cancer
2020-2022	Dissertation committee	PhD student (Ann Thaiudom) self-management (graduated)
2020-2021	Comprehensive exam committee	PhD student (Christine M. DiRie) Veteran
2020-2021	Comprehensive exam committee	PhD student (Dale Mathis) Chair Sheila
2020-2023	Research practicum mentor (2021 N9710, Advanced Research Practicum in Nursing)	PhD student (Wareg, N. & Natsayakarn Narkthong) Mizzou qual. data analysis; Ghana analysis ongoing.
2019-2020	Comp & dissertation committee	PhD student (Corrine Floyd) nurse incivility
2019-2020	Quality improvement project committee	DNP student (Emilee N. Laster) "Improving Patient Care: Implementing a Three-Minute Foot Exam for Diabetic Patients in a Primary Care Clinic"
10/10/19	F31 Mock reviewer	PhD student (Elizabeth Anderson) Latina Bra ca Mizzou
2013Sum	Project Mentor	BSN student Mizzou/Research Practicum (Dr. Armer lab)

## INVITED PRESENTATIONS

4/25/2015	Panel member	"Preparing for Comprehensive Exams"	Sinclair School of Nursing
6/4/ 2014	Panel member	"Orientation for New Nursing PhD Students"	Sinclair School of Nursing

## MENTORING OUTCOMES

- Advisor: BSN students' EBP project presentation "The interprofessional management of Concussion in a school setting" *first place* at 2020 CON Research Day (11/12/2020); Represent UMSL presenting at UM System Undergraduate Research Day at the Capitol (Cross-campus undergrad research event, 4/2021)
- Advisor: BSN students' EBP project "Improving cultural competence of hospice care among minorities: what makes it work?" *2<sup>nd</sup> place* at 2020 CON Research Day (11/10/2021); (student group Bree Wenzel)

## TEACHING DEVELOPMENT TRAINING

5/19-7/19	Online in 9	Center of Teaching & Learning. University of Missouri-St. Louis	9-wks Canvas course development training
6/20-7/20	Resilient Course Design (RSD)	Center of Teaching & Learning. University of Missouri-St. Louis	Design flexible, high-quality blended courses leveraging the best of Canvas-based online and in-person learning experiences
9/20-4/21	UM Teaching Scholar program	University of Missouri System	Teaching research project

## RESEARCH EXPERIENCE

Current research interests (\* refers to merging area)

- **Chronic illness:** *Cancer survivorship (breast, gynecological cancer), Lymphedema* Self-management, Symptom assessment, Occupational rehabilitation, QOL
- **Population research** & health disparity
- **Digital** health, data science, informatics\*
- **Ageing**, Community health, *Caregiver*\*
- Educational research

## GRANTS & PROJECTS

## **Funded Studies**

**PI:** Developing a digital peer coaching program to activate lymphedema self-management among *rural* and urban breast cancer survivors. University of Iowa Office of Vice President for Research (OVPR) 1/14/2023-2/2024. \$30,000

**PI:** A telehealth peer-to-peer support program to improve lymphedema pain self-management among *rural* and *low-income* breast cancer survivors. Lila M. Johnson Fund 2/1/2023-2/2024. \$12,000

**Co-I:** Application of eXplainable Artificial Intelligence for automatic stratification/prioritization of patient subpopulations for deep understanding of COVID-19 and cancer associations in Cerner database. *Washington University Institute of Clinical and Translational Sciences Clinical and Translational Research Funding Program (CTRFP)/NIH/National Center for Advancing Translational Sciences (NCATS) grant UL1TR002345. 03/01/2022 – 04/30/2023.* \$49,999

This study aims to describe the patterns of COVID-19 symptoms, severity, sequelae, and recovery among cancer patients and the COVID-19 impact on cancer care delivery.

**PI:** Technology-based support of the transition to a cancer survivor with lymphedema. *UM-St. Louis Research Award Competition. 7/2021-6/2023.* \$9,514 (postponed 5/2022 due to leaving the institution)  
This study aims to address the needs and priorities of newly-diagnosed lymphedema patients in transitioning to self-management and technology behaviors. The finding of this study will support in developing a web-and-mobile-based, patient-centered educational and behavioral health application focusing on pragmatic self-care support for lymphedema management, especially for cancer survivors who are newly diagnosed with lymphedema.

**Co-PI:** The Impact of Breast Cancer-related Lymphedema on *Rural* Survivors' Return to Work (PI: Allison Anbari)  
*Sigma Theta Tau International/Rosemary Berkel Crisp 6/1/2019-7/31/2021.* \$4,756  
This study focused on identifying the barriers and facilitators of self-management and return-to-work among rural populations in Missouri.

**Co-I:** Self-reported Work Experiences and Quality of Life in *Latina* Breast Cancer Survivors with Lymphedema (PI Elizabeth Anderson)  
*Sigma Theta Tau International Alpha Iota Chapter research fund 1/2019-1/2020.* \$1500  
This study examined the barriers in return-to-work and self-management associated with breast cancer and lymphedema among the Latina population in the Taxes area.

**PI:** The Influence of Breast Cancer-related Lymphedema on Women's Return-to-Work.  
*Toni and Jim Sullivan Endowed Research Fund 2017-2018.* \$1000  
This study focused on occupational rehabilitation among women who developed secondary lymphedema following breast cancer treatment. The study examined the ways that lymphedema has affected the survivors' occupational functioning and the personal and environmental factors that adjust the return-to-work outcomes.

## **Other funds**

**PI:** The Effects of Lymphedema on Self-Reported Physical and Emotional Functions among Breast Cancer Survivors: A Meta-analysis.

*UM-St. Louis Faculty supplemental research funds 5/2021. \$1500 (Not study proposal competition)*

This study aims to synthesize and analyze the effect of breast cancer related-lymphedema (BCRL) on self-reported physical functions, emotional function, and overall quality of life, and the factors that associated with the effects.

*Lymphedema self-management during return-to-work: The journey of urban, rural, Hispanic/Latina, and Ghanaian breast cancer survivors. 2022 46<sup>th</sup> MNRS*  
UMSL 2022 Faculty research travel grant. 11/30/21 \$1000

The Impact of Breast Cancer-related Lymphedema on Survivors' Return to Work; The Effects of Lymphedema on Self-reported Physical Function among Breast Cancer Survivors: A Meta-analysis. Presentations at National Lymphedema Network. Dallas, TX.

Graduate Professional Council (GPC) 10/21/16 \$400

Work in breast cancer survivors. Podium presentation at the International Society of Nurses in Cancer Care (ISNCC) conference, Vancouver, British Columbia July, 8-11, 2015.

Mizzou Advantage travel award 4/17/15 \$1500

#### Projects without funding

**co-PI:** Lymphedema and Return-to-work experience among breast cancer survivors in Ghana 11/2018-present (co-PI Miriam, deceased)

PI: Facilitating students' collaborative work in an asynchronous online class 9/2020-present (UM Teaching Scholar Project)

Consultant: The effects of music therapy on pain reduction using Care Channel among postoperative patients. Boone Hospital Center 09/2020-5/2021

#### Unfunded proposals

PI: Developing a digital peer coaching program to activate lymphedema self-management among rural and low-income breast cancer survivors. Midwest Nursing Research Society Seed Grant. \$7,500

Fellowship Award. *Gerontological Society of America 2021 \$1500 (Not research proposal competition)*

2022 NIH mhealth Summer Training Institute

PI: The Transition to a Breast Cancer Survivor with Lymphedema. *STTI Research Grant (June 2019)*

PI: Support the Transition to a Cancer Survivor with Lymphedema. UMSL research award (2/2020 submitted but grant canceled *due to Covid-19*)

Co-I: Application of eXplainable Artificial Intelligence (XAI) methods for automatic stratification and prioritization of patient subpopulations to have deep understanding of COVID-19 and cancer associations using ASCO registry database. *American Society of Clinical Oncology Registry Research Grants*. \$30,000 (wrote Research Aims and data analysis plan for proposal) 3/2021

Trainee: GSA 2021 Diversity Mentoring and Career Development Technical Assistance Workshop

#### **PUBLICATIONS**

Elizabeth, A., William, I.B., Armer, N., **Sun, Y.**, Shyu CR. (in review) Use of pattern mining of Cerner data to identify patterns contributing to negative respiratory outcomes in breast cancer patients diagnosed with COVID-19. *Nursing Outlook*.

**Sun, Y.**, Fu, M.R., Jiang, Y. Little, A. (resubmitted in review) Initiating and Maintaining Decongestive Therapy Self-management of Lymphedema among Breast Cancer Survivors: A descriptive qualitative study. *Integrative cancer therapies*. (Recommended for publication)

Anderson, E., Allison, A., **Sun, Y.** Armer, J. (2022) A Multiple Case Study of Latina Breast Cancer Survivors Returning to Work with Breast Cancer-related Lymphedema: Adaptation, Resilience, and Quality of Life. *Hispanic healthcare international*, 15404153221116755

**Sun, Y.** Hulett, J. M., Cheng, A., Armer, J.M. (2022) Assessment of Physical Activities of Older Midwestern Breast Cancer Survivors using CHAMPS. *International Journal of Nursing Research*, 8(1), 1-5. doi: 10.31690/ijnr.2022.v08i01.001

Anbari, A., **Sun, Y.**, McCaffery, S. Armer, J. (2021) Breast cancer-related lymphedema and rural survivor's return to work. *Cancer treatment and communication*, 29, <https://doi.org/10.1016/j.ctarc.2021.100459>

Dorit Tidhar, Jane M. Armer, Allison Anbari, **Yuanlu Sun**, Michael Bernas, Joseph L. Feldman, Janice N. Cormier (2021). Clinical evaluation of lymphedema. In: Ming-Huei Cheng (eds). Principles and Practice of Lymphedema Surgery. Elsevier. Paperback ISBN: 9780323694186; eBook ISBN: 9780323694193

**Sun, Y.** (2020) The breast cancer-related lymphedema and women's return-to-work. *British Lymphedema Society News & Views*, 119, 25-27. <https://www.thebls.com/documents-library/news-views-issue-119>

**Sun, Y.**, Shigaki, C.L, Armer, J.M. (2020). Return-to-work and breast cancer survivorship care. *Current breast cancer reports*, 1-6. doi:10.1007/s12609-020-00371-2

**Sun, Y.**, Shigaki, C. L., Armer, J. M. (2020). The Influence of Breast Cancer-related Lymphedema on Women's Return-to-Work. *Women's health*, 16, 1-16. doi: 10.1177/1745506520905720

- Sun, Y., & Armer, J. M.** (2019). A nurse's twenty-four-year journey with breast cancer-related lymphedema. *Work: A Journal of Prevention, Assessment & Rehabilitation*, 63(1), 21-31. doi:10.3233/wor-192904
- Armer, J. M., Ballman, K., McCall, L., Armer, N. C., **Sun, Y.**, Udmuangpia, T., . . . Boughey, M. D. (2019). Lymphedema symptoms and limb measurement changes in breast cancer survivors treated with neoadjuvant chemotherapy and axillary dissection: results of American College of Surgeons Oncology Group (ACOSOG) Z1071 (Alliance) substudy. *Supportive Care in Cancer*, 1-9. doi: 10.1007/s00520-018-4334-7
- Sun, Y.,** Shigaki, C. L., Armer, J. M. (2017). Return to Work among Breast Cancer Survivors: A Literature Review. *Supportive Care in Cancer*, 25(3), 709-718. doi: 10.1007/s00520-016-3446-1
- **Sun, Y.,** Shigaki, C. L., Armer, J. M. (2016). Return to Work among Breast Cancer Survivors: A Literature Review. *Supportive Care in Cancer*, Advance online publication. <https://doi.org/10.1007/s00520-016-3446-1>
- Armer, J. M., Feldman, J. L., Ostby, P., Chance-Heltzler, J., **Sun, Y.**, Armer, N. C., & Shih, T. (2017). Lymphedema within the Healthcare System: Complexities, Economics, and Outcomes. In *Lymphedema: a concise compendium of theory and practice*. Edited by Lee BB., Rockson S., Bergan J. (eds). Springer Global, pp 503-523. doi: 10.1007/978-3-319-52423-8\_40
- Armer, J. M., Feldman, J. L., Ostby, P., Thrift, K. M., Lasinski, B. B., Beck, M. S., Rodrick, J. R., Norton, S., **Sun, Y.**, Udmuangpia, T., Armer, N. C. & Stewart, B. R (2016). Simplifying Evidence-based Management of Breast Cancer-related Lymphedema. *Expert Review of Quality of Life in Cancer Care*, 1(5), 389-402
- Xue, C., Yu, Q., Pan, J.-j., **Sun, Y.**, & Zhang, L. (2012). A phase II study of sorafenib in combination with cisplatin and 5-fluorouracil in the treatment of recurrent or metastatic nasopharyngeal carcinoma. *Journal of Clinical Oncology*, 30(15\_suppl), 5538-5538. doi:10.1200/jco.2012.30.15\_suppl.5538
- Published conference proceeding**
- Margaret McNeely, Alaina Newell, **Yuanlu Sun**, Newell, Alaina M. Deborah Gross (*in press*) Essential components of the maintenance phase of Complex Decongestive Therapy. *American Cancer society*
- Anderson, E., Anbari, A., **Sun, Y.**, Armer, J. (2021) Breast cancer-related lymphedema influences on the work experiences and quality of life of Hispanic/Latina survivors. *Oncology Nursing Forum*, 48(2), 21-21
- Anbari, A., **Sun, Y.**, McCaffery, S. Armer, J. (2021) Breast cancer-related lymphedema and rural survivor's return to work. *Oncology Nursing Forum*, 48(2), 39-40
- Sun, Y.**, Armer, J. M. (June 2019) Reliability of Circumferential Measurements for Assessment of Upper Extremity Lymphedema. *9th International Lymphoedema Framework Conference*, 56.
- Sekyere, M., Armer, J., **Sun, Y.**, Anderson, E., Anbari, A. (Jun 2019). Impact of Breast Cancer-related Lymphedema on Survivors' Return to Work and Quality of Life in Ghana. *9th International Lymphoedema Framework Conference*, 137.

In preparation for submission/resubmission:

**Sun, Y.**, Baskett, W. I., Anderson, E. A., Anbari, A. B., Hulett, J. M., Narkthong, N., Cheng, A-L., Armer, N. C., Armer, J. M., & Shyu, C-R. (editing). Socioeconomic status, Health insurance and In-hospital Mortality among Breast Cancer Survivors with COVID-19: An analysis of the Cerner Real-World Dataset. *Western Journal of Nursing Research*.

Author () The essential components of the maintenance phase of complete decongestive therapy (CDT) *Cancer*, American Cancer Society (ACS) and Wiley Publishing Company.

**Sun, Y.**, Oyewusi, C., Armer, J.M. (r-editing) Lymphedema and Breast Cancer Questionnaire and its adapted tools in assessing self-reported symptoms of lymphedema among breast, gynecological and melanoma cancer survivors: A systematic review. *Journal of Lymphoedema*

Anderson, E. A., Baskett, W. I., **Sun, Y.**, Anbari, A. B., Hulett, J. M., Narkthong, N., Cheng, A-L., Armer, N. C., Shyu, C-R., & Armer, J. M. (2023 in preparation). Lessons Learned: Answering Clinical Questions Using Electronic Health Record Data.

Armer, J. M., Anderson, E. A., Baskett, W. I., Anbari, A. B., Hulett, J. M., **Sun, Y.**, Narkthong, N., Armer, N. C., & Shyu, C-R. (2023 in preparation). Breast Cancer Survivors with COVID-19 Are More Likely to Experience Lymphedema and Fatigue.

- Sun, Y.,** Anbari, A., Anderson, E. A., Armer, J. M. Lymphedema self-management during return-to-work: The journey of urban, rural, and Hispanic/Latina breast cancer survivors.
- \***Sun, Y.** The Effects of Lymphedema on Self-Reported Physical Function among Breast Cancer Survivors: A Meta-analysis.
- \***Sun, Y.,** Umit, Armer, J. Reliability of circumferential measurements for assessment of upper extremity lymphedema
- \***Sun, Y.,** Cheng, A., The relationships between lymphedema-related symptoms and quality of life among Breast cancer survivors

My google scholar <https://scholar.google.com/citations?hl=en&user=oHuxjgUAAAAJ>

## PRESENTATIONS

### Podium presentation

- Wareg, N., **Sun, Y. (instructor & mentor)**, Natsayakarn Narkthong, Miriam Sekyere, Allison B. Anbari, Elizabeth A. Anderson, Jane M. Armer (March 2023) Lymphedema self-care challenges for breast cancer survivors living in a resource-restricted community. 2023 47<sup>th</sup> MNRS Guaranteed Symposium: *Advancing Self-Care Science through the Research Lenses of the NINR 2022-2026 Strategic Plan*, Des Moines, IA
- Margaret McNeely, Alaina Newell, **Yuanlu Sun**, Newell, Alaina M. Deborah Gross (2023, Oct 8) Creation of a consensus statement identifying the essential components of the maintenance phase of complete decongestive therapy (CDT). 2023 *American Cancer Society Lymphology Association of North America (LANA) Lymphedema Summit* St Louis MO.
- Anderson, E. A., Anbari, A. B., Baskett, W. I. Cheng, A-L., **Sun, Y.**, Shyu, C-R., & Armer, J. M. (April 1, 2023). Using Data Science Techniques to Identify Clinical Variables Associated with Negative Respiratory Outcomes in Breast Cancer Survivors Diagnosed with COVID-19. Paper presentation at *the 47th Midwest Nursing Research Society's Annual Meeting "Leading the Way: The Critical Importance of Nursing Science and Implementation in a New Era,"* Des Moines, Iowa, March 29 - April 1, 2023. & (2023, June 26-27) *1st International Conference on Palliative Care and Family Health Nursing "Moving to Success,"* Bangkok, Thailand; & (2023, November 3-4) *Canadian Lymphedema Framework Conference, Toronto, Canada)*
- Armer, J. M., Anderson, E. A., Baskett, W. I., Cheng, A-L., Anbari, A. B., Hulett, J. M., **Sun, Y.**, Narkthong, N., Armer, N. C., & Shyu, C-R. (2023). Breast Cancer Survivors with COVID-19 Are More Likely to Experience Lymphedema and Fatigue. *The 11th International Lymphoedema Framework conference "Stronger Together,"* Nottingham, UK, June 13-15, 2023.
- Sun, Y.,** Anbari, A., Anderson, E. A., Wareg, N., Narkthong, N., Armer, J. M. (2022) Lymphedema self-management during return-to-work: The journey of urban, rural, Hispanic/Latina, and Ghanaian breast cancer survivors. 2022 46<sup>th</sup> MNRS Guaranteed Symposium: *Healing and Equity among Diverse populations: Journey toward the Future*, Schaumburg, IL
- Sun, Y.,** (submitted) Facilitate students' collaborative learning in an asynchronized online class. *Focus on Teaching and Technology Conference (FTTC)*, Saint Louis, MO Sep 2021
- Sun, Y.** (April 28, 2021) Barriers and facilitators of students' collaborative learning in an online class. UM Teaching Scholars Spring Conference, small group discussion, virtual April 2021
- Elizabeth A A., Allison A., **Sun, Y.**, Armer J. M. (Feb 4 2021) Breast Cancer-Related Lymphedema Influences on the Work Experiences and Quality of Life of Hispanic/Latina Survivors. ONS/NCI/NINR Symptom Science Colloquium
- Allison, A., **Sun, Y.**, McCaffery (Mar 28, 2021) *The Impact of Breast Cancer-Related Lymphedema on Rural Survivors' Return to Work.* Midwest Nurse Research Society 45<sup>th</sup> conference, virtual
- Allison, A., **Sun, Y.** (Feb 4-5, 2021) Breast Cancer-Related Lymphedema and Rural Survivors' Return to Work. ONS/NCI/NINR Symptom Science Colloquium, virtual
- Sun Y.** (Oct 9, 2020) Cancer survivorship: lymphedema and occupational rehabilitation. Virtual Early Career Research Symposium University of Missouri-St. Louis
- Sekyere, M., Armer, J., **Sun, Y.**, Anderson, E., Anbari, A. (Mar 29 2020). Impact of Breast Cancer-related Lymphedema on Survivors' Return to Work and Quality of Life in Ghana. International Conference on Cancer Nursing (ICCN). London, UK (*Postponed due to Covid19*)
- Sun Y.** (Oct 23 2019) Cancer Survivorship: Lymphedema and Occupational Rehabilitation Oral presentation at 13th Annual Multidisciplinary Research Conference. Saint Louis, MO

- Sun, Y., Armer, J. M.** (June 13, 2019) Reliability of Circumferential Measurements for Assessment of Upper Extremity Lymphedema. Oral presentation at 9th International Lymphoedema Framework Conference. Chicago, IL.
- Sun, Y., Armer, J. M.** (*March, 2019*) The Influences of Breast Cancer-related Lymphedema on Survivors' Return-to-Work. Oral Presentation at Midwest Nurse Research Society 43<sup>rd</sup> Annual Conference. Kansas City, MO. & (*June 13, 2019*) poster presentation at 9th International Lymphoedema Framework Conference. Chicago, IL.
- Sun, Y., Armer, J. M.** (April, 2017). The Effects of Lymphedema on Self-Reported Physical Function among Breast Cancer Survivors: A Meta-analysis. Oral Presentation at Midwest Nurse Research Society Annual Conference. Minneapolis, MN.
- Sun, Y., Armer, J. M.** (September, 2016). The Impact of Breast Cancer-related Lymphedema on Survivors' Return to Work. Oral Presentation at National Lymphedema Network. Dallas, TX.
- Sun, Y., Armer, J. M.** (September, 2015). Symptoms of Breast Cancer-Related lymphedema. Oral Presentation at 25th World Conference of Lymphology. San Francisco, CA.
- Sun, Y., Armer, J. M.** (July, 2015). Work among Breast Cancer Survivors: A Literature Review. Oral Presentation at 2015 International Conference on Cancer Nursing. Vancouver, BC.
- Poster presentation (Selected)
- Sun, Y., Fu, M.R., Jiang, Y** (accepted) Maintaining Decongestive Therapy Self-management of Lymphedema among Breast Cancer Survivors. *American Psychosocial Oncology Society 2024 Annual Conference, New Mexico.*
- Anderson, E. A., Anbari, A. B., Baskett, W. I., Cheng, A-L., Armer, N. C., **Sun, Y.**, Shyu, C-R., & Armer, J. M. (2023, April 24-May18). Using Data Science Techniques to Identify Clinical Variables Associated with Negative Respiratory Outcomes in Breast Cancer Survivors Diagnosed with COVID-19. Poster presentation at the 5th Annual Washington University Institute of Clinical and Translational Sciences "Advancing Clinical and Translational Science at an Academic Healthcare System Symposium," St. Louis, MO.
- Anbari, A., **Sun, Y.**, McCaffery, S. Armer, J. (2021) The impact of breast cancer-related lymphedema on rural and small-town survivors on work and quality of life: a multiple-case study *10<sup>th</sup> International Lymphoedema Framework Conference (ILF 2021) Nov 18-20*
- Bridget Sheridan, Elise Elking, Emma Stevenson, Isabella Kudanovych **Mentor Dr. April Sun** (Apr 2021) *The Interprofessional Management of Concussions in the School Setting. Undergraduate Research Day in the Capitol 2021.*
- Sekyere, M., Armer, J., **Sun, Y.**, Anderson, E., Anbari, A. (Jun 2019). Impact of Breast Cancer-related Lymphedema on Survivors' Return to Work and Quality of Life in Ghana. Poster presentation at 9th International Lymphoedema Framework Conference. Chicago, IL.
- Sun, Y., Armer, J. M.** (March, 2019). Reliability of Circumferential Measurements for Assessment of Upper Extremity Lymphedema. Poster Presentation at Midwest Nurse Research Society 43<sup>rd</sup> Annual Conference. Kansas City, MO.
- Sun, Y., Armer, J. M.** (April, 2017). The Impact of Breast Cancer-related Lymphedema on Survivors' Return to Work. Poster Presentation at Midwest Nurse Research Society Annual Conference. Minneapolis, MN.
- Armer, J. M., Ballman, K., McCall, L., Suman, V., **Sun, Y.**, Udmuangpia, T., ... Boughey, J. C. (June, 2017). Symptoms and Limb Changes for Breast Cancer Survivors Treated with Neoadjuvant Chemotherapy: Lymphedema Results of ACOSOG Z1071 (Alliance). MASCC/ISOO. Washington, DC: MASCC/ISOO. (international)
- Sun, Y., Armer, J. M.** (April, 2017 & August, 2015). Return-to -Work among Breast Cancer Survivors: A Literature Review. Poster Presentation at Midwest Nurse Research Society Conference (MNRS). Minneapolis, MN. & 25th Caring for the Frail Elderly conference. Columbia, MO.
- Sun, Y., Armer, J. M.** (April, 2017 & September, 2016). The Effects of Lymphedema on Self-reported Physical Function among Breast Cancer Survivors: A Meta-analysis. Poster at MNRS 41st Annual Research Conference. Minneapolis, MN. & National Lymphedema Network. Dallas, TX.
- Sun, Y., Allison, K., Armer, J. M.** (November, 2015). Women's Concerns of Mammography for Breast Cancer Screening. Poster Presentation at MU Health Research Day. Columbia, MO.
- Armer, J.M., Armer, N., **Sun, Y.**, Stewart, B., Feldman, J. & Cormier, J. (2015, September), American Lymphedema Framework Project Open-space Stakeholder Meetings: Aiming to Shape the Future of Lymphedema Care in the United States. Poster at the WCOL Congress, San Francisco, CA. (international)



- Sun, Y., Armer, J. M.** (August, 2015). Symptoms of Breast Cancer-Related lymphedema. Poster Presentation at 25th Caring for the Frail Elderly conference. Columbia, MO.
- Sun, Y., Armer, J. M.** (August, 2015). Effects of Resistant and Stretching Exercise on Breast Cancer-Related Lymphedema. Poster Presentation at 25th Caring for the Frail Elderly conference. Columbia, MO.
- Armer, J. M., Armer, N. C., **Sun, Y.** (July, 2015) American Lymphedema Framework Project Open-Space Stakeholder Meetings: Aiming to Shape the Future of Lymphedema Care in the United States. Poster Presentation at 2015 International Conference on Cancer Nursing. Vancouver, BC.
- Sun, Y., Armer, J. M.** (April, 2015 & June 2014). Safety and Benefits of Resistance and Stretching Exercises for Lymphedema. Poster Presentation at MU Healthcare Sharing Days. Columbia, MO. & 2014 International Lymphedema Framework Conference. Glasgow, UK.
- Sun, Y., Armer, J. M.** (April, 2015 & June, 2014). Symptoms of Lymphedema in Breast Cancer Survivors: A Literature Review. Poster Presentation at Midwest Nurse Research Society Annual Conference. Indianapolis, IN. & 2014 International Lymphedema Framework Conference. Glasgow, UK. (Visa delayed, poster was carried and presented by co-author)

#### Other presentations

- 12/23/18 Speaker at 2018 Sun Yat-sen University International Young Scholar Symposium  
(中山大学国际青年学者论坛) Guangzhou, China (virtual)
- 05/12/17 Guest Speaker at David Lile Show (Columbia radio program) Breast cancer and lymphedema
- 04/22/17 Guest Speaker at 'Eleventh Annual Breast Cancer Awareness and Survivorship Event', Columbia MO

### **OTHER SCHOLARLY ACTIVITY**

#### Abstract reviewer

46<sup>th</sup> Midwest Nursing Research Society Annual Conference Oct Nov 2021

#### Journal Manuscript reviewer

Journal of Supportive Care in Cancer	1/24/22, 12/28/21, 9/15/21, 6/11/21, 5/21/21, 1/28/20, 1/14/20, 12/10/20, 11/27/20, 11/3/20, 8/21/20, 7/10/20
European Journal of oncology nursing	8/11/21, 7/7/20, 10/29/19, 2/10/19
European Journal of Cancer Care	3/2/20, 10/19/20
Journal of Cancer Survivorship	11/20/20, 8/19/20
BMC cancer	Jun-20
Journal of Psycho-oncology	Jun-20, 8/10/17. Reviewer certificate for psycho-oncology.
Journal of Cancer Management and Research	Oct-18, 8/23/18
Nursing Open	5/29/21
Journal of Women's Health	8/10/20
Journal of Aging and Physical Activity	11/11/21
Western Journal of Nursing Research	4/24/22
Computer, Informatics and Nursing	6/17/22, 11/15/22, 7/3/23

### **OTHER RESEARCH EXPERIENCE**

06/2012-05/2017 Sinclair School of Nursing *Research assistant*

#### Major projects worked with:

- Data analysis of IRR data & lymphedema home survey (Missouri R01 data)
- Mobile Device App for Lymphedema Early Detection and Self-Care: Real-Time Application in the Breast Center (Guilherme DeSouza & Jane Armer)
- ALFP Long-Term Breast Cancer Treatment Effects (2012-2017) (data collection, entry, cleaning)
- ALFP Genome-Wide Association Analysis: Post-breast cancer lymphedema (2013) (data collection, entry; mentor undergraduate research fellows)

- ALFP Physical Activity, Breast Cancer Survivorship, and Aging (2014) (data collection, entry, cleaning; mentor undergraduate research fellows, analysis, and manuscript writing, etc)
  - ALFP Lymphedema assessment in the clinical setting (2016-2017) (lead data collection and entry)
  - Dr. Jo-Ana Chase (2015) Meta-Analysis of Physical Activity Intervention Effects on Physical Function among Community-Dwelling Older Adults (*literature retrieval, article review to determine eligibility, creating spreadsheet for meta-analysis data entry*)
  - Dr. Lorraine J. Phillips (2014) Meta-analysis; Dr. Vicki Conn (2014) meta-analysis. Data entry, spreadsheet building)
  - Dr. Marilyn Rantz (2012-2016) Quality Improvement Program for Missouri (QIPMO); Data entry
- 07/2011-05/2012 Sun Yat-sen University Cancer Center Clinical Research Nurse
- Coordinator of pharmaceutical research in the chemotherapy department.
  - Conducting Phase I, II, III clinical trials under Good Clinical Practice (GCP) guideline.
    - Developed and modified Standard Operating Procedures (SOP).
    - Collaborated with other researchers to evaluate and assess subject's eligibility for inclusion in studies and obtained informed consent.
    - Arranged patient enrollment, examinations, treatments, and followed up as first contact.
    - Delegated tasks and supervised the related activities of other researchers and clinicians.
    - Collected clinical and non-clinical data per protocol and SOP.
    - Documented findings on potential and enrolled subjects as trial specified, maintained all research records and documentation throughout the length of the trial.
    - Provided patient and family education on treatment and clinical trial information, identified participants' needs and problems.
    - Completed data entry and resolved sponsors' and ethical committees' queries per guidelines.
    - Reported adverse events and findings to principal investigator, sponsors, ethical committees, and other regulatory agencies
    - Attended regular sponsor and project meetings and provided report.
    - Updated study information on ClinicalTrials.gov.
- 03/2009-06/2010 Undergraduate Research Assistant for Professor. Yan Jun
- Lead data entry (assigned asks for team members) for a study on Acute Myocardial Infarction patients' psychosocial factors

## CLINICAL EXPERIENCE

2014 -2017	Lymphedema project nurse researcher	Ellis Fischel Cancer Center
07/2011-05/2012	Registered nurse/Clinical Research Nurse <ul style="list-style-type: none"> <li>• Part-time Comp for clinician choir</li> </ul>	Sun Yat-sen University Cancer Center
07/2010-05/2011	Nurse Intern <ul style="list-style-type: none"> <li>• Practiced in Departments of Internal Medicine, ICU, Gynecology, Obstetrics, Neonatology, Emergency Room, Surgery, and Operating Room.</li> <li>• English-Chinese medical interpreter in the emergency room and outpatient clinic (volunteer).</li> </ul>	Sun Yat-sen Memorial Hospital
10/2010-11/2010	Nurse Intern <ul style="list-style-type: none"> <li>• Practiced in psychiatric inpatient department, Physiotherapy clinic, and Psychological Test clinic.</li> </ul>	Guangdong General Hospital (Psychiatric Department)
10/2010-11/2010	Nurse Intern <ul style="list-style-type: none"> <li>• Provided health services including prevention, health education, family health planning education; Assisted community immunization program; home health service.</li> </ul>	Zhuguang Street Community Health Center, Guangzhou
07/2009-08/2009	Summer Extern <ul style="list-style-type: none"> <li>• Job Shadow in Pediatric Oncology Department.</li> </ul>	The First Affiliated Hospital of Sun Yat-sen University
07/2008-07/2008	Unlicensed Medical Personnel	Yunnan General Hospital



2023-2024	Clinical Health Coach training, Iowa Chronic Care Consortium
9/2022-2023	Uiowa academy workshops, UI grant writing workshop, Iowa cancer consortium workshops and summit, breast cancer workshops, biomedical and health informatics, CAMS seminars, CON research forum, CON pitch your aims
8-12/2022	CON & Uiowa new faculty orientation
8/1-2/2022	2022 Electronic Medical Records Boot Camp (Columbia University)
4/21-23/2022	S-SPIRE Mixed Methods Workshop (Stanford Medicine registered)
10/28-30/2021	Longitudinal Data Analysis Using R (StatHorizon)
5/20-23/2021	Designing Effective Online Surveys (StatHorizon)
3/6/2020	Grant writing Workshop (UMSL)
10/30/19	Poverty <i>simulation</i> training (UMSL)
8/2019-pres.	UMSL Female faculty network
2/27/19	Part I & II Integrating the INACSL Standards of Best Practice: SimulationSM2016
3/1/19	Attended simulation debriefing presentation (Mar 1 <sup>st</sup> 2019, UMSL)
3/5/19	EPIC IP Nurse Fundamentals (SSM health)
3/4/19	Epic and Alaris Pump Integration (SSM health St Louis)
6/1-4/2015	Qualitative Analysis seminar (University of North Carolina at Chapel Hill)
3/2013	Cancer Biology Course (Oncology Nurse Society)

## SOFTWARES

Data analysis software: R, SPSS, Dedoose, SAS (basic)

Survey applications: Qualtrics, Survey Monkey.

Office tools: Microsoft Office (Word, Excel, PowerPoint, Teams, OneNote, and Outlook), google apps.

Reference manager: Zotero, EndNote

Cloud: Google Drive, OneDrive, Amazon Web Services (AWS)

Video: VoiceThread, Panopto, Youtube editor

AI tools: GPT-4

## COMMUNITY SERVICE

Volunteer Pianist

2011-2012 Sun Yat-sen University Cancer Center

2012-2017 Nursing home (Tiger place), Low-income building (Paquin Tower), VA hospital

Performer

05/4/2021 "Music by Latin American Composers" makes cultural connections (UMSL's livestreamed piano concert)

4/19/2022 "Around the Globe with the Piano" Lee Theater (UMSL concert, William Grant Still, Africa: Land of Romance)