UNIVERSITY OF MASSACHUSETTS LOWELL

COMPREHENSIVE PROFESSIONAL VITAE

NAME: Yuan Zhang DATE: 1/31/2024

SCHOOL: Susan and Alan Solomont School of Nursing

COLLEGE: Zuckerburg College of Health Sciences

RANK: Associate Professor with Tenure

FIELD: Occupational Health and Health Promotion

A. EDUCATION AND ACADEMIC QUALIFICATIONS

<u> 1. Edu</u>	<u>cation</u>	
201	13 Ph.D.	Solomont School of Nursing, University of Massachusetts Lowell, Lowell, MA
		Area of Specialty: Occupational Health and Health Promotion
		Dissertation Topic: "Sleep duration and health outcomes of formal caregivers
		in skilled nursing facilities: The contribution of the work environment"
201	1 Post-Masters	University of Massachusetts Lowell, Lowell, MA
	Certificate	Nursing Education Certificate
		Environmental Risk Assessment Certificate
200	07 M.S.	School of Nursing, Shandong University, Jinan, Shandong, P. R. China
		Area of Specialty: Clinical Nursing and Nursing Education
200	04 B.S.	School of Nursing, Shandong University, Jinan, Shandong, P. R. China
2. Acad	lemic Experience	
9/2	019-present	Associate Professor, Solomont School of Nursing
		University of Massachusetts Lowell
9/2	013-8/2019	Assistant Professor, Solomont School of Nursing
		University of Massachusetts Lowell
3/2	013-8/2013	Post-Doctoral Research Fellow
		Department of Work Environment, University of Massachusetts Lowell
6/2	011-8/2011	Internship

Office of Occupational Health Nursing, OSHA, Washington, D.C.

Zhang, Y.

8/2007-2/2013 Senior Research Assistant, Center for the Promotion of Health in the New

> England Workplaces (CPH-NEW) funded by NIOSH Total Worker Health® (2U19 OH008857), Department of Work Environment, University of

Massachusetts Lowell

2/2006-2/2007 Research Assistant for "Patients' intensive care experience during mechanical

ventilation", School of Nursing, Shandong University, P. R. China

B. PROFESSIONAL ACTIVITIES

1. Professional Association Participation

2023-present	Eastern Nursing Research Society
2023-present	American Nurses Association
2023-present	Massachusetts Nurses Association
2015-present	Massachusetts Public Health Association
2013-present	Sleep Research Society
2009-present	American Public Health Association
2009-present	Honor Society of Nursing, Sigma Theta Tau International
2015-2019	American Nurses Association
2015-2019	Massachusetts Nurses Association
2013-2013	American Academy of Sleep Medicine
2011-2011	American Society of Safety Engineers

a. Committees and	Officers
2015-2017	Eta Omega Chapter Treasurer, Sigma Theta Tau International
2014-2017	Eta Omega Chapter Key Award coordinator, Leadership Succession Committee,
	Sigma Theta Tau International
2013-present	Faculty Advisor, Evidence Based Practice and Research Council, Lowell General Hospital

b. Editorial Board

2021-present Editorial Board, Workplace Health & Safety

c. Consultation

2014-2018 Research study "Safe Patient Handling and Movement (SPHM) Course Content:

A National Survey of Nursing Programs" VA Center of Innovation on Disability

and Rehabilitation Research (CINDRR)

Research Affiliate to the Center for the Promotion of Health in the New England 2013-2016

Workplaces (CPH-NEW)

2. Professional Honors and Awards

2024	American Nurses Association (ANA) Massachusetts Excellence in Nursing Research Award
2023	Recognition as <i>UMentor Faculty Advocate 2023</i> at the University of Massachusetts Lowell Faculty Symposium
2020	Recognition as <i>Launch Mentor 2020</i> at the University of Massachusetts Lowell Faculty Symposium
2018	Recognition as <i>faculty with the most publications</i> in the Zuckerberg College of Health Sciences at the University of Massachusetts Lowell Faculty Symposium
2017	Massachusetts Association of Colleges of Nursing Faculty Early Career Award
2017	University of Massachusetts Lowell Online Course Development Award
2016	Teaching Excellence Award, Solomont School of Nursing
2015	Sigma Theta Tau International Eta Omega Chapter Travel Award
2014	John A. Hartford Institute Geriatric Nursing Scholar
2010	Outstanding Graduate Student Award, University of Massachusetts Lowell
2009	May Futrell Scholarship Award, University of Massachusetts Lowell
2008	May Futrell Scholarship Award, University of Massachusetts Lowell

3. Reviewer of Referred Journal Articles

2024	Journal of Occupational and Environmental Medicine
2024	Workplace Health & Safety
2024	Industrial Health
2023	Workplace Health & Safety
2023	BMC Nursing
2023	Annals of Work Exposures and Health
2023	Sleep Health: Journal of the National Sleep Foundation
2022	Workplace Health & Safety
2021	Workplace Health & Safety
2021	Preventive Medicine
2020	BMC Nursing
2019	International Journal of Industrial Ergonomics
2019	Industrial Health
2018	BMC Nursing
2018	Western Journal of Nursing Research
2018	International Journal of Behavioral Medicine

2018	International Journal of Nursing Education Scholarship
2017	BMJ Open
2016	BMC Geriatrics
2016	International Journal of Nursing Studies
2015	PLOS ONE
2015	Journal of Occupational and Environmental Medicine
2015	Journal of Applied Gerontology
2015	Ergonomics
2014	Health Promotion Practice
2014	BMC Public Health
2013	Neuropsychiatric Disease and Treatment
2013	Journal of Multidisciplinary Healthcare
2012	Health Services Insights
a. Reviewer of	Referred Grant Proposals
2023	CPH-NEW Emerging Issues Project Pilot Grant Reviewer
2020	National Institute of General Medical Sciences (NIGMS), NIH
2018-2020	American Nurse Foundation Grant Reviewer
2016-2017, 2018-20	19 CPH-NEW Pilot Grant Reviewer
b. Reviewer of	Referred Conference Abstracts and Scholarship
2022	International Symposium to Advance Total Worker Health®
2018	International Symposium to Advance Total Worker Health®
2015	American Public Health Association Conference
2014	American Public Health Association Conference
2014	Keogh Memorial Scholarship, American Public Health Association
2013	Work, Stress, and Health Conference
Certification and Lic	<u>ensure</u>

<u>4.</u>

2011-present Massachusetts RN license # RN 2269663

2011-present Healthcare Professionals CPR Certification

C. RESEARCH

1. Grants and Contracts

a. Research Grants: CURRENT

2024 **Merrimack College Seed Grant** \$18,000 (awarded)

"Perceived knowledge of registered nurses caring for hospitalized underserved patients

with opioid use disorder." (2024-2025)

The project will examine nurses' knowledge and attitude, and confidence in educating and documenting OUD-related care to patients in the inpatient settings.

Role: Consultant. PI: Inyene Essien, School of Nursing and Health Sciences, Merrimack College. Act as the consultant, I contribute to the project with my expertise in developing quantitative and qualitative questions and collecting field surveys with healthcare workers.

2023 National Science Foundation (NSF)

\$1 million (submitted)

Smart-Connected Health (SCH)

"Developing Scalable and Adaptable Cognitive Wellness Self-Management System for Frontline Healthcare Workers" (2024-2028)

The project will leverage wearable technologies, clinical notes analytics, and job-related administrative databases to detect and predict behavioral and physiological biomarkers of stress-related disorders, compassion fatigue, exhaustion, and burnout.

Role: Co-PI. PI: Mohammad Arif Ul Alam, Department of Computer Science. Act as the co-PI, I contribute to the project with my expertise on work-related exposure assessment and mental health assessment and promotion.

2023 Department of Justice (DOJ)

\$250,000 (submitted)

"A sleep health and wellness training program to improve the well-being of police officers" (2024-2026)

This project will design, develop, and implement a web-based education and training on sleep health and wellness to improve sleep, mental health, and well-being of police officers.

Role: Subcontract Principal Investigator. PI: Laura Barger, Brigham Women's Hospital/Harvard Medical School. Act as the subcontract PI, I will contribute to communications with police departments, interviews with police officers, and develop the education and training program.

2023-2025 University of Massachusetts Lowell Seed Grant

\$15,000 (awarded)

"Improving optimism, sleep quality, stress, and mental health using a virtual reality-based intervention among undergraduate students: a pilot study" (2023-2025)

This pilot study will examine the effectiveness of a virtual reality-based intervention to improve optimism, sleep quality and mental health among college students.

Role: Co-Investigator. PI: Yun-Ju Lai. Act as the key personnel, I contribute to the project with my expertise on sleep and mental health promotion.

2023-2024 Faculty Equity Collaborative Mentoring Seed Grant

\$2,000 (awarded)

"A Diverse Asian Faculty Peer Mentoring Group for Quantitative Research Collaboration and Career Advancement" (2023-2024)

This seed grant will connect Asian faculty for a peer mentoring group to promote future career advancement and collaborative grant applications.

Role: Co-Investigator. PI: Hsien-Yuan Hsu, Research and Evaluation in Education, FAHSS.

2022-2023 Donahue Center for Business Pilot Research Grant

\$3,000 (awarded)

Using marketing technology to foster healthy sleep habits (2022-2023)

The study will develop a smartphone app to educate college students on healthy sleep habits, dietary choices and exercise using marketing language to improve sleep quality.

Role: Co-Investigator. PI: Ann Kronrod, Department of Marketing Entrepreneurship and Innovation. Act as the key personnel, I contribute to the project with my expertise on sleep education and smartphone app assessment of sleep quantity and quality.

2022-2023 Donna Manning Pilot Research Grant

\$4,000 (awarded)

Optimism with sleep quality, stress, and mental health among college students returning to classes during the COVID-19 pandemic (2022-2023)

The study will examine the associations of optimism with sleep quality, stress, and mental health and evaluate whether sleep and stress play mediating roles in the associations between optimism and mental health among college students.

Role: Co-Investigator. PI: Yunju Lai. Act as the key personnel, I contribute to the project with my expertise on sleep and mental health assessment and mediating effect analysis.

2021-2026 NIOSH-CPH-NEW Center (5 U19 OH012299-02)

\$7 million (awarded)

Project A: "Safety in Healthcare through Integrated Facilitated Teams (SHIFT)-II" Project A SHIFT-II involves evaluating the long-term effectiveness and sustainability of the Healthy Workplace Participatory Program (HWPP) at one public sector healthcare facility and expand the HWPP to multiple unit-based teams within the facility. The project will also implement an adapted HWPP through healthcare unions and worker associations, using a Train-the-Trainer model and evaluate HWPP uptake and adoption within healthcare unions.

Role: Co-Investigator. PI: Laura Punnett, Suzanne Nobrega, & Alicia Kurowski, Department of Biomedical Engieering. Act as the key personnel, I contribute to the project with my expertise on shift work and sleep promotion, musculoskeletal health, and workplace participatory interventions linking occupational health and health promotion. I am serving as key resources for shift work intervention and sleep promotion for healthcare workers.

2021-2023 University of Massachusetts Lowell Seed Grant

\$10,000 (awarded)

"Investigating the link between sleep alterations and cognitive decline in the elderly using wearable devices" (2021-2023)

This pilot study will examine the associations between sleep and cognitive function among older adults using wearable devices.

Role: Co-PI. PI: Joyita Dutta, Department of Electric and Computer Engineering. Act as the key personnel, I contribute to the project with my expertise on sleep and objective field measures. I will be actively involved in the overall study design and data collection and contribute to the analysis and interpretation of sleep and cognition data from wearable devices.

2020-2022 NIOSH-CPH-NEW Center (2U19 OH008857-11) Supplement \$70,000 (awarded) "Wearable technology and biophysical measurements to assess psychosocial impact of work organization and critical workplace events"

This supplement grant will use field objective sensors for a two-week continuous track of blood pressure, heart rate, respiration, heart rate variability, and sleep of correctional officials and nurses to assess the effect of psychosocial impact of work organization and critical workplace events on these objective measures.

Role: Investigator. PI: Insoo Kim & Jennifer Garza, University of Connecticut. Act as the key personnel, I contribute to the project with my expertise on sleep and objective field measures. I will be actively involved in the overall study design and data collection, development of survey measures, and analysis of survey and objective data.

2019-2022 R01 National Institute of Aging (R01 AG044416) \$ 1,768,926 (\$1.8 million, awarded)

Subcontract: \$170,000

"Treatment of circadian disruption from shiftwork in older adults" (2019-2022)

This R01 grant will field-test a sleep timing intervention and evaluate its feasibility, efficacy, and acceptability in older night shift nurses for promoting sleep duration and quality and improving on-shift alertness and performance. The intervention has been previously tested in lab simulated older night shift workers with promising outcomes.

Role: Subcontract Principal Investigator. PI: Jeanne Duffy, Brigham Women's Hospital/Harvard Medical School. Act as the subcontract PI, I contributed to communications with the healthcare institutions, on-site recruitment of participants, development of the survey measures and focus group scripts, facilitation of focus groups, analyses of quantitative and qualitative data, and report writing and manuscript publications.

b. Research Grants: COMPLETED

2016-2021 NIOSH-CPH-NEW Center (2U19 OH008857-11) \$6,357,027 (\$6.3million, awarded)

Project A: "Safety in Healthcare through Integrated Facilitated Teams (SHIFT)" Project C: "Total Worker Health Dissemination and Implementation Hub"

Project A SHIFT involves evaluating the effectiveness and cost-effectiveness of the Healthy Workplace Participatory Program (HWPP), adapted to joint management-labor teams, and utilizing process evaluation to compare uptake among the three types of public health sector institutions and determine predictors of uptake, fidelity, and effectiveness.

Project C Total Worker Health® Dissemination and Implementation Hub is a communication, education, and dissemination project dedicated to advancing TWH science and practice.

Role: Investigator. PI: Laura Punnett. Act as the key personnel, I contribute to the project with my expertise on shift work and sleep promotion, musculoskeletal health, and workplace participatory interventions linking occupational health and health promotion. I am leading the development and implementation of a continuous education program on ergonomics in healthcare (https://www.uml.edu/Research/CPH-NEW/nurse-education/ergonomics/) and serving as key resources for shift work intervention and sleep promotion for healthcare workers.

2016-2018 College of Health Sciences Research Grant, University of Massachusetts Lowell \$8,000 (awarded)

"Using smartwatch to investigate health behaviors of night shift nurses"

This pilot project proposed to use smartwatch and smartphone app to collect objective measures of eating, exercise, and sleep behaviors of 30-night shift nurses. The detailed behavioral examination will provide us with rich information for the development of effective behavioral interventions for night shift nurses.

Role: Principal Investigator. Act as the principal and leading personnel on this project.

2016-2018 CPH-NEW Pilot Grant, University of Massachusetts Lowell \$11,000 (awarded)

"Development and implementation of a healthy sleep intervention for correctional supervisors using participatory action research."

This pilot project proposed to develop and implement healthy sleep training and a smartphone-based sleep tracking app to correctional supervisors. A quasi-experimental study design is used to collect the effectiveness of the intervention on sleep quality, health behaviors and health outcomes of correctional supervisors in 19 Connecticut correctional facilities.

Role: Consultant. PI: Alicia Dugan, University of Connecticut Health Center. I contributed to the project with my expertise on sleep hygiene education and healthy sleep promotion in shift workers. I served as resources and consultation on the content of the healthy sleep training and app development and sleep data analyses.

2015-2016 Eta Omega Chapter Research Grant, Sigma Theta Tau International \$1,900 (awarded)

"Coping with stress and sleep quality among college nursing students."

This pilot project proposed to use online surveys to examine the relationships among stress, coping strategies, sleep quality, and mental health among college nursing students.

Role: Principal Investigator. Act as the principal and leading personnel on this project.

2015-2017 CPH-NEW Pilot Grant, University of Massachusetts Lowell \$10,927 (awarded)

"Assessing the occupational health risks and health behaviors for men in correctional nursing and evaluating the barriers and facilitators for a peer mediation program."

The research project proposed to use quantitative and qualitative methods to examine gender difference in occupational exposures, health behaviors and outcomes of correctional nurses and examine facilitators and barriers to improve the utilization of EMPOWER as peer mediation program for coworker violence.

Role: Co-Investigator. PI: Mazen El Ghaziri. I contributed to this project with my expertise on occupational health nursing, especially on occupational exposures, health behaviors and outcomes of nurses. I was involved in the research proposal writing, study participants recruitment, data collection and analyses, and reports and manuscripts writing.

2014-2016 University of Massachusetts Lowell Seed Grant

\$9,000 (awarded)

"Investigation of physical workload and sleep quality with objective field measures among rehabilitation professionals."

This pilot project proposed to use objective field measures to characterize the physical workload, leisure-time physical activity, and sleep quality of rehabilitation employees in nursing homes. PATH observation, Actigraphy sleep and physical activity data, and a short survey were collected with 40 rehabilitation employees at eight nursing homes.

Role: Principal Investigator. Act as the principal and leading personnel on this project.

2006-2016 NIOSH- CPH-NEW Center (2U19 OH008857)

\$9.5 million (awarded)

Project A: "Promoting Physical and Mental Health of Caregivers through Trans-Disciplinary Intervention (Pro-Care)"

Role: Research Assistant, Post-Doctoral Research Fellow, and Research Affiliate. PI: Laura Punnett. I have contributed to the field participatory intervention, conducting formative, process, and outcome evaluations, facilitating focus groups and key informant interviews, collecting onsite surveys, analyzing quantitative and qualitative data, and writing reports and publishing manuscripts.

c. Teaching & Education Grants

2015-2016 Interprofessional Education Teaching Grant, University of Massachusetts Lowell \$2,000 (awarded)

"Reinvigorating engagement and collaboration through interprofessional education."

This pilot teaching project proposed to implement an interprofessional education (IPE) activity with nursing and public health students in research methods course to foster engagement, understanding, communication, and collaboration across different disciplines.

Role: Principal Investigator. Co-PI: Joel Tickner, Department of Public Health. Act as the principal and leading personnel on this project.

d. Faculty Start-Up Funded Research

2018 University of Massachusetts Lowell Faculty Start-Up Funds

\$1,000

"Musculoskeletal disorders and sleep quality among nursing staff"

This pilot project collected online surveys with 516 nursing staff at Lowell General Hospital on musculoskeletal pain, sleep quality, and interests in a workplace yoga program for chronic pain management. The project aims at collecting pilot data for the re-submission of the NIH R34 grant on workplace yoga implementation for nurses with chronic low back pain.

Role: Principal Investigator. Act as the principal and leading personnel on this project.

2016 University of Massachusetts Lowell Faculty Start-Up Funds

\$2,000

"Physical activity behaviors among nursing staff"

This pilot project collected paper surveys with 363 nursing staff at Lowell General Hospital on shift workers' leisure-time physical activity, and facilitators and barriers for engaging in regular physical activity of nursing staff.

Role: Principal Investigator. Act as the principal and leading personnel on this project.

2015 University of Massachusetts Lowell Faculty Start-Up Funds

\$2,000

"Shift work and sleep among hospital nurses"

This pilot project proposed collected paper surveys with 397 nurses at Lowell General Hospital to examine the associations among shift work, sleep-wake habits, sleep disturbances, and health behaviors and outcomes of hospital nurses.

Role: Principal Investigator. Act as the principal and leading personnel on this project.

2014 University of Massachusetts Lowell Faculty Start-Up Funds

\$1,000

"Centralized work station changing to hybrid work station: Communication and teamwork among nursing staff"

This pilot project included individual interviews with 20 nursing staff at Lowell General Hospital to examine the impact of work station change from centralized station to pod station on communication and teamwork among nursing staff.

Role: Principal Investigator. Act as the principal and leading personnel on this project.

e. Unfunded Research

2023 National Science Foundation (NSF)

\$998,070

"Intelligent wearable mental health assessor for frontline healthcare workers" (2023-2026)

The project will leverage wearable technologies, clinical notes analytics, and job-related administrative databases to detect and predict behavioral and physiological biomarkers of stress-related disorders, compassion fatigue, exhaustion, and burnout.

Role: Co-PI. PI: Mohammad Arif Ul Alam, Department of Computer Science. Act as the co-PI, I contribute to the project with my expertise on work-related exposure assessment and mental health assessment and promotion.

2023 University of Massachusetts Lowell Seed Grant

\$15,000

"Testing the efficacy of a mobile application designed to improve sleep" (2023-2025)

This pilot study will examine the effectiveness of a mobile app using figurative language compared to plain language to improve sleep of college students.

Role: Co-Investigator. PI: Ann Kronrod, Department of Marketing Entrepreneurship and Innovation. Act as the key personnel, I contribute to the project with my expertise on sleep education and smartphone app assessment of sleep quantity and quality.

2022 R01 National Institute of Aging (NIA)

\$4 million

Subcontract: \$530,000

"Treatment of circadian disruption from shiftwork in older adults" (2023-2028)

This R01 grant will field-test a melatonin intervention and evaluate its feasibility, efficacy, and acceptability in older night shift workers for promoting sleep duration and quality.

Role: Subcontract Principal Investigator. PI: Jeanne Duffy, Brigham Women's Hospital/Harvard Medical School. Act as the key personnel, I will contribute to communications with workplaces, recruitment of participants, development of the focus group script, facilitation of focus groups, analyses of quantitative and qualitative data, and report writing and manuscript publications.

ORAU-Directed Research and Development Grant

\$150,000

"Assessing the occupational health risks and health behaviors of prison and jail correctional nurses" (6/2021-5/2022)

This grant will use mixed methods design to compare occupational health hazards, explore differences and similarities in safety and health behavior and health outcomes of jail and prison correctional nurses, as well as explore and evaluate techniques to assess correctional nurses implicit bias in provision of care in jail and prison correctional settings.

Role: Co-Investigator. PI: Mazen ElGhaziri. I will contribute to this project with my expertise in assessing occupational risks, health behaviors and outcomes of healthcare workers. I will be involved in in the survey and interview script development, data collection and analyses, and manuscript and report writing.

2020 Department of Defense Peer Reviewed Medical Research Program

\$312,987

"A smartwatch platform for sleep and cardiovascular monitoring: A pilot observational study in women veterans and civilians" (2021-2023)

This pilot observational study aims to examine the effect of sleep on cardiovascular risks among women veterans and civilians using wearable devices.

Role: Co-Investigator. PI: Joyita Dutta, Department of Electric and Computer Engineering. Act as the key personnel, I contribute to the project with my expertise on sleep and objective field measures. I will be actively involved in the overall study design and data collection and contribute to the analysis and interpretation of sleep-wake data from wearable devices.

2019 National Institute of Justice

\$1.5 million

"Corrections officer research on stress and fatigue elimination: A multistate evaluation of the effect of shift work and extended hours on corrections officer physical and mental health"

This grant will examine the effect of scheduling and extended work (work schedules, overtime, and secondary employment) on correctional officers' stress and fatigue assessed by subjective measures and objective physiologic markers. The study will recommend guidelines that support healthy scheduling practices within the correctional workforce.

Role: Co-Investigator. PI: Mazen ElGhaziri. I will contribute to this project with my expertise in assessing the effect of shift work on stress, fatigue, sleep, and health outcomes of shift workers. I was involved in the grant proposal writing, and will actively participate in the survey development, data collection and analyses, and manuscript and report writing.

2018 R34 National Center for Complementary and Integrative Health

\$687,300

"Workplace yoga implementation to nurses with chronic low back pain"

This R34 grant was submitted in February 2017 and reviewed positively. We revised the proposal based on reviewers' feedback and resubmitted it in July 2018. The study will implement a tailored workplace yoga program to nurses with chronic low back pain through adapting the yoga program, pilot-testing and iteratively refining it, and evaluating the feasibility of the workplace yoga compared to stretch through a 12-wk single-center RCT. The proposal was reviewed in November 2018 and received an impact score of 38.

Resubmission Review Score: 38

Role: Principal Investigator. Act as the principal and leading personnel on this project.

2018 National Institute of Justice

\$1,492,845 (\$1.5 million)

"Corrections officer research on stress and fatigue elimination: A multistate evaluation of the effect of shift work and extended hours on corrections officer physical and mental health"

This grant will examine the effect of scheduling and extended work (work schedules, overtime, and secondary employment) on correctional officers' stress and fatigue assessed by subjective measures and objective physiologic markers. The study will recommend guidelines that support healthy scheduling practices within the correctional workforce.

Role: Co-Investigator. PI: Mazen ElGhaziri. I will contribute to this project with my expertise in assessing the effect of shift work on stress, fatigue, sleep, and health outcomes of shift workers. I was involved in the grant proposal writing, and will actively participate in the survey development, data collection and analyses, and manuscript and report writing.

2017 R34 National Center for Complementary and Integrative Health

\$672,600

"Workplace yoga for nurses with chronic low back pain"

This R34 grant was revised based on reviewers' positive comments and will be resubmitted in July 2018. The study will design a tailored workplace yoga program for nurses with chronic low back pain through qualitative formative evaluation using participatory action research and the social ecological model, pilot-test and refine the program, and evaluate the feasibility of the refined yoga program through a 12-wk randomized waitlist controlled trial.

Role: Principal Investigator. I act as the principal and leading personnel on this project.

2017 R01 National Heart, Lung, and Blood Institute

\$ 2,140,689 (\$2.1million)

Subcontract: \$198,022

"Implementation and evaluation of an evidence-based sleep strategy for shift workers"

This R01 grant was revised based on reviewers' positive comments and resubmitted in March 2018. The study will field-test a sleep timing intervention and evaluate its feasibility, efficacy, and acceptability in night shift nurses for promoting sleep duration and quality as well as improving on-shift alertness and performance. The intervention has been previously tested in lab simulated night shift workers with promising outcomes.

Role: Co-Investigator and Subcontract Principal Investigator. PI: Jeanne Duffy, Brigham Women's Hospital/Harvard Medical School. Act as the key personnel, I will contribute to communications with the healthcare institutions, on-site recruitment of participants, development of the survey measures and focus group scripts, facilitation of focus groups, analyses of quantitative and qualitative data, and report writing and manuscript publications.

2016 R01 NIA AG044416 Administrative Supplement

\$54,000

Subcontract: \$32,026

"Treatment of circadian disruption from shiftwork in older adults"

This administrative supplement will survey health care workers on their sleep habits, factors contributing to the choice of sleep timing and duration, and their acceptability to the intervention that was tested effective in the parent R01. We will examine whether there are racial/ethnic disparities that impact sleep behaviors and practices when working night shifts.

Role: Subcontract Principal Investigator. PI: Jeanne Duffy, Brigham Women's Hospital/Harvard Medical School. Act as key personnel, I will contribute to the design and administration of surveys at nursing homes, and provide expertise on survey analysis and manuscript and report writing.

2016 American Sleep Medicine Foundation Focused Projects Award

\$20,000

"mHealth intervention for sleep promotion of night shift nurses: A feasibility trial"

This project proposes to develop a smartphone app intervention to promote sleep quality of night shift nurses. RCT is used to collect feasibility, process evaluation, and initial efficacy of the intervention on sleep quality of 30-night shift nurses.

Role: Principal Investigator. Act as the principal and leading personnel on this project.

2016 American Nurse Foundation Grant

\$10,000

"An online education and smartphone app intervention for sleep and mental health promotion among female nursing students: A feasibility trial"

This project proposes to develop a 2-hour online education and a smartphone app intervention to promote sleep quality and mental health of female nursing students. RCT is used to collect feasibility and efficacy of the intervention on sleep and mental health of 40 nursing students.

Role: Principal Investigator. Act as the principal and leading personnel on this project.

2015 American Nurse Foundation Grant

\$5,000

"Understanding role stressors across the novice to expert nurse practitioner continuum."

This project proposes to describe personal and job-related stressors in the role transition of newly practicing nurse practitioners and identify individual and organizational factors that contribute to their job stress, work-life balance, and job satisfaction.

Role: Co-Investigator. PI: Anya Peters. As key personnel on this project, I was involved in the proposal writing, including specific aims, research methods, and interview questions.

2. Academic and Professional Publications

a. Referred Manuscript Publications

Data-Based Manuscripts Published as Associate Professor at the University 9/2019-present

Siddique, S. (PhD student), Gore, R., **Zhang, Y.,** Punnett, L., & SHIFT Research Team. Emotional exhaustion in healthcare workers: Moving beyond coping skills to improve organizational conditions. *Journal of Occupational and Environmental Medicine*. Accepted. (Impact Factor 3.2)

This cross-sectional study reported that job hazards mediated and moderated the association between organizational safety and emotional exhaustion.

Barger, L., **Zhang, Y.,** Lammers-van der Holst, H., Snoep, D., Murphy, A., Desnoyers, B., & Duffy, J. Feasibility, effectiveness and acceptability of an afternoon-evening sleep schedule in older nightshift workers. <u>SLEEP Advances.</u> Accepted. (Impact Factor 0.4)

This mixed methods study reported that participants assigned to the 8-hr self-selected and 8-hr afternoon-evening groups has significantly increased time-in-bed than the baseline and the control group. Focus group discussions indicated that although feasible, it was not acceptable by participants to spend 8-hr in bed due to family and other ADLs.

Nobrega, S. (PhD student), & Zhang, Y. Let's learn together! A mixed methods study to assess readiness for interprofessional education on Total Worker Health practice. Workplace Health & Safety: The Official Journal of the American Association of Occupational Health Nursing. Accepted. (Impact Factor 2.6)

This mixed methods study reported occupational safety and health professionals' readiness for interprofessional education on Total Worker Health practice through survey and focus groups.

Lammers-van der Holst, H.M., Quadri, S., Murphy, A., Ronda, J., **Zhang, Y.,** Barger, L., & Duffy, J. Evaluation of sleep strategies between night shifts in actual shift workers. <u>Sleep Health: Journal of the National Sleep Foundation</u>. doi:10.1015/j.sleh.2023.08.025 (Impact Factor 4.45)

This paper reported significant differences between morning, delayed, split-sleep or mixed sleepers in the timing of sleep, subjective sleep quality, and regularity of sleep between consecutive night shifts, whereas sleep duration and subjective soundness of sleep did not show differences.

Zhang, Y., Murphy, J. (Immerse scholar), Lammers-van der Holst, H.M., Barger, L., Lai, Y-J., & Duffy, J. Interventions to improve sleep of nurses: A systematic review. *Research in Nursing and Health*, 46(5), 462-484. doi:10.1002/nur.22337 (Impact Factor 2.24)

This systematic review paper summarized findizm930604ngs from 38 previous experimental and quasi-experimental studies on interventions used to improve sleep outcomes of nurses, including aroma therapy, dietary supplements, cognitive behavioral therapy, light therapy, mind-body therapy, sleep education, exercise, napping, shift schedule modification, and multicomponent intervention.

Essien, Y. (PhD student), Zhang, Y., Koren, A., Palacios, N., Louis, F., & Tucker, K. Sociocultural factors associated with persistent prescription opioid use among Puerto Rican adults in Massachusetts. *PLOS One*, *18*(8), e0290104. doi:10.1371/journal.pone.0290104 (Impact Factor 3.75)

This paper reported significant associations between perceived discrimination and persistent prescription opioid use among 798 Puerto Ricans living in MA.

Fallon, P. (PhD student), ElGhaziri, M., Jaeger, L., **Zhang, Y.,** & Dugan, A. Peer support programs to reduce work-related organizational stress and trauma for public safety workers and military: A scoping review. *Workplace Health & Safety: The Official Journal of the American Association of Occupational Health Nursing*, 71(11), 523-535. doi:10.1177/21650799231194623 (Impact Factor 2.6)

This review paper summarized findings from 13 previous studies on the use of peer support program for public safety workers to reduce organizational stress and trauma.

Zhang, Y., Dugan, A., ElGhaziri, M., **Siddique, S. (PhD student)**, & Punnett, L. Work-family conflict and depression among healthcare workers: The role of sleep and decision latitude. <u>Workplace Health and Safety: The Official Journal of the American Association of Occupational Health Nursing</u>, 71(4), 195-205. doi:10.1177/21650799221139998 (Impact Factor 2.6)

This paper reported that sleep disturbances served as a mediator while decision latitude served as a moderator in the association between work-family conflict and depression among healthcare workers.

Zhang, Y., ElGhaziri, M., & de Castillero, E. Synergistic effect of self-efficacy and social support on regular participation in leisure-time physical activity among nursing staff. *International Journal of Nursing Practice*, e13087. doi:10.1111/ijn.13087 (Impact Factor 2.23)

This paper used mixed methods research to report that self-efficacy and social support has a synergistic

effect on nursing staff's regular participation in leisure-time physical activity. Qualitative data suggested that work-out areas in the workplace with release time and organized activity may promote regular leisure-time physical activity of nursing staff.

Dugan, A.G., Decker, R.E., **Zhang, Y.,** Lombardi, C.M.,...Cavallari, J. Precarious work schedules and sleep: A study of unionized full-time workers. *Occupational Health Science*, 6(2), 247-277. doi:10.1007/s41542-022-00114-y (Impact Factor 3.1)

This paper reported that precarious work schedules had indirect effects on fatigue and depressive symptoms through sleep quantity. Schedule flexibility moderated the relation between precarious work schedules and sleep quantity. Sleep quality moderated the association between sleep quantity and fatigue and depressive symptoms.

Burns-Mullett, C. (DNP student), & **Zhang, Y.** STOP-Bang screening for obstructive sleep apnea and referring for further evaluation in preoperative patients: A quality improvement project. *Journal of PeriAnesthesia Nursing*, 37(5), 601-606. doi: 10.1016/j.jopan.2021.11.001 (Impact Factor 1.7)

This paper reported that 46.9% of the 32 preoperative patients had a further consultation with PCP about OSA risks after implementing STOP-Bang screening at an ambulatory surgery center.

Zhang, Y., ElGhaziri, M., **Siddique, S. (PhD student)**, Gore, R., Kurowski, A., Nobrega, S., & Punnett, L. Emotional labor and depressive symptoms among healthcare workers: The role of sleep. *Workplace Health and Safety: The Official Journal of the American Association of Occupational Health Nursing,* 69(8), 383-393. doi:10.1177/21650799211014768. (Impact Factor 2.6)

This paper reported that sleep disturbances significantly mediated the association between surface-acting emotional labor and depressive symptoms among healthcare workers.

Punnett, L., Nobrega, S., **Zhang, Y.,** Rice, S., Gore, R., Kurowski, A., & SHIFT Research Team. The Healthy Workplace Participatory Program: Stepped-wedge protocol for prospective, controlled evaluation using mixed methods. <u>BMC Public Health</u>, 20(1), 1463. doi:10.1186/s12889-020-09551-2 (Impact Factor 4.55)

This paper reported the stepped-wedge protocol for prospective, mixed-methods evaluation of the Healthy Workplace Participatory Program in the CPHNEW safety and health through integrated facilitated teams (SHIFT) project.

Zhang, Y., ElGhaziri, M., Nasuti, S., & Duffy, J. The comorbidity of musculoskeletal disorders and depression: Associations with working conditions among hospital nurses. <u>Workplace Health and Safety: The Official Journal of the American Association of Occupational Health Nursing.</u> 68(7), 346-354. doi:10.1177/2165079919897285 (Impact Factor 2.6)

This paper reported that work-family conflict and 8-hr night shift or 12-hr day shift were associated with the comorbidity of musculoskeletal disorders and depression among hospital nurses.

2020 Park. M., Zhang, Y., Price, L.L., Bannuru, R.R., & Wang, C. Mindfulness is associated with

sleep quality among patients with fibromyalgia. *International Journal of Rheumatic Diseases*, 23(3), 294-301. doi:10.1111/1756-185X.13756 (Impact Factor 2.56)

This paper reported that higher mindfulness was associated with better sleep quality, less sleep disturbance, less pain interference, anxiety and depression in patients with fibromyalgia. Pain interference, depression, and anxiety mediated the association between mindfulness and sleep quality and disturbances.

- Peters, A., Kellogg, M., & **Zhang, Y.** Implementation of a smartphone app to measure and manage anxiety in undergraduate clinical nursing students. *Nursing Education Perspectives:*Official Journal of the National League for Nursing, 40(6), 367-369. (Impact Factor 1.0)
 - This paper reported quantitative and qualitative findings from 11 clinical nursing students for using a smartphone app to measure and manage anxiety.
- **Kotejoshyer, R. (PhD student)**, **Zhang, Y.,** Flum, M., Fleishman, J. M., Punnett, L., & ProCare Research Team. Prospective evaluation of fidelity, impact and sustainability of participatory workplace health. *International Journal of Environmental Research and Public Health*, *16*(9), E1494. doi: 10.3390/ijerph16091494 (Impact Factor 4.61)

This paper reported the process fidelity, program impact, and medium-term sustainability of a workplace participatory program integrating occupational safety and health with health promotion through mix-method research at three intervention and three control sites.

ElGhaziri, M., Dugan, A., **Zhang, Y.,** & Castro, M.E. Sex and gender role differences in occupational exposures and work outcomes among registered nurses in correctional settings. <u>Annals of Work Exposures and Health,</u> 63(9), 568-582. doi:10.1093/annweh/wxz018 (Impact Factor 2.6)

This paper reported the sex and gender role differences in occupational exposures and work outcomes among 95 correctional nurses in a northeast state of US.

Data-Based Manuscripts Published as Assistant Professor at the University 9/2013-8/2019

Zhang, Y., ElGhaziri, M., Dugan, A., & Castro, M. Work and health correlates of sleep quantity and quality among correctional nurses. *Journal of Forensic Nursing*, 15(1), 42-51. doi:10.1097/JFN.0000000000000229 (Impact Factor 1.0)

This paper reported an online survey with 89 correctional nurses in a northeast state of US about the work and health factors correlated with their sleep quantity and quality.

Powell-Cope, G., Rugs, D., lalynytchev, A., Devine, D., McCoskey, K., Zhang, Y., & Deter, L. Patient handling and mobility course content: A national survey of nursing programs. <u>The American Journal of Nursing</u>, <u>118(11)</u>, 22-31. (Impact Factor 2.7) (AJN Featured Article and 1.5 Continuing Education Credits Offering)

This paper reported an online survey with faculty from 228 baccalaureate and associate degree nursing programs in the U.S. about nursing curriculum coverage for patient handling and mobility content.

Zhang, Y., Peters, A., & **Bradstreet, J (Immerse scholar)**. Relationships among sleep quality,

coping styles, and depressive symptoms among college nursing students: A multiple mediator model. *Journal of Professional Nursing: Official Journal of the American Association of Colleges of Nursing*, 34(4), 320-325. doi:10.1016/j.profnurs.2017.12.004 (Impact Factor 2.5)

This paper reported that association between sleep quality and depressive symptoms was attenuated by coping, especially emotional disengagement coping, through analysis with 242 nursing students.

Zhang, Y., & Tickner, J. Reinvigorating engagement and collaboration through interprofessional education (RECIPE) in nursing and public health students. *Journal of Nursing Education and Practice*, 8(12), 15-20. (Impact Factor 0.3)

This paper reported the evaluation of an interprofessional education (IPE) activity implemented with nursing and public health undergraduates in fall 2015.

Zhang, Y., Peters, A., & Chen, G. Perceived stress mediates the association between sleep quality and mental disorders among college nursing students. *International Journal of Nursing Education Scholarship*, 15(1). doi:10.1515/ijnes-2017-0020 (Impact Factor 1.0)

This paper reported that perceived stress mediated the association between sleep quality and mental disorders among 242 college nursing students participating in a cross-sectional survey.

Zhang, Y., Duffy, J., de Castillero, E., & Wang, K. Chronotype, sleep characteristics, and musculoskeletal disorders among hospital nurses. *Workplace Health and Safety: The Official Journal of the American Association of Occupational Health Nursing*, 66(1), 8-15. doi:10.1177/2165079917704671 (Impact Factor 2.6)

This paper reported that evening type, prolonged sleep onset latency, and using sleep-promoting substances were associated with increased risk of MSDs among nurses.

Zhang, Y., Punnett, L., & Rebecca, G. Predictors of nursing staff voluntary termination in nursing homes: A case-control study. *Journal of Applied Gerontology: The Official Journal of the Southern Gerontological Society*, 38(11), 1518-1536. doi:10.1177/0733464817724043 (Impact Factor 3.0)

This paper reported that evening shift work and shift length>8hrs contributed to nursing staff voluntary termination through using a case-control study design with nursing staff in 18 nursing homes.

Zhang, Y., Chernaik, M., & **Hallet, K** (**Immerse scholar**). Relationship issues among college nursing students: Associations with stress, coping, sleep and mental disorders. <u>Teaching and Learning in Nursing</u>, 12(4), 246-252. doi:10.1016/j.teln.2017.06.005 (Impact Factor 1.9)

This paper reported that nursing students were facing various kinds of relationship issues, which were significantly associated with perceived stress, coping, poor sleep quality, and anxiety and depression.

Zhang, Y., Duffy, J., & de Castillero, E. Do sleep disturbances mediate the association between work-family conflict and depression among nurses? A cross-sectional study. *Journal of Psychiatric and Mental Health Nursing*, 24(8), 620-628. doi:10.1111/jpm.12409 (Impact Factor 2.7)

This paper reported that sleep disturbances significantly mediated the association between work-family

conflict and depressive symptoms among nurses.

Zhang, Y., Punnett, L., & Nannini, A. Work-family conflict, sleep, and mental health of nursing assistants working in nursing homes. *Workplace Health and Safety: The Official Journal of the American Association of Occupational Health Nursing*, 65(7), 295-303. doi:10.1177/2165079916665397 (Impact Factor 2.6)

This paper reported that work-family conflict was associated with nursing assistants' mental health, and poor sleep quality mediated the association between work-family conflict and mental health.

Zhang, Y., Cifuentes, M., Gao, X., **Amaral, G. (Immerse scholar)**, & Tucker, K. Age- and gender-specific associations between insomnia and falls in Boston Puerto Rican adults. *Quality of Life Research*, 26(1), 25-34. doi:10.1007/s11136-016-1374-7 (Impact Factor 3.5)

This paper reported that adults with insomnia had a 32% increased likelihood of having falls. Insomnia was significantly associated with higher risk of falls in adults of 60 y or older, and in women.

Zhang, Y., Punnett, L., Mawn, B., & Gore, R. Working conditions and mental health of nursing staff in nursing homes. *Issues in Mental Health Nursing*, *37*(7): 485-492. doi:10.3109/01612840.2016.1162884 (Impact Factor 2.1)

This paper reported that mental health was associated with different working conditions in different nursing groups, including nursing assistants, licensed practical nurses, and registered nurses.

Zhang, Y., Flum, M., **Kotejoshyer, R. (PhD student)**, Fleishman, J. M., Henning, R., & Punnett, L. Workplace participatory occupational health/health promotion program: Facilitators and barriers observed in three nursing homes. *Journal of Gerontological Nursing*. 42(6), 34-42. doi:10.3928/00989134-20160308-03 (Impact Factor 1.3)

Using the Social Ecological Model, this paper reported facilitators and barriers for a participatory occupational health/health promotion program in three nursing homes through qualitative evaluations.

Xu, D., Chen, L., Wan, X., **Zhang, Y.,** Liu, N., & Wang, K. Toileting behavior and related health beliefs among Chinese female nurses. *International Journal of Clinical Practice*, 70(5), 416-423. doi:10.1111/ijcp.12798 (Impact Factor 2.6)

Using the Health Belief Model, this paper found that the perceived barriers of healthy toileting behaviors and self-efficacy predicted healthy toileting behaviors; while perceived severity of lower urinary track symptoms predicted unhealthier toileting behaviors.

Zhang, Y., Punnett, L., PhillipsMcEnany, G., & Gore, R. Contributing influences of work environment on sleep quantity and quality of nursing assistants in long-term care facilities. <u>Geriatric Nursing</u>, 37(1), 13-18. doi:10.1016/j.gerinurse.2015.08.010 (Impact Factor 2.7)

This paper reported that nursing assistants' sleep quantity and quality were closely associated with the beneficial work features in the long-term care environment.

Zhang, Y., Soroken, L. (PhD student), Laccetti, M., de Castillero, E., & Konadu, A. (2015). Centralized to hybrid nurse station: communication and teamwork among nursing staff. *Journal of Nursing Education and Practice*, 5(12), 34-41. doi:10.5430/jnep.v5n12p34 (Impact Factor 0.3)

This qualitative study reported although nursing staff experienced the challenge of isolation, they consistently identified patient-centered interactions and learning to work as a team at the hybrid station.

Zhang, Y., Flum, M., West, C., & Punnett, L. (2015). Assessing organizational readiness for a participatory occupational health/health promotion intervention in skilled nursing facilities. <u>Health Promotion Practice</u>, 16(5), 724-732. doi:10.1177/1524839915573945 (Impact Factor 1.9)

This paper qualitatively assessed readiness of five skilled nursing facilities for a participatory occupational health/health promotion intervention.

Zhang, Y., Punnett, L., Gore, R., & The CPHNEW Research Team. (2014). Relationships among employees' working conditions, mental health and intention to leave in nursing homes. *Journal of Applied Gerontology: The Official Journal of the Southern Gerontological Society*, 33(1), 6-23. doi:10.1177/0733464812443085 (Impact Factor 3.0)

This paper reported that clinical caregivers' intention to leave was reduced greatly when they get along with supervisors and coworkers, feel respect at work, and have more decision-making opportunities.

Raman, G., **Zhang, Y.,** Minichiello, V.J., D'Ambrosio, C., & Wang, C. (2013). Tai Chi improves sleep quality in healthy adults and patients with chronic conditions: A systematic review and meta-analysis. *Journal of Sleep Disorders & Therapy*, 2, 141. doi:10.4172/2167-0277.1000141 (Impact Factor 2.9)

This meta-analysis reported that Tai Chi improved sleep quality in both healthy adults and patients with chronic health conditions.

Holmberg, M.D. (MS student), Flum, M., West, C., Zhang, Y., Qamili, S., & Punnett, L. (2013). Nursing assistants' dilemma: Caregiver vs. caretaker. *Hospital Topics*, 91, 1-8. doi:10.1080/00185868.2013.757953 (Impact Factor 1.62)

This paper qualitatively assessed nursing assistants' opinions on the extent to which the work environment supported or impeded their care-giving to residents.

Manuscripts Published Prior to Appointment at the University

Zhang, Y., Flum, M., Nobrega, S., Blais, L., Qamili, S., & Punnett, L. (2011). Work organization and health issues in long-term care centers: Comparison of perceptions between caregivers and management. *Journal of Gerontological Nursing*, *37*(5), 32-40. doi:10.3928/00989134-20110106-01 (Impact Factor 1.3)

This qualitative study explored common and divergent perceptions of caregivers and managers concerning occupational safety, work organization, and psychosocial concerns at nursing homes.

Zhang, L., & **Zhang, Y. (2011).** A novel region merge algorithm based on neutrosophic logic. <u>International Journal of Digital Content Technology and its Applications</u>, 5(7), 381-387. doi:10.4156/jdcta.vol5.issue7.47 This study compared the breast cancer image processing with a new fuzzy based method.

Zhang, Y., & Wang, K.F. (2006). The application of self-efficacy theory in the health education of patients with diabetes. *Chinese Journal of Practical Nursing*, 10, 73-74. (In Chinese)

This paper is a literature review and summary about the application of self-efficacy theory in the health education with diabetic patients. The paper was published in Chinese.

Zhang, Y., & Wang, K.F. (2006). The anxiety of patients with breast cancer in different stages of hospitalization and Nursing countermeasures. *Nursing Journal of Chinese People's Liberation Army*, 2, 30-31. (In Chinese)

This paper is a cross-sectional study to compare breast cancer patients' anxiety pre- and post-operation.

Manuscripts in Review

- 1. Lai, Y-J., Tsai, E-Y., Jarustanaput, P. (PhD student), Wu, Y-S., Chen, Y-H., O'Leary, S.E., Manachevakul, S. (PhD student), & **Zhang., Y.** Mediating Effects of Sleep Quality and Stress on Optimism and Mental Health in College Students. Journal of Professional Nursing. (in review)
- **2. Zhang, Y.,** Murphy, A., Lammers-van der Holst, H.M., Barger, L., & Duffy, J. Night shift work and sleep experiences in older night shift nurses. *Journal of Nursing Administration*. (in review)
- **3.** Essien, Y. (PhD student), Zhang, Y., Koren, A., Palacios, N., Louis, F., & Tucker, K. The mediating effect of depression on the relationship between perceived discrimination and persistent prescription opioid use in Puerto Rican adults. *Journal of Addictions Nursing*. (in review)
- **4. Siddique**, **S. (PhD student)**, Gore, R., **Zhang**, Y., Punnett, L., & SHIFT Research Team. Emotional exhaustion in healthcare workers: Moving beyond coping skills to improve organizational conditions. *Journal of Occupational and Environmental Medicine*. (in review)
- **5. Siddique**, **S. (PhD student)**, Gore, R., **Zhang**, **Y.**, & Punnett, L. Emotional exhaustion in healthcare workers: Moving beyond coping skills to improve organizational conditions. *American Journal of Public Health*. (in review)
- **6. Siddique, S. (PhD student)**, Gore, R., **Zhang, Y.,** Punnett, L., & SHIFT Research Team. Surface-acting emotional labor, emotional exhaustion and depression in healthcare workers. <u>Scandinavian Journal of Work, Environment and Health.</u> (in review)
- 7. Parker, T. (PhD student), ElGhaziri, M., Zhang, Y., Barnes-Farrell, J., Gossett, E., Shishivan, H.H., Henning, R., Garza, J., Kim, I., & Cherniack, M. Real-time reporting and the impact of workplace violence and incivility in the nursing population assessed using experience sampling methods (ESM). Workplace Health & Safety. (in review)
- **8. Nobrega, S. (PhD student), Zhang, Y.,** Hendrickson-Lohmeier, J., & Cavallari, J. Development and psychometric evaluation of the Total Worker Health skill scale. *Annals of*

- Work Exposures and Health. (in review)
- **9.** Barger, L., **Zhang, Y.,** Lammers-van der Holst, H., Snoep, D., Murphy, A., Desnoyers, B., & Duffy, J. Feasibility, effectiveness and acceptability of an afternoon-evening sleep schedule in older nightshift workers. *SLEEP Advances*. (in review)

Manuscripts in Progress

- 1. MacCaulloch, P. (PhD student), Zhang, Y., ElGhaziri, M., & Punnett, L. Nurse safe patient handling: A concept analysis. *Nursing Forum*. (in progress)
- **2. Kotejoshyer, R. (PhD student)**, **Zhang, Y.,** Punnett, L., Buchholz, B. Physical workload and ergonomic assessment of therapy jobs in nursing homes. *Ergonomics*. (in progress)

b. Referred Conference Paper Publications

Ding, X. (PhD student), Xu, J., Wang, H., Chen, G, Thind, H., & **Zhang, Y.** (2016). WalkMore: Promoting walking with just-in-time context-aware prompts. IEEE Annual Wireless Health Conference, October 25-27, National Institute of Health, Bethesda, MD, US.

c. Published Journal-indexed Conference Abstracts

- **Zhang, Y.,** Lammers-van der Holst, H.M., Barger, L.K.,...Duffy, J.F. Individual differences of sleep pattern and duration between two consecutive night shifts among night workers. <u>Sleep.</u> 45 (Suppl. 1), A111. doi:10.1093/sleep/zsad077.0249 (Impact Factor 5.6)
- **Zhang, Y., Murphy, A. (Immerse scholar)**, Lammers, H., Barger, L., Swaminathan, N., Granfield, C., Palacios, A.A., & Duffy, J. Sleep patterns and experiences in older night shift nurses. *Sleep.* 45 (Suppl. 1), A151. doi:10.1093/sleep/zsac079.333 (Impact Factor 5.6)
- **Zhang, Y.,** ElGhaziri, M., **Siddique, S. (PhD student)**, Gore, R., Kurowski, A., Nobrega, S., & Punnett, L. Sleep disturbances mediate the association between emotional labor and depressive symptoms among healthcare workers. <u>Sleep.</u> 44 (Suppl. 2), A292-293. doi:10.1093/sleep/zsab072.747 (Impact Factor 5.6)
- Lammers-van der Holst, H.M., **Zhang, Y.,** Barger, L.K.,...Duffy, J.F. Limited time for sleep in night shift workers is associated with risk of insomnia and shift work disorder. <u>Sleep.</u> 44 (Suppl. 2), A119-120. doi:10.1093/sleep/zsab072.298 (Impact Factor 5.6)
- **Zhang, Y.,** Thind, H., Kim, S., **Nunes, R.** (Immerse scholar), Reidy, J. (Immerse scholar), Punnett, L., & Duffy, J.F. Associations of low back pain and sleep among nursing staff. <u>Sleep</u>, 43 (Suppl. 1), A389. doi: 10.1093/sleep/zsaa056.1020 (Impact Factor 5.6)
- **Zhang, Y.,** Thind, H., Kim, S., **Soup, A. (Immerse scholar),** Punnett, L., & Duffy, J.F. Workplace yoga program features and associations with shift work and sleep among nursing staff. *Sleep.* 43 (Suppl. 1), A296. doi:10.1093/sleep/zsaa056.774 (Impact Factor 5.6)
- Lammers-van der Holst, H.M., **Zhang, Y.,** Barger, L.K.,...Duffy, J.F. Sex differences in sleep and quality of life in healthcare shift workers. *Sleep.* 43 (Suppl. 1), A146-147. doi:10.1093/sleep/zsaa056.379 (Impact Factor 5.6)

- **Zhang, Y., Kotejoshyer, R. (PhD student)**, Punnett, L., & Buchholz, B. Physical workload, leisure-time physical activity, musculoskeletal disorders, and sleep quality among rehabilitation employees. *Sleep*, 41 (suppl. 1), A341. doi:10.1093/sleep/zsy061.917 (Impact Factor 5.6)
- **Zhang, Y.,** Duffy, J., & de Castillero, E. (2017). Relationships of musculoskeletal disorders, sleep disturbances, and depression among hospital nurses. *Sleep*, 40 (suppl. 1), A410. doi:10.1093/sleepj/zsx050.1098 (Impact Factor 5.6)
- **Zhang, Y.,** Duffy, J., de Castillero, E.R., & Wang, K. (2016). Chronotype, sleep characteristics, and musculoskeletal disorders among hospital nurses. *Journal of Sleep and Sleep Disorders Research*, 39, A263. (Impact Factor 1.0)
- **Zhang, Y.,** Cifuentes, M., Gao, X., **Amaral, G. (Immerse scholar)**, & Tucker, K. (2016). Age-and gender-specific associations between insomnia and falls in older Puerto Ricans. *Journal of Sleep and Sleep Disorders Research*, 39, A356. (Impact Factor 1.0)
- 2014 Raman, G., Zhang, Y., Minichiello, V., D'Ambrosio, C., & Wang, C. (2014). *Journal of Alternative and Complementary Medicine*, 20(5), A66. doi:10.1089/acm.2014.5173. abstract. PMID: 24805674 (Impact Factor 2.38)
- **Zhang, Y.,** Price, L., Morgan, N., Morgan, L., & Wang, C. (2014). Mindfulness is associated with sleep quality among patients with fibromyalgia. *Arthritis & Rheumatology*. 66(S10), S1116. doi:10.1002/art.38914. abstract. (Impact Factor 13.3)

d. Other Publications

- **Zhang, Y.** (2013). Sleep duration and health outcomes of formal caregivers in skilled nursing facilities: The contribution of the work environment. Doctoral Dissertation, University of Massachusetts Lowell, Lowell, MA.
- **Zhang, Y.** (2011). Working conditions, employee mental health, and intention to leave the job. CPH News Views 2011 May; (21): 1-2. Retrieved from http://www.uml.edu/docs/News%20and%20Views%20Issue21 tcm18-40725.pdf
- Zhang, Y. (2009). How does sleep quality impact safety and health, especially among shift workers, and what can be done to help? CPH News Views 2009 Sep; (12): 1-2. Retrieved from http://www.uml.edu/docs/CPH%20News%20and%20Views%20Issue%2012 tcm18-40734.p

3. Professional Conference Presentations

a. Referred Podium and Poster Regional, National, and International Conference Presentations

- "Optimism and mental health in college students: The mediating role of sleep quality and stress" by Lai, Y-J., Tsai, E-Y., Jarustanaput, P., **Zhang, Y.,** & Zaidi, M. at the 2024 Council for the Advancement of Nursing Science Conference, Washington, DC, June 13-15, 2024. (submitted)
- 2024 "Investigation of a competency framework to guide continuing education in Total Worker Health" by Nobrega, S. (PhD student), Zhang, Y. at International Congress for Occupational Health, Marrakesh, Morocco, April 28-May 3, 2024. (submitted)

- "Competencies for leading integrative Total Worker Health practices: Perspectives from occupational safety and health professionals" by Nobrega, S. (PhD student), Morocho, C., Zhang, Y. at the 2024 European Academy of Occupational Health Psychology, Granada, Spain, June 5-7, 2024. (submitted)
- 2024 "Night shift work and sleep experiences of older night shift nurses" by **Zhang, Y.,** Murphy, A., Lammers, H., Barger, L., & Duffy, J. at <u>2024 Eastern Nurse Research Society</u>, Boston, MA, April 4-5, 2024. (poster)
- 2024 "Fine Particulate Matter Exposure and Pediatric Mental Health Outcomes: An Integrative Review" by Trombley, J. (PhD student), Koren, A., Abdallah, L., & Zhang, Y. at 2024 Eastern Nurse Research Society, Boston, MA, April 4-5, 2024. (poster)
- "Let's learn together! Attitudes of occupational safety and health professionals about the use of interprofessional education pedagogies in continuing education" by Nobrega, S. (PhD student),
 Zhang, Y. at International Congress for Occupational Health, Marrakesh, Morocco, April 28-May 3, 2024. (podium)
- "Facilitators and barriers for the availability, use and helpfulness of PSP programs to address correctional officers stress and trauma in prison and jail settings: Findings from a National Survey" by Fallon, P. (PhD student), El Ghaziri, M., Jaegers, L. A., Zhang, Y., Dugan, A., Cherniack, M. at the 2023 Work, Stress and Health Conference, Miami, FL, November 8-11, 2023. (poster)
- "Total Worker Health® Competency Among Multidisciplinary Occupational Safety and Health Professionals: A Survey Study to Guide Continuing Education" by Nobrega, S. (PhD student), Morocho, C., Zhang, Y., & Cavallari, J. at the 2023 Work, Stress and Health Conference, Miami, FL, November 8-11, 2023. (podium)
- 2023 "A Qualitative Investigation of Competencies Needed for *Total Worker Health* Practice" by Nobrega, S. (PhD student), Morocho, C., Zhang, Y., & Cavallari, J. at the 2023 Work, Stress and Health Conference, Miami, FL, November 8-11, 2023. (poster)
- "The Mediating Effect of Depression on the Relation Between Perceived Discrimination and Persistent Prescription Opioid Use Among Puerto Rican Adults" by Essien-Aleksi, E. I. (PhD student), Koren, A., Palacios, N., Tucker, K. T., & Zhang, Y. at the American Public Health Organization PHN Research Committee Virtual Conference, June 6, 2023. (lightning talk).
- "Individual differences of sleep pattern and duration between two consecutive night shifts among night workers" by **Zhang, Y.,** Lammers-van der Holst, H.M., Barger, L.K.,...Duffy, J.F. at <u>SLEEP</u> 2023, Indiannapolis, IN, June 3-7, 2023. (poster)
- "Daily associations between work and sleep among intensive care nurses" by Zhang, Y., El-Ghaziri, M., Parker, T. (PhD student), Barnes-Farrell, J., Gossett, E., Shishivan, H.H., Henning, R., Garza, J., Kim, I., & Cherniack, M. at the 2022 APHA Conference, Boston, November 6-9, 2022. (poster)
- "Interventions to improve sleep of shift working nurses: A systematic review" by **Zhang**, **Y.**, **Murphy**, **J.** (**Immerse scholar**), Lammers, H., Barger, L., & Duffy, J. at the 2022 APHA Conference, Boston, November 6-9, 2022. (poster)
- "Work and health behavior correlates of weight gain among formal caregivers in nursing homes" by **Zhang, Y., Nabi, M. (MS student),** & Punnett, L. at the 2022 APHA Conference, Boston,

- November 6-9, 2022. (poster)
- "Real-time workplace violence incidents and stress reporting among intensive care registered nurses" by El-Ghaziri, M., **Zhang, Y., Parker, T. (PhD student)**, Barnes-Farrell, J., Gossett, E., Shishivan, H.H., Henning, R., Garza, J., Kim, I., & Cherniack, M. at the 2022 APHA Conference, Boston, November 6-9, 2022. (podium)
- "Sociocultural factors associated with persistent prescription opioid use among Puerto Rican adults in Massachusetts" by **Essien, I. (PhD student)**, **Zhang, Y.,** Koren, A., Palacios, N., & Tucker, K. at the 2022 APHA Conference, Boston, November 6-9, 2022. (poster)
- "Peer support for frontline correction officers: Results from a national survey" by Fallon, P. (PhD student), El-Ghaziri, M., Jaeger, L., Zhang, Y., & Dugan, A. at the 2022 APHA Conference, Boston, November 6-9, 2022. (poster)
- "Real-time approaches to measure workplace violence among nurses, is one measure enough? Development of an incident scoring system" by **Parker, T. (PhD student)**, El-Ghaziri, M., Barnes-Farrell, J., **Zhang, Y.,** Henning, R., & Cherniack, M. at the 2022 IAWBH Conference, San Diego, September 19-24, 2022. (poster)
- "Sleep patterns and experiences in older night shift nurses" by **Zhang, Y.,** Murphy, A., Lammers, H., Barger, L., Swaminathan, N., Granfield, C., Palacios, A.A., & Duffy, J. at <u>SLEEP 2022</u>, Charlotte, NC, June 4-8, 2021. (poster)
- "Investigating nursing incivility and harassment experiences by characterizing day-level experiences" by **Parker**, **T.** (**PhD** student), Barnes-Farrell, J., Cherniack, M., El-Ghaziri, M., Gilmer, D., Gossett, E., Shishivan, H.H., & **Zhang**, **Y.** at the 2022 EAOHP Conference, Bordeaux, France, July 6-8, 2022. (poster)
- 2021 "Scoping review of peer support programs to reduce stress and trauma for frontline safety personnel" by Fallon, P. (PhD student), El Ghaziri, M., Jaegers, L., Zhang, Y., Dugan, A., & Chernick, M. at the 2021 NECOEM Conference, Boston, MA, December 2-3, 2021. (poster)
- "Work-family conflict and depressive symptoms among healthcare workers: The role of sleep and decision latitude." by **Zhang, Y.,** Dugan, A., **Siddique, S. (PhD student)**, & Punnett, L. at the Work, Stress and Health 2021 Virtual Conference, Miami, FL, November 3-6, 2021. (Poster)
- 2021 "Impact of Surface Acting Emotional Labor on Depression in Healthcare Workers: The Role of Emotional Exhaustion as a Mediator" By Siddique, S. (PhD student), Gore, R., Zhang, Y., & Punnett, L. at the Work, Stress and Health 2021 Virtual Conference, Miami, FL, November 3-6, 2021. (Poster)
- "Emotional exhaustion in healthcare workers: The importance of organizational leadership and safety" By **Siddique**, **S. (PhD student)**, Gore, R., **Zhang**, **Y.**, & Punnett, L. at <u>the Work</u>, <u>Stress and Health 2021 Virtual Conference</u>, Miami, FL, November 3-6, 2021. (Poster)
- "Immediate and Retrospective Characterizations of Stress in Nursing Incivility and Harassment Experiences." By **Parker, T. (PhD student)**, Barnes-Farrell, J., Cherniack, M., El-Ghaziri, M., Gilmer, D., Gossett, E., Shishivan, H.H., & **Zhang, Y.** at the Work, Stress and Health 2021 Virtual Conference, Miami, FL, November 3-6, 2021. (Poster)

- "Continuous multimodal assessment of physiological stress responses among nurses in relation to incidents of workplace violence: A feasibility study guided by Total Worker Health® principles." By Gossett, E. (PhD student), Henning, R., El-Ghaziri, M., Barnes-Farrell, J., Parker, T., Zhang, Y., Shishivan, H.H., Kim, I., & Cherniack, M. at the Work, Stress and Health 2021 Virtual Conference, Miami, FL, November 3-6, 2021. (Poster)
- "Sleep disturbances mediate the association between emotional labor and depressive symptoms among healthcare workers" by **Zhang, Y.,** ElGhaziri, M., **Siddique, S. (PhD student)**, Gore, R., Kurowski, A., Nobrega, S., & Punnett, L. at <u>SLEEP 2021</u>, Seattle, WA, June 12-16, 2021. (Poster)
- "Limited time for sleep in night shift workers is associated with risk of insomnia and shift work disorder" by Lammers-van der Holst, H.M., **Zhang, Y.,** Barger, L.K.,...Duffy, J.F. at <u>SLEEP 2021</u>, Seattle, WA, June 12-16, 2021. (Poster)
- 2020 "Long shift duration is associated with high risk for Shift Work Disorder" by Lammers-van der Holst, H.M., **Zhang, Y.,** Barger, L.K.,...Duffy, J.F. at <u>ESRS Congress 2020</u>, Seville, Spain, September 22-25, 2020. (Poster)
- 2020 "Associations of low back pain and sleep among nursing staff" by **Zhang, Y.,** Thind, H., Kim, S., **Nunes, R.** (Immerse scholar), Reidy, J. (Immerse scholar), Punnett, L., & Duffy, J. at <u>SLEEP</u> 2020, Philadelphia, PA, June 13-17, 2020. (Poster)
- Workplace yoga program features and associations with shift work and sleep among nursing staff" by **Zhang, Y.,** Thind, H., Kim, S., **Soup, A.** (**Immerse scholar**), Punnett, L., & Duffy, J. at <u>SLEEP</u> 2020, Philadelphia, PA, June 13-17, 2020. (Poster)
- "Sex differences in sleep and quality of life in healthcare shift workers" by Lammers-van der Holst, H.M., **Zhang, Y.,** Barger, L.K.,...Duffy, J.F. at <u>SLEEP 2020</u>, Philadelphia, PA, June 13-17, 2020. (Poster)
- 2019 "Factors associated with regular participation in leisure-time physical activity among nursing staff" by **Zhang, Y.,** ElGhaziri, M., de Castillero, E. at the 2019 American Public Health Association Conference, Philadelphia, PA, November 2-6, 2019. (Poster)
- 2019 "Evaluation of an online nurse continuing education program to prevent patient handling injuries" by Nobrega, S., Zhang, Y., Kurowski, A., Mawn, B., Do, P. (MS student), Chin, W. (PhD student), & Punnett, L. at the 2019 American Public Health Association Conference, Philadelphia, PA, November 2-6, 2019. (Poster)
- 2019 "Development, implementation and evaluation of global health experience with nursing students" by **Zhang, Y.,** King, V., & Zang, Y. at the 27th Annual Conference for Nurse Educators, North Falmouth, MA, May 29-31, 2019. (Poster)
- 2018 "Racial and ethnic disparities in musculoskeletal disorders and functional disabilities of nursing assistants in long-term care facilities" by **Zhang, Y.,** Punnett, L., & ProCare Research Team at the 2018 NHCGNE Leadership Conference, Boston, MA, November 13-14, 2018. (Poster)
- "Work and health correlates of sleep quantity and quality among correctional nurses" by **Zhang, Y.,** Ghaziri, M., & Dugan, A. at the 2018 American Public Health Association Conference, San Diego, CA, November 10-14, 2018. (Poster)

- "Facilitators and barriers to improve the utilization of EMPOWER as a peer mediation program for T3WV (co-worker conflict/workplace bullying) among correctional registered nurses" by ElGhaziri, M., **Zhang, Y.,** Dugan, A., Peters, A., & Castro, M. at the Sixth International Conference for Violence in the Healthcare Sector, Toronto, Canada, October 24-26, 2018. (Podium)
- "Mindfulness is associated with sleep quality among patients with fibromyalgia" by Park, M., **Zhang, Y.,** Price L., Bannuru, R.R., & Wang, C at the 2018 ACR/ARHP Annual Meeting, Chicago, IL, October 19-24, 2018. (Poster)
- Workplace Bullying Exposure and Prevention in Correctional Nursing" by El Ghaziri, M., Dugan, A., **Zhang, Y.,** & Castro, M.E. at the 11th International Conference on Workplace Bullying and Harassment, Bordeaux, France, June 5-8, 2018. (Podium)
- "Physical workload, leisure-time physical activity, musculoskeletal disorders, and sleep quality among rehabilitation employees" by **Zhang, Y., Kotejoshyer, R. (PhD student)**, Punnett, L., & Buchholz, B. at <u>SLEEP 2018</u>, Baltimore, MD, June 2-6, 2018. (Poster)
- 2018 "Reinvigorating engagement and collaboration through interprofessional education (RECIPE) in nursing and public health students" by **Zhang, Y.,** & Tickner, J. at the 26th Annual Conference for Nurse Educators, North Falmouth, MA, May 30-June 1, 2018. (Poster)
- 2018 "Development and Implementation of Smartphone App to Measure and Manage Undergraduate Clinical Student Anxiety" by Peters, A.B., Kellogg, M., **Zhang, Y.** at <u>the 26th Annual Conference for Nurse Educators</u>, North Falmouth, MA, May 30-June 1, 2018. (Poster)
- 2017 "Workplace violence exposure among correctional registered nurses" by ElGhaziri, M., Dugan, A., Zhang, Y., & Castro, M. at the 2017 American Public Health Association Conference, Atlanta, GA, November 4-8, 2017. (Podium)
- "Correctional nurse's occupational exposures and attitudes related to health, safety and wellness in the workplace: A mixed method approach" by ElGhaziri, M., Dugan, A., Zhang, Y., & Castro, M. at the 2017 American Assembly for Men in Nursing Annual Conference, Las Vegas, NV, September 21-23, 2017. (Poster)
- "Relationships of musculoskeletal disorders, sleep disturbances, and depression among hospital nurses" by **Zhang, Y.,** Duffy, J., & de Castillero, E. at <u>SLEEP 2017</u>, Boston, MA, June 3-7, 2017. (Poster)
- 2017 "STOP-Bang Questionnaire Screening for Sleep Apnea Treatment" by Burns-Mullett, C. (DNP student), & Zhang, Y. at the 24th Annual Northeast Regional Nurse Practitioner Conference, Boston, MA, May 3-5, 2017. (Poster)
- 2016 "Musculoskeletal disorders and comorbid depression: Associations with working conditions among aging nurses" by **Zhang, Y.,** & Wang, K. at the 2016 American Public Health Association Conference, Denver, CO, October 29-November 2, 2016. (Podium)
- "Sleep quality and mental disorders among college nursing students: The mediating role of perceived stress and coping styles" by **Zhang, Y.,** Peters, A., & Chen, G. at the 2016 American Public Health Association Conference, Denver, CO, October 29-November 2, 2016. (Podium)

- "Perceptions of role and occupational risk of correctional nurses" by ElGhaziri, M., Dugan, A.,
 Zhang, Y., & Castro, M. at the Fifth International Conference for Violence in the Healthcare Sector, Dublin, Ireland, October 26-28, 2016. (Poster)
- "Sleep disturbances mediate the association between work-family conflict and depression among hospital nurses" by **Zhang, Y.,** Duffy, J., & de Castillero, E. at the 2016 American Public Health Association Conference, Denver, CO, October 29-November 2, 2016. (Poster)
- 2016 "Chronotype, sleep characteristics, and musculoskeletal disorders among hospital nurses" by **Zhang, Y.,** Duffy, J., & de Castillero, E. at <u>SLEEP 2016</u>, Denver, CO, June 11-15, 2016. (Poster)
- 2016 "Age- and gender-specific associations between insomnia and falls in older Puerto Ricans" by **Zhang, Y.,** Cifuentes, M., Gao, X., **Amaral, G.** (**Immerse scholar**), & Tucker, K. at <u>SLEEP 2016</u>, Denver, CO, June 11-15, 2016. (Poster)
- 2015 "Relationships among work schedules, sleep quality, and functional disability of nursing home employees" by Zhang, Y., Punnett, L., & ProCare Research Team at the 2015 American Public Health Association Conference, Chicago, IL, October 31-November 4, 2015. (Podium)
- 2015 "Individual differences in sleep-wake habits and sleep quality among nursing home employees" by **Zhang, Y.,** Punnett, L., & ProCare Research Team at the 2015 American Public Health Association Conference, Chicago, IL, October 31-November 4, 2015. (Podium)
- "Assessing the occupational health risks and health behaviors for men in correctional nursing" by ElGhaziri, M., Dugan, A., **Zhang, Y.,** & Castro, M. at the 2015 American Public Health Association Conference, Chicago, IL, October 31-November 4, 2015. (Poster)
- "Impact of staff education and electronic medical record alerts on reducing hospital-wide sepsis mortality" by Liddell, J., Simons, S., White, D., & Zhang, Y. at Organization of Nurse Leaders, Massachusetts, Rhode Island & New Hampshire, Norwood, MA, September 11, 2015. (Poster)
- 2015 "A noval idea to attract community hospital nurses to participate in nursing research" by McPadden, T., Albert, K.,...Zhang, Y., Lynch, C. at <u>Organization of Nurse Leaders, Massachusetts, Rhode Island & New Hampshire</u>, Norwood, MA, September 11, 2015. (Poster)
- "Investigation of physical workload of therapy work in nursing homes" by Kotejoshyer, R. (PhD student), Zhang, Y., Buchholz, B., Punnett, L., & ProCare Research Team at the 2015 Safe Patient Handling and Mobility Conference, Glendale, AZ, April 20-24, 2015. (Poster)
- 2014 "The States of Southeast Asian Communities in New England" by Uy, P., Dinh, K., Ho, I., Kim, S., Kim, M.J., & Zhang, Y., at the 2014 States of Southeast Asian American Studies, Minneapolis, MN, October 2-3, 2014. (Podium)
- 2014 "Predictors of nursing staff voluntary termination in long-term care facilities" by **Zhang, Y.,** Punnett, L., Gore, R., & ProCare Research Team at the 2014 American Public Health Association Conference, New Orlands, LA, November 15-19, 2014. (Poster)
- "Mindfulness is associated with sleep quality among patients with fibromyalgia" by **Zhang, Y.,** Price, L., Morgan, N., Morgan, L., & Wang, C at <u>American College of Rheumatology</u>, Boston, MA, November 14-19, 2014. (Poster)
- 2013 "Work-family conflict and mental health among caregivers in skilled nursing facilities: The role of

- sleep" by **Zhang**, **Y.**, Punnett, L., & The CPHNEW Research Team at the 2013 American Public Health Association Conference, Boston, MA, November 2-6, 2013. (Podium)
- "Facilitators and barriers for workplace participatory interventions: Perspectives from employees and management in three nursing homes" by **Zhang, Y.,** Flum, M., **Kotejoshyer, R. (PhD student)**, Fleishman, J. M., Henning, R., & Punnett, L. at the 2013 Work, Stress, and Health Conference, Los Angeles, CA, May 16-19, 2013. (Podium)
- "Relationships between working conditions and sleep quality among employees in long-term care centers" by **Zhang, Y.,** Punnett, L., & Phillips McEnany, G. at the 2012 Symposium on Human Factors and Ergonomics in Health Care: Bridging the Gap, Baltimore, MD, March 12-14, 2012. (Poster)
- "Relationships among working conditions, mental health and caregivers' intention to leave in long-term care centers" by **Zhang, Y.,** Punnett, L., & Gore, R. at the Work, Stress, and Health Conference, Orlando, FL, May 19-22, 2011. (Podium)
- "Sleep quality among employees in long-term care centers: The contribution of the work environment" by **Zhang, Y.,** Punnett, L., & Phillips McEnany, G. at the 2011 American Public Health Association Conference, Washington DC, October 29-November 2, 2011. (Poster)
- "A Research-to-Practice Partnership in the Long-Term Care Sector" by Punnett, L., Flum, M., Gore, R., Kurowski, A., Lahiri, S., Zhang, Y., Kernan, G., & Roberts, Y. at NIOSH NORA Conference, Cincinnati, OH, July 12-13, 2011. (Poster)
- "Work organization and health issues in long-term care centers: Comparison of perceptions between caregivers and management" by **Zhang, Y.,** Flum, M., Nobrega, S., Blais, L., Qamili, S., & Punnett, L. at the 2009 American Public Health Association Conference, Philadelphia, PA, November 7-11, 2009. (Podium)

b. Invited Podium and Poster Regional and Local Presentations

- "Improving optimism, sleep quality, stress, and mental health using a virtual reality-based intervention among undergraduate students: A pilot study" by Lai, Y-J., Shen, J., **Zhang, Y.,** & Wang, Y. at the UMass Lowell Faculty Symposium, December 5, 2023, UMass Lowell, Lowell, MA. (Lightning Talk)
- 2023 "Prescreening task force" by Carroll, M. & Zhang, Y. at the 2023 Lowell General Hospital Research and Quality Fair, Lowell, MA, November 7, 2023. (Poster)
- "Treatment of circadian disruption in older night workers" by **Zhang, Y.,** Lammers-van der Holst, H.M., Barger, L.K.,...Duffy, J.F., at the Zuckerberg College of Health Sciences Faculty Retreat, May 2023, UMass Lowell, Lowell, MA. (Podium)
- 2023 "Optimism with sleep quality, stress, and mental health among college students returning to classes during the COVID-19 pandemic" by Lai, Y.J., Zhang, Y., Jarustanaput, P. (PhD student), Manachevakul, S. (PhD student), & O'Leary, S.E. (BS student), at the 2nd Solomont School of Nursing Donna Manning Scholarship and Research Day, April 2023, UMass Lowell, Lowell, MA. (Podium)
- 2022 "Sociocultural Factors Associated with Persistent Prescription Opioid Use Among Puerto Rican

- Adults in Massachusetts" by Essien-Aleksi, E. I. (PhD student), Koren, A., Palacios, N., Tucker, L. T., & Zhang, Y. at the 1st Solomont School of Nursing Donna Manning Scholarship and Research Day, April 2022, UMass Lowell, Lowell, MA. (Most popular poster award)
- "Interventions to improve sleep quality of shift-working nurses: A systematic review" by **Murphy**, **J.** (Immerse scholar) & Zhang, Y., at the 24th UMass Lowell Virtual Student Research and Community Engagement Symposium, April 2021, UMass Lowell, Lowell, MA. (Poster)
- Workplace interventions to reduce low back pain in nursing staff: A systematic review" by **Johnston, A. (Immerse scholar)** & **Zhang, Y.,** at the <u>24th UMass Lowell Virtual Student Research and Community Engagement Symposium,</u> April 2021, UMass Lowell, Lowell, MA. (Poster)
- 2020 "Individual differences of low back pain and sleep among nursing staff" by Nunes, R. (Immerse scholar), Reidy, J. (Immerse scholar), & Zhang, Y., at the 23rd UMass Lowell Virtual Student Research and Community Engagement Symposium, April 27, 2020, UMass Lowell, Lowell, MA. (Poster)
- 2020 "Endorsed workplace yoga program features by nursing staff" by Soup, A. (Immerse scholar), & Zhang, Y., at the 23rd UMass Lowell Virtual Student Research and Community Engagement Symposium, April 27, 2020, UMass Lowell, Lowell, MA. (Poster)
- "Low back pain is associated with sleep of nursing staff" by Zhang, Y., Thind, H., Kim, S., Nunes, R. (Immerse scholar), Reidy, J. (Immerse scholar), Punnett, L., & Duffy, J. at the UMass Center for Clinical Translational Science, 2020 Community Engagement and Research Symposium, March 20, 2020, UMass, Worcester, MA. (Poster)
- "Interested workplace yoga program features by nursing staff and its associations with shift work and sleep" by **Zhang, Y.,** Thind, H., Kim, S., **Soup, A.** (Immerse scholar), Punnett, L., & Duffy, J. at the UMass Center for Clinical Translational Science, 2020 Community Engagement and Research Symposium, March 20, 2020, UMass, Worcester, MA. (Poster)
- "Using survey and interview findings to develop programming for correctional nurses' work environment" by ElGhaziri, M., Dugan, A., & **Zhang, Y.** at the 2020 <u>Semi-annual Sturbridge</u> Symposium by UMass Lowell and UConn, Sturbridge, MA, Jan 16, 2020. (Podium)
- "Night shifts in older workers: Field test of a sleep timing strategy" by Duffy, J., Lammers-van der Holst, H.M., & Zhang, Y., et al. at the 2019 Lowell General Hospital Nursing Research and Quality Fair, Lowell, MA, October 29, 2019. (Podium)
- "Test of a sleep timing strategy to improve night shift performance in older healthcare workers" by Lammers-van der Holst, H.M., Ronda, J.M., Barger, L.K., **Zhang, Y.,** Duffy, J.F., et al. at Discover Brigham 2019, Boston, MA, November 2019. (Poster)
- 2019 "Development, implementation and evaluation of global health experience with nursing students" by **Zhang, Y.,** King, V., & Zang, Y. at the 2019 Zuckerberg College of Health Sciences Faculty Retreat, Lowell, MA, May 22, 2019. (Poster)
- 2019 "Evaluation of physical activity and sleep quality among night shift nurses using Actigraph and Smartphone app" by Chow, S. (Immerse scholar), Zuber, J. (Immerse scholar), & Zhang, Y., at the 22nd UMass Lowell Student Research and Community Engagement Symposium, May 1, 2019,

- UMass Lowell, Lowell, MA. (Poster)
- 2019 "Work and health behavior correlates of weight gain among nursing home employees" by Zhang, Y., Nabi, M. (MS student), Punnett, L., & the ProCare Research Team, at the UMass Center for Clinical Translational Science, 2019 Community Engagement and Research Symposium, March 22, 2018, UMass, Worcester, MA. (Poster)
- 2019 "Self-efficacy and social support are associated with regular participation in leisure-time physical activity among nursing staff" by **Zhang**, **Y.**, ElGhaziri, M., de Castillero, E. at <u>the UMass Center for Clinical Translational Science</u>, 2019 Community Engagement and Research Symposium, March 22, 2018, UMass, Worcester, MA. (Poster)
- "Aromatherapy as an adjunct treatment for postoperative nausea and vomiting (PONV) relief" by Carroll, M. & Zhang, Y. at the 2018 Lowell General Hospital Nursing Research and Quality Fair, Lowell, MA, November 5 & 13, 2018. (Podium)
- "Discharge bundle in the elective joint replacement population" by Veins, B. (DNP student), Adkins, J., & Zhang, Y. at the 2018 Lowell General Hospital Nursing Research and Quality Fair, Lowell, MA, November 5 & 13, 2018. (Poster)
- "Correlates of sleep quantity and quality among correctional nurses" by **Zhang, Y.,** Ghaziri, M., & Dugan, A. at <u>the UMass Center for Clinical Translational Science, 2018 Community Engagement and Research Symposium</u>, March 9, 2018, UMass, Worcester, MA. (Poster)
- "Work- and leisure-time physical activity, musculoskeletal disorders, and sleep quality among rehabilitation employees" by Zhang, Y., Kotejoshyer, R. (PhD student), Punnett, L., & Buchholz, B. at the UMass Center for Clinical Translational Science, 2018 Community Engagement and Research Symposium, March 9, 2018, UMass, Worcester, MA. (Poster)
- "Occupational health risks and health behaviors for correctional nurses: An overview" by El Ghaziri, M., Dugan, A., **Zhang, Y.,** Castro, M. at the Semi-annual Sturbridge Symposium by UMass Lowell and UConn, Sturbridge, MA, January 12, 2017. (Podium)
- 2017 "Chronotype, sleep characteristics, and musculoskeletal disorders among hospital nurses" by **Zhang, Y.,** Duffy, J., & de Castillero, E. at <u>UMass Lowell School of Nursing Clinical Practice and Research Symposium</u>, April 27, 2017. (Poster)
- "Physical activity behaviors among nursing staff" by **Zhang, Y.,** de Castillero, E., **Chernaik, M.** (**Immerse scholar**), & **Hallet, K** (**Immerse scholar**). at the 2016 Lowell General Hospital Nursing Research Fair, Lowell, MA, October 4 & 18, 2016. (Podium and Poster)
- "Gender role expectations and the lived experience of correctional registered nurses" by ElGhaziri,
 M., Dugan, A., Zhang, Y., & Castro, M. at the Semi-annual Sturbridge Symposium by UMass
 Lowell and UConn, Sturbridge, MA, May 12, 2016. (Podium)
- 2016 "Coping with relationship issues among college nursing students" by Chernaik, M. (Immerse scholar), & Zhang, Y. at the 2016 Summer UMass Lowell Co-op Scholar Poster Presentations, Lowell, MA, August 3, 2016. (Poster)
- 2016 "Physical activity, sleep quality, safety and health outcomes of shift workers" by **Zhang, Y.,** Duffy J., & de Castillero, E., at the UMass Lowell Faculty Research and Creative Work Symposium,

- Lowell, MA, March 3, 2016. (Poster)
- "Impact of staff education and electronic medical record alerts on reducing hospital-wide sepsis mortality" by Liddell, J., Simons, S., White, D., & Zhang, Y., at the 2015 Lowell General Hospital Nursing Research Fair, Lowell, MA, October 13 & 20, 2015. (Podium and Poster)
- "Shift work and sleep among hospital nurses" by **Zhang, Y.,** Duffy, J., de Castillero, E., **Long, E.** (Immerse scholar), & Hallet, K. (Immerse scholar), at the 2015 Lowell General Hospital Nursing Research Fair, Lowell, MA, October 13 & 20, 2015. (Podium and Poster)
- 2015 "Investigation of physical workload and sleep quality in rehabilitation professionals" by **Kotejoshyer, R. (PhD student), Zhang, Y.,** Buchholz, B., Punnett, L., & ProCare Research Team, at the UMass Lowell Faculty Research and Creative Work Symposium, Lowell, MA, March 11, 2015. (Poster)
- "Centralized work station changing to hybrid work station: communication and teamwork among nursing staff" by **Zhang, Y., Soroken, L. (PhD student),** Laccetti, M., & de Castillero, E., at the 2014 Lowell General Hospital Nursing Research Fair, Lowell, MA, October 21-22, 2014. (Podium and poster)
- "Predictors of nursing staff voluntary termination in skilled nursing facilities" by **Zhang, Y.,**Punnett, L., & Gore, R., at <u>the Semi-annual Sturbridge Symposium by UMass Lowell and UConn,</u>
 Sturbridge, MA, Jan 16, 2014.(Podium)
- 2014 "Insomnia symptoms and falls among older Puerto Rican adults" by Zhang, Y., Cifuentes, M., Gao, X., Amaral, G. (Immerse scholar), & Tucker, K., at the UMass Center for Clinical Translational Science, 2014 Community Engagement and Research Symposium, November 7, 2014, UMass, Worcester, MA. (Poster)
- "Mindfulness is associated with sleep quality among patients with fibromyalgia" by **Zhang, Y.,** Price, L., Morgan, N., Morgan, L., & Wang, C at the UMass Center for Clinical Translational Science, 2014 Community Engagement and Research Symposium, November 7, 2014, UMass, Worcester, MA. (Poster)
- 2014 "Predictors of nursing staff voluntary termination in long-term care facilities" by Zhang, Y., Punnett, L., Gore, R., & ProCare Research Team, at the UMass Center for Clinical Translational Science, 2014 Community Engagement and Research Symposium, November 7, 2014, UMass, Worcester, MA. (Poster)
- 2014 "Investigation of physical workload and sleep quality in rehabilitation professionals" by Kotejoshyer, R. (PhD student), Zhang, Y., Buchholz, B., Punnett, L., & ProCare Research Team, at the UMass Center for Clinical Translational Science, 2014 Community Engagement and Research Symposium, November 7, 2014, UMass, Worcester, MA. (Poster)
- "Sleep mediates the relationship between work-family spillover and mental health of nursing home caregivers" by **Zhang, Y.,** Punnett, L., Phillips McEnany, G., & Mawn, B., at the UMass Lowell Faculty Research and Creative Work Symposium, Lowell, MA, Feb 11, 2014. (Poster)
- "Sleep duration and health outcomes among formal caregivers in skilled nursing facilities: The contribution of the work environment" by **Zhang, Y.,** Punnett, L., PhilipsMcEnany, G., & Mawn,

- B., at the Semi-annual Sturbridge Symposium by UMass Lowell and UConn, Sturbridge, MA, Jan 17, 2013. (Podium)
- "Facilitators and barriers for workplace participatory programs: Perspectives from employees and management in three nursing homes" by **Zhang, Y.,** Flum, M., **Kotejoshyer, R. (PhD student)**, Fleishman, J. M., Henning, R., & Punnett, L. at <u>the College of Health Sciences Research Symposium, UMass Lowell, Lowell, MA, May 2, 2013. (Podium)</u>
- "Facilitators and barriers for workplace participatory programs: Perspectives from employees and management in three nursing homes" by **Zhang, Y.,** Flum, M., **Kotejoshyer, R. (PhD student)**, Fleishman, J. M., Henning, R., & Punnett, L. at the 3rd Annual Symposium Community Engaged Research: Exploring the Reach, Impact, & Value, Center for Clinical and Translational Science, UMass Medical, Worcester, MA, November 8, 2013. (Poster)
- "Key factors influencing the success of participatory health promotion and protection programs: A comparison of intervention and non-intervention centers" by Kotejoshyer, R. (PhD student), Zhang, Y., Flum, M., Punnett, L., & Fleishman, J. at the 3rd Annual Symposium Community Engaged Research: Exploring the Reach, Impact, & Value, Center for Clinical and Translational Science, UMass Medical, Worcester, MA, November 8, 2013. (Poster)
- "Sleep quality among employees in long-term care centers: The contribution of the work environment" by **Zhang, Y.,** Punnett, L., & Phillips McEnany, G. at the 2nd Annual Symposium Challenging Issues in Community Health: The Role of Research, Center for Clinical and Translational Science, UMass Medical, Shrewsbury, MA, November 30, 2012. (Poster)
- 2010 "Relationships among employees' working conditions, mental health and intention to leave in long-term care centers" by Zhang, Y., Punnett, L., & Gore, R. at the School of Health and Work Environment Research Symposium, UMass Lowell, Lowell, MA, May 13, 2010. (Poster)
- 2010 "Work organization and health among long-term care employees: Perceptions of health needs & participatory intervention" by Flum, M., Zhang, Y., Blais, L., Russell, J., Nobrega, S., Punnett, L., & ProCare Team, at the School of Health and Work Environment Research Symposium, UMass Lowell, Lowell, MA, May 13, 2010. (Poster)
- "A Research-to-Practice Partnership in the Long-Term Care Sector" by Punnett, L., Flum, M., Gore, R., Zhang, Y., Kurowski, A., Lahiri, S., Roberts, Y., Kernan, G., Henning, R., & ProCare Team, at the School of Health and Work Environment Research Symposium, UMass Lowell, Lowell, MA, May 13, 2010. (Poster)

4. Social Media

2023 spring Research paper was graded as A (high quality) in an integrative review published

in the Journal of Gerontological Nursing

https://journals.healio.com/doi/10.3928/00989134-20221206-01

2023 spring Publish an article in the Conversation which has been republished by over 20

media outlets including the Houston Chronicle, SFGate, the Associated Press and

Yahoo News

https://theconversation.com/health-care-workers-are-frazzled-and-poor-sleep-ma

	y-turn-stress-into-poor-mental-health-199944
2022 spring	Provide sleep health tips and educational materials for the university trivia night
	event in March 2022
	https://www.uml.edu/myuml/Submissions/2022/2022-03-04-15-23-18-Having-tro
	uble-falling-asleep-Come.aspx
2020 fall	Interview with University Relations on "Sleep tips for students studying online"
	https://www.uml.edu/News/stories/2020/Remote-Learning-Tips.aspx
2019 fall	LowellSun article "Overnight workers might want to listen to this UML prof"
	https://www.lowellsun.com/2019/09/12/overnight-workers-might-want-to-listen-t
	o-this-uml-prof/
2019 fall	Press release "Research aims to improve night-shift workers' sleep: Job
	performance for older employees critical as labor force ages"
2018 spring	Merrimack Valley Magazine editor interview about the science of sleep and
2016 spring	research regarding sleep promotion of shift workers and the general population
2017 spring	Massachusetts Association of Colleges of Nursing Faculty Teach Award report on
	"Massachusetts Report on Nursing" by ANA Massachusetts
2016 fall	Nursing Assistants Need Quality Sleep to Provide Quality Care: Strategies to
	Beat Fatigue https://www.uml.edu/News/stories/2016/NursingSleep.aspx
2016 spring	Radio broadcast interview with WBZ-AM about the effect of sleep disturbance
2010 spring	on worker job performance in advance of the switch to Daylight Saving Time
	on worker job performance in advance of the switch to Bayinght Saving Time

D. INSTRUCTION RELATED ACTIVITY

1. Teaching: University of Massachusetts Lowell – Baccalaureate Level

Number of Students/fall semester

Course #	Course Title	Credit	Fall	Fall	Fall	Fall	Fall	Fall	Fall	Fall	Fall	Fall	Fall	Fall	Fall
		allocation	13*	14*	15**	16**	17**	18**	19**	20**	21	22	23	24	25
NURS.	Health	4 (12h)	12***	-	-	-	-	-	-	-	-	-	-		
3150	Promotion &														
	Risk Reduction														
	of Families II,														
	Gerontological														
	Practicum														
NURS.	Research in	3 (3h)	-	35	8	-	-	-	62	-	-	-	-		
3010	Nursing and				34****										
	Health Care														
NURS.	Nursing	1 (3h)	-	8	8	-	-	-	-	20	20	20	20		
3130L	Assessment and														
	Skills														
NURS.	Role Transition	6 (6h)	-	-	-	8	10	12	-	-	-	-	-		
4140	Practicum														
HSCI.	IPE Research	3 (3h)	-	-	-	-	-	-	-	42	45	73	48		
3400	Methods														

^{*} Awarded pre-tenure course load reduction

Number of Students/spring semester

Course #	Course Title	Credit/Hours allocation	Spr 14*	Spr 15*	Spr 16**	Spr 17**	Spr 18**	Spr 19**	Spr 20**	Spr 21***	Spr 22**	Spr 23**
										*		
NURS.3150	Health Promotion & Risk	4 (12h)	12***	-	-	-	-	-	-	-	-	-
	Reduction of Families II,											
	Gerontological											
	Practicum											
NURS.4140	Role Transition	6 (6h)	-	9	11	-	12	-	-	-	-	-
	Practicum											
NURS.3010	Research in Nursing and	3 (3h)	-	-	-	-	-	-	-	-	-	-
	Health Care											
NURS.2120R	Medication Calculations	1 (1h)	-	-	-	54	-	96	-	-	92	83
	Recitation											
HSCI.3400	IPE Research Methods	3 (3h)	-	-	-	-	-	-	40	-	46	-

^{*} Awarded pre-tenure course load reduction

Number of Students/summer semester

Course #	Course Title	Credit/Hours	Summer	Summer	Summer	Summer	Summer	Summer
		allocation	20	21	22	23	24	25
HSCI.3400	Online IPE Research Methods	3 (3h)	29	14	33	30		

2. Teaching: University of Massachusetts Lowell - Graduate Level

Number of Students/fall semester

Course #	Course Title	Credit/Hours	Sum	Spring	Spring	Spring	Spring	
		allocation	16	17**	19**	20**	23**	
HSCI.5020	Global Health Experience	3 (3h)	8	-	-	-	-	
NURS.7300	Quantitative Research	3 (3h)	-	12	6	-	9	
	Methods and Grantsmanship							
NURS.7390	Mentored Research	3 (3h)	-	-	-	4	-	

^{**} Awarded research-productive course load reduction

a. New Course Development

Develop the 12-week online course syllabus, assignments, course activities, and weekly agenda, readings, and lecture notes for the Undergraduate IPE Research

^{**} Awarded research-productive course load reduction

^{***}To reduce class size, this course was divided into two sections and taught twice a semester

^{****} Course PI

^{**} Awarded research-productive course load reduction

^{***}To reduce class size, this course was divided into two sections and taught twice a semester

^{****} Sabbatical leave

Methods course (HSCI. 3400)

Develop the online course syllabus, assignment guidelines and rubric, course activities, and weekly agenda, reading, and lecture notes for the PhD Quantitative Research Methods and Grantsmanship (NURS.7300)

Develop the course objectives, contents, activities, and assignments for the Graduate Global Health Experience Course (HSCI.5020); Organize and lead student global health experience in China in the summer of 2016

b. Dissertation/Thesis/Scholarly Project Advisement

PhD Students (n=9)

2024-present	Project title: "Patient activation and quality of life in community-dwelling older adults with chronic diseases" (Committee Chair)
	Student: Linette Wilson
2024-present	Project title: "Social support, self-compassion, and psychological well-being among Thai adults with Type 2 Diabetes Mellitus" (Committee Member)
	Student: Ploypapus Jarustanaput (Committee Chair: Ainat Koren)
2022-present	Project title: "Factors associated with resilience and quality of life among family caregivers of person with dementia in Thailand" (Committee Chair)
	Student: Praphasri Thungmiphon
2020-present	Project title: "Emotional labor, burnout and depression among healthcare workers" (Committee Member)
	Department: Public Health (Committee Chair: Leland Ackerson)
	Student: Sundus Siddique
2019-2023	Project title: "Investigating hospital safety culture characteristics related to nurse patient handling policies and practices: A mixed method study" (Committee Chair)
	Student: Patricia MacCulloch. Defense: Spring 2023
2022-2023	Occupational Safety and Health Professional Perspectives on Total Worker Health (TWH) Competencies and Interprofessional Continuing Education (Committee Member)
	Department: Education (Committee Chair: Jill Lohmeier)
	Student: Suzanne Nobrega. Defense: Spring 2023
2020-2023	Project title: "Exploring facilitators and barriers of peer support programs for correctional officers in jail and prison settings: A mixed method approach" (Committee Member)

Department: Nursing (Committee Chair: Mazen ElGhaziri) Student: Pamela Fallon. Defense: Spring 2023 2021-2022 Project title: "Sociocultural factors associated with persistent prescription opioid use among Puerto Rican adults in Massachusetts" (Committee Chair) Student: Inyene Essien. Defense: Spring 2022 2014-2015 Project title: "Unconstrained smartphone sensing and empirical study for sleep monitoring and self-management." (Committee Member) Department: Commuter Science (Committee Chair: Guanling Chen) Student: Ke Huang. Defense: Spring 2015 **DNP Students (n=6)** 2020-2021 Project title: "Will the implementation of the Institute of Healthcare Improvement's Joy in Work Framework improve nurse leader resiliency?" (Statistician) Student: Susan Santana (Rivier University) 2017-2018 Project title: "Nurse manager leadership development: Enhancing skillsets to improve staff retention." (Statistician) Student: Cecelia Lynch (MGH Institute of Health Professionals) 2017-2018 Project title: "Does the implementation of discharge bundle compared to standard treatment in the joint replacement population reduce the readmission rate in a ten-week timeframe?" (Preceptor and Statistician) Student: Barbara Vein (Chamberlain College of Nursing) Project title: "STOP-Bang approach to identifying sleep apnea for referral for 2015-2016 treatment." (Committee Chair) Student: Cheryl BurnsMullett 2015-2016 Project title: "Yoga pranayama intervention for PTSD symptoms in Veterans." (Committee Member) Student: Kelly Doyle 2013-2014 Project title: "Safe patient handling: Motivators of Nursing Practice Change." (Committee Member) Student: Carin Bennett-Rizzo **Graduate Research Project (n=2)** 2013-2014 Project title: "The challenges of palliative care in a global setting." Student: Brianna Eble (Win Best Poster Award) 2013-2014 Project title: "Centralize workstation changing to hybrid work station:

Communication and teamwork among nursing staff."

Student: Afua Konadu

c. Undergraduate Research/Honor Mentor (n=18)

2023-3024	Project title: "Factors associated with burnout in nursing aides" (in collaboration with Dr. Kimberlee Flink)
	Student: Barry Kyra
2022-2023	Project title: "Investigating hospital safety culture characteristics related to nurse patient handling policies and practices"
	Student: Miranda Lee
2022 fall	Honor by Contract title "Implementing the fourth age-friendly university principle of intergenerational learning into universities globally"
	Student: Brianna Harrington
2021 fall	Honor by Contract title "Nursing careers after nursing education"
	Student: Ashley Walsh
2020-2021	Project title: "Treatment of circadian disruption from shiftwork in older adults"
	Students: Jennifer Murphy & Abigail Johnston
2019-2020	Project title: "Treatment of circadian disruption from shiftwork in older adults"
	Students: Janine Reidy & Rachel Nunes & Annie Soup
2018-2019	Project title: "Musculoskeletal discomfort and sleep quality among nursing staff"
	and "Using smartwatch to investigate health behaviors of night shift nurses."
	Students: Shanna Chow & Julia Zuber
2016-2017	Project title: "Physical activity behaviors among nursing staff."
	Students: Sarah Nasuti & Joseph Bradstreet
2016 summer	Project title: "Coping with stress and sleep quality among college nursing students."
	Student: Michelle Chernaik
2015-2016	Project title: "Assessing the occupational health risks and health behaviors for men in correctional nursing and evaluating the barriers and facilitators for a peer mediation program."
	Student: Kaylin Hadley
2015 summer	Project title: "Shift work and sleep among hospital nurses."
	Student: Johanna Griffin
2014-2015	Project title: "Investigation of physical workload and sleep quality with objective

field measures among rehabilitation professionals"

Student: Emily Long

2014 summer Project title: "Insomnia and falls in community-dwelling Puerto Rican adults."

Student: Gina Amaral

d. Guest Speaker/Lecturer

•	
2023 fall	2023 spring "Shift Work and Sleep Promotion in Nursing" lecture for Dr. Mazen ElGhaziri Role Transition
2023 spring	"Shift Work and Sleep Promotion in Nursing" lecture for Dr. Mazen ElGhaziri Role Transition
2022 fall	"Shift Work and Sleep Promotion in Nursing" lecture for Dr. Mazen ElGhaziri Role Transition
2022 spring	"Shift Work and Sleep Promotion in Nursing" lecture for Dr. Mazen ElGhaziri Role Transition
2021 fall	"Shift Work and Sleep Promotion in Nursing" lecture for Dr. Mazen ElGhaziri Role Transition
2021 spring	"Shift Work and Sleep Promotion in Nursing" lecture for Dr. Mazen ElGhaziri Role Transition
2020 fall	"Shift Work and Sleep Promotion in Nursing" lecture for Dr. Mazen ElGhaziri Role Transition
2020 spring	"Shift Work and Sleep Promotion in Nursing" lecture for Dr. Mazen ElGhaziri Role Transition
2019 fall	"Shift Work and Sleep Promotion in Nursing" Dr. Mazen ElGhaziri Role Transition
2019 spring	"Shift Work and Sleep Promotion in Nursing" Dr. Mazen ElGhaziri Role Transition
2018 fall	"Shift Work and Sleep Promotion in Nursing" Dr. Mazen ElGhaziri Role Transition
2018 spring	"Shift Work and Sleep Promotion in Nursing" Dr. Mazen ElGhaziri Role Transition
2017 fall	"Research Process in Nursing" Dr. Joel Tickner Research Methods in Public Health
2017 fall	"Shift Work and Sleep Promotion in Nursing" Professor Laurie Soroken Role Transition
2016 spring	"Where there is a will, there is a way" Spring Fox Lecture, Eta Omega Chapter, Sigma Theta Tau International
2015 fall	Cultural Panel Discussion on Global Health Care, organized by Nursing Student Without Borders Committee
2015 fall	"Data Analysis and Interpretation" Dr. Mazen ElGhaziri Research in Nursing and Health Care
2015 fall	"Research Process in Nursing" Dr. Joel Tickner Research Methods in Public Health
2014 fall	"Data Analysis and Interpretation" Dr. Anya Peters Research in Nursing and Health
	^

Care

E. SERVICE ACTIVITIES

1. Service to International Collaborations

a. Student Collaboration

2016 spring Coordinate the Memorandum of Understanding (MOU) signed on teaching and research collaborations between UMass Lowell and Shandong University, China

2016 summer Organize and lead an international global health experience trip to China for 8 nursing

students at different academic levels, including Post-BS, RN-BS, MS, and PhD

b. Faculty Collaboration

2016 fall Coordinate UMass Lowell faculty sabbatical program at Shandong University, China

2. Service to Professional and Research Community

2018 fall	Attend Fall Induction, Eta Omega Chapter, Sigma Theta Tau International
2016 fall	Attend Spring Fox Lecture, Eta Omega Chapter, Sigma Theta Tau International
2016 spring	Attend Spring Fox Lecture, Eta Omega Chapter, Sigma Theta Tau International
2015 fall	Attend Fall Induction, Eta Omega Chapter, Sigma Theta Tau International
2015 spring	Attend Spring Fox Lecture, Eta Omega Chapter, Sigma Theta Tau International
2014 fall	Attend Fall Induction, Eta Omega Chapter, Sigma Theta Tau International
2014 spring	Attend Spring Fox Lecture, Eta Omega Chapter, Sigma Theta Tau International
2013 fall	Attend Fall Induction, Eta Omega Chapter, Sigma Theta Tau International
2013-present	Faculty advisor, Lowell General Hospital Evidence-Based Practice and Research Council, meet monthly since fall 2013, providing research support to research and quality improvement projects at the hospital, and facilitating the organization's
	Annual Nursing Research and Quality Fair

2. Service to University of Massachusetts Lowell

a. Service to the University

2022-present	University Launch Team
2017-2019	Member, Faculty Senate Committee, elected spring of 2017 as faculty senate representing the Solomont School of Nursing. Attend monthly senate meetings.
2013-2016	Research Affiliate, Center for the Promotion of Health in the New England Workplace, providing resources and services for research and student mentoring.
2013-2015	Member, Center for Asian American Studies
2013-2020	Member, Center for Gerontological Research and Partnership

b. Service to the Zuckerberg College of Health Sciences

	Zhang, Y.
2022-present	Member, College Recruitment & Retention Committee
2022-2024	Member, Public Health Qualifying Exam Committee
2021-2022	Member, Search Committee, Department of Public Health
2020 summer	Member, College Academic Planning Committee
2018 spring	Member, Search Committee for Biostatistician Lecturer, Department of Public Health
c. Service to the	e Solomont School of Nursing
2023-present	Co-Chair, Scholarship and Award Committee, reviewing undergraduate scholarship applications and selecting qualified applicants for awards annually
2021-present	Chair, School Personnel Committee
2021-present	Member, Research and Scholarship Committee
2020 Spring	Chair, School Academic Planning Committee
2019-present	Faculty mentor for YunJu Lai
2019-2021	Member, School Personnel Committee
2019 spring	Chair, Faculty Search Committee
2018-2020	Member, Faculty Search Committee
2019-present	Qualify Exam Committee
2017-present	Member, PhD Program Committee, attend monthly committee meetings. Responsibilities include review of PhD program objectives and courses, review of applicants and student progression, prepare AQAD review, and review of PhD program curriculum, and development of new program pathways.
2016-2017	Member, Teaching Excellence Award Committee, reviewing teaching excellence award applications in 2017.
2014-2019	Faculty co-advisor, Nursing Student without Borders Committee, providing guidance and support to the student committee for community services and field trips.
2014-present	Member, International Collaboration Committee, planning and organizing student international academic learning and service trips.
2014-2022	Member, Scholarship and Award Committee, reviewing undergraduate scholarship applications and selecting qualified applicants for awards annually.
2014-2021	Coordinator, Shalin Liu Internship, coordinating and supervising nursing student internship experience at D'Youville Living Well Community.
	Student: Caroline Owusu (2020-2021)
	Student: Nancy Pin (2019-2020)
	Student: Minhthu Nguyen (2018-2019)
	Student: Summar Coneeny (2017-2018)
	Student: Emily Fitzgerald (2016-2017)

Student: Maggie Scacca (2015-2016) Student: Kelsey Barrett (2014-2015)

2013-present Member, Baccalaureate Program Committee, attend monthly meetings to

discuss/review and implement changes regarding issues at the Baccalaureate program including program and curriculum objectives, AACN crosswalk, clinical placements,

accelerated program, and student issues.

d. Service on Academic Advising

2013 – 2019 Advise 22-26 undergraduate students per semester

2019 – present Advise 15-28 undergraduate and graduate students per semester

e. Service on Student Recruitment

Fall 2023	UMass Lowell College of Health Sciences Prospective Student Open House
Spring 2023	UMass Lowell College of Health Sciences Welcome Day
Fall 2022	UMass Lowell College of Health Sciences Prospective Student Open House
Fall 2021	UMass Lowell College of Health Sciences Early Action Open House
Fall 2020	Attend PhD Café twice to recruit students for the BS to PhD direct-entry program
Fall 2019	UMass Lowell College of Health Sciences Student Fall Fest
Spring 2019	UMass Lowell College of Health Sciences Early Action Open House
Fall 2018	UMass Lowell College of Health Sciences Prospective Student Open House
Spring 2018	UMass Lowell College of Health Sciences Early Action Open House
Fall 2017	UMass Lowell College of Health Sciences Prospective Student Open House
Spring 2017	UMass Lowell College of Health Sciences Early Action Open House
Fall 2016	UMass Lowell College of Health Sciences Prospective Student Open House
Spring 2016	UMass Lowell College of Health Sciences Early Action Open House
Fall 2015	UMass Lowell College of Health Sciences Prospective Student Open House
Spring 2015	UMass Lowell College of Health Sciences Early Action Open House
Fall 2014	UMass Lowell College of Health Sciences Prospective Student Open House
Summer 2014	UMass Lowell College of Health Sciences HEALL Welcome Dinner
Spring 2014	UMass Lowell College of Health Sciences Accepted Student Open House
Fall 2013	UMass Lowell College of Health Sciences Prospective Student Open House