Pia K. Markkanen, ScD Visiting Instructor Curriculum Vitae

August 20, 2024

I. CONTACT AND PERSONAL INFORMATION

Name: Pia Katariina Markkanen

Title: Visiting Instructor

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Office address: Department of Public Health, O'Leary 540G

Zuckerberg College of Health Sciences University of Massachusetts Lowell

Lowell, MA 01854, USA

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II. EDUCATION AND RESEARCH

Doctor of Science in Work Environment (ScD)
 University of Massachusetts (UMASS) Lowell,
 School of Health and Environment, the Department of Work Environment, USA
 Doctoral Dissertation (with qualitative research methods): Shoes, Glues, and Families:

Working Conditions in Informal Sector Footwear Manufacturing. GPA: 3.964

Master of Science in Chemical Engineering (MSc)
 The Lappeenranta University of Technology, the Department of Chemical Engineering, Lappeenranta, Finland. Area of specialization: process engineering.
 Master's Thesis: Methane Activation Reactor

1986-1992

2000-2004

III. PROFESSIONAL SKILLS AND EXPERTISE

- Thirty-one (31) years of professional experience in occupational and environmental health.
- Experienced instructor, trainer, student mentor and public speaker.
- Experience in grant writing and managing national and international programs and projects.
- Experienced qualitative and mixed-methods researcher: conducting focus groups, in-depth interviews, worksite walk-throughs. Use of the NVIVO Qualitative Analysis Software and Qualtrics survey tool.
- International project management experience in multicultural environments with goal-orientated approach and strong initiative, while working with governments, employers' and workers' organizations, and non-government agencies. Work experience in different countries includes China, Cambodia, India, Indonesia, Mongolia, Nepal, Pakistan, the Philippines, Switzerland, Thailand, and Viet Nam.

IV. EXPERIENCE IN TEACHING AND RESEARCH IN PUBLIC HEALTH

I'm a teaching faculty at the Department of Public Health, UMASS Lowell. I have teaching experience both at the graduate and undergraduate levels in a number of public health disciplines, including environmental health, occupational safety and health, health promotion, social determinants of health, and implementation and evaluation of public health programs. Since 2020, I've been a key personnel in the National Institute for Occupational Safety and Health (NIOSH)-funded Training Program Grant (TPG) at UMASS Lowell. This program funds graduate students at the Department of Public Health, UMASS Lowell, in their occupational epidemiology MPH track.

In addition to teaching, I have strong mixed-methods research skills. I have been applying qualitative methods in research for 23 years. I was a key personnel in all the NIOSH-funded Safe Home Care studies at UMASS Lowell during 2004-2023 and led population recruitment, data collection, and data analyses for all the qualitative research activities.

V. PROFESSIONAL EXPERIENCE

	University of Massachusetts (UMASS) Lowell, USA
Present – Jan 2024	Visiting Instructor at the Department of Public Health.
Dec 2023 – Sep 2016	Research Professor at the Department of Public Health.
Aug 2016 – Jan 2004	Research Professor at the Department of Work Environment.
Present - Jan 2020	Primary instructor at the Department of Public Health: PUBH 5061 OL Environmental Health (Sp24, Sm24); PUBH 2050 Social Determinants of Health (Sp23,24); PUBH 5510 Work Environment Policy and Practice (Sp24,Sp22-20). PUBH 2080 Princip. of Environmental Health Science (F22,23); PUBH 4410 Implementation and Evaluation in Health Promotion (F23).
Present- Jul 2020	Key personnel. Work Environment Training Program Grant Project, funded by the U.S. National Institute for Occupational Safety and Health (NIOSH)
Aug 2023- Sep 2019	Co-Investigator. NIOSH-funded Safe Home Care Intervention Project.
Apr 2024 – Apr 2020	Steering Committee member. Age-Friendly University Initiative at UMASS Lowell (present). Center for Gerontology and Research Partnerships (2020-21).
Nov 2020 – Nov 2019	Principal Investigator. Work-related Violence in Home Care: Training Development and Implementation Project, funded by the SEIU Healthcare NW Health Benefits Trust, Seattle, WA.
Aug 2019- Aug 2010	Co-investigator. NIOSH-funded Safe Home Care Project.
Aug 2019- Apr 2019	Research Scientist at the Toxics Use Reduction Institute (TURI) to assess and compare airborne chlorine exposures generated by a bleach-based cleaning product and a potentially safer cleaning product alternative to bleach.
Aug 2017 - Jul 2015	Co-investigator. Occupational Health Research, Policy & Capacity Building in Thailand-United States, funded by the Fogarty Center/ NIH/ NIOSH/ NIEHS.
Dec 2013 – Oct 2013	Principal Investigator. Literature review on OSH among migrant workers in the Americas, funded by the International Labour Organization (ILO).
Mar 2013 – Nov 2012	Co-investigator . Development of a training curriculum on cleaning tips for home care clients with asthma and allergies, funded by Massachusetts Council for Home Care Aides Services INC.
Jul 2010-May 2009	Project Manager at the US EPA-funded Mercury Reduction Project in Mexico and Ecuador, Lowell Center for Sustainable Production (LCSP).
Dec 2010-Jul 2009	Research Associate at the Occupational Safety and Health Case Study Project, LCSP. Project funded by the Public Welfare Foundation.
Aug 2009-Dec 2004	Co-investigator in the NIOSH-funded Project SHARRP (<i>Safe Homecare and Risk Reduction for Providers</i>) to investigate blood exposures among homecare workers.
Nov 2004 – Jun 2004	Research Associate at the LCSP. Working conditions and child labour among fishers, conducted in West Java and North Sumatra, Indonesia.

Jun 2016 - Jul 2016	International Labour Office (ILO), Geneva, Switzerland OSH Research Consultant for the ILO's Sectoral Policies Department to develop an academic literature review on access to water, sanitation, and hygiene (WASH) in the workplace as an occupational safety and health concern.
Jan 2020 - Jun 2018	Harvard School of Public Health/ Center for Work, Health and Well-being/ Center for Community-based Research, Boston, USA OSH Bases h. Computer to the Food Service Ladactor Western Service and
Jan 2020 - Jun 2010	OSH Research Consultant, the Food Service Industry Worker Safety and Ergonomics Intervention Study.
Jun 2011- Oct 2011	OSH Research Consultant, the Mumbai Worksite Tobacco Control Study to develop an OSH checklist.
Aug2011 – Feb 2010	OSH Research Consultant to develop worksite practice guidelines to integrate OSH and health promotion.
Jan 2005 – Feb 2005	National Institute of Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC), DHHR, USA Consultant to develop a compendium of measures on discrimination, harassment, and biases initiated by the Center for Women at Work of UMASS Lowell.
May 2004- Sep 2001	<u>UMASS Lowell, USA</u> Research assistant at the <i>Young Workers, Organized Labour, and Tobacco Control</i> Project - a collaboration of the Dana Farber Cancer Institute and UMASS Lowell.
Aug 2004- Dec 2000 (Several independent consultancies, 8 months altogether)	International Labour Office, Jakarta, Bangkok, and Geneva OSH consultant at the InFocus Programme on the Elimination of Child Labour (IPEC) in the footwear industry. IPEC's Hazardous Work Unit in child labour in agriculture, in Geneva, Switzerland. Finland-ILO Asian-Pacific Regional Programme on Occupational Safety and Health (ASIAOSH), preparation for and participation in the final ASIAOSH evaluation. InFocus Programme of SafeWork, assisting in the development of the ILO Guidelines on Safety and Health in Shipbreaking.
May 2001- Sep 2000	<u>UMASS Lowell, USA</u> Research Assistant at the <i>Workers Safety and Health Training</i> — funded by the Paper, Allied Industries, Chemicals, and Energy Workers' Union and the U.S. Department of Energy.
Aug 2000 - Jan 1997	International Labour Office, Bangkok, Thailand Expert in OSH managing the Finland-ILO Asian-Pacific Regional Programme on Occupational Safety and Health (ASIAOSH).
Dec 1996 - Nov 1995	International Labour Office, Bangkok, Thailand Associate Expert in OSH implementing the Finland-ILO ASIAOSH Programme.
May 1995 - Oct 1995	International Labour Office, Geneva, Switzerland Expert in a chemical safety sub-programme on harmonized classification and labelling system of chemicals for the Czech Republic, implemented by the Interdepartmental Project on Environment and the World of Work (INTERDEP/ENV).
Apr 1995-Jan 1994	Consultant to develop chemical sections for the 4th Edition of the <i>ILO</i> Encyclopaedia of Occupational Health and Safety.
Dec 1993- May 1993	Internship and consultant to develop a database of exposure limit values for airborne toxic substances for the ILO's International OSH Information Centre.

VI. PUBLICATIONS AND SCIENTIFIC CONFERENCE PRESENTATIONS

Published work/ dissertations

- Sama S, Quinn M, Gore R, Galligan C, Kriebel D, Markkanen P, Lindberg J, Fallon P. (2024). The Safe Home Care Intervention Study: Implementation Methods and Effectiveness Evaluation. *J Appl Gerontol*. 23:7334648241246472. DOI: 10.1177/07334648241246472. Epub ahead of print
- Markkanen P, Gore R, Sama S, Lindberg J, Galligan C, Quinn M. (2024). Coaching Home Care Clients to Prepare Their Homes for Safe Care Visits: A Mixed-Methods Study to Evaluate a Nurse-Led Educational Intervention Process. *Int. J. Environ. Res. Public Health* 2024, *21*, 360. DOI: 10.3390/ijerph21030360
- Brouillette N, Markkanen P, Quinn M, Galligan C, Sama S, Lindberg J, Karlsson N. (2023). Aide and Client Safety "Should Go Hand-In-Hand": Qualitative Findings From Home Care Aides, Clients, and Agency Leaders. *J Appl Gerontol*. Apr;42(4):571-580. DOI: 10.1177/07334648221146769. Available open access.
- Markkanen P, Brouillette N, Quinn M, Galligan C, Sama S, Lindberg J, Karlsson N. (2021). "It changed everything": The Safe Home Care qualitative study of the COVID-19 pandemic's impact on home care aides, clients, and managers. *BMC Health Services Research*. Vol 21(1): 1055. DOI:10.1186/s12913-021-07076-x. Available open access.
- Lindberg J, Quinn M, Gore R, Galligan C, Sama S, Sheikh N, <u>Markkanen P</u>, Parker-Vega A, Karlsson N, LeBouf R, Virji M. (2021). Assessment of home care aides' respiratory exposure to total volatile organic compounds and chlorine during simulated bathroom cleaning: an experimental design with conventional and "green" products. *Journal of Occupational & Environmental Hygiene*. Vol 18(6): 276-287. DOI: 10.1080/15459624.2021.1910280. Available open access.
- Quinn M, Markkanen P, Galligan C, Sama S, Lindberg J, Edwards M. (2021). Healthy aging requires a health home care workforce: the occupational safety and health of home care aides. *Current Environmental Health Reports*. Published online May 12, 2021. DOI: 10.1007/s40572-021-00315-7. Available open access.
- Markkanen P, Peters S, Grant M, Dennerlein J, Wagner G, Burke L, Wallace L, Sorensen G. (2021). Development and application of an innovative instrument to assess work environment factors for injury prevention in the food service industry. *Work.* Vol 68(3): 641-651. DOI:10.3233/WOR-203399.
- Sama S, Quinn M, Galligan C, Karlsson N, Gore R, Kriebel D, Prentice J, Osei-Poku G, Carter C, Markkanen P, Lindberg J. (2021). Impacts of the COVID-19 pandemic on home health and home care agency managers, clients, and aides: A Cross-Sectional Survey, March to June, 2020. *Home Health Care Management & Practice*. Vol. 33(2): 125-129. DOI: 10.1177/1084822320980415. Available open access.
- Karlsson N, <u>Markkanen</u> P, Kriebel D, Galligan C, Quinn M. (2020). *That's not my job*: A mixed methods study of challenging client behaviors, boundaries, and home care aide occupational safety and health. *American Journal of Industrial Medicine*. Vol 63(4):368-378. DOI: 10.1002/ajim.23082.
- Karlsson N, <u>Markkanen P</u>, Kriebel D, Gore R, Galligan C, Sama S, Quinn M. (2019). Home care aides' experiences of verbal abuse: a survey of characteristics and risk factors. *Occupational and Environmental Medicine*. Vol 76(7):448-454. DOI: 10.1136/oemed-2018-105604. Available open access.
- Goodyear N, Markkanen P, Beato-Melendez C, Mohamed H, Gore R, Galligan C, Sama S, Quinn M. (2018). Cleaning and disinfection in home care: A comparison of two commercial products with potentially different consequences for respiratory health. *American Journal of Infection Control*. Vol. 46(4): 410-416. DOI: 10.1016/j.ajic.2017.09.033. Available open access.
- Markkanen P, Galligan C, Quinn M. (2017). Safety Risks among Home Infusion Nurses and Other Home Health Care Providers. *Journal of Infusion Nursing*. Vol. 40(4):215-223. DOI: 10.1097/NAN.0000000000000227. Available open access.
- Brouillette N, Quinn M, Kriebel D, Markkanen P, Galligan C, Sama S, Gore R, Laramie A, Davis L. (2017). Risk of sharps injuries among home care aides: Results of the Safe Home Care survey. *American Journal of Infection Control*. Vol 45(4): 377-383. DOI: 10.1016/j.ajic.2016.11.018. Available open access.
- Markkanen P and Slatin C. (2016). We Have to Be Willing to Say the World Has Changed and Now We Have to Figure Out How to Deal With That: An Interview with Charles Levenstein, About New Solutions. *New Solutions*. Vol. 26(1):119-33, May 2016. DOI: 10.1177/1048291116635668. Available open access.
- Quinn M, Markkanen P, Galligan C, Sama S, Kriebel D, Gore R, Brouillette N, Okyere D, Sun C, Punnett L, Laramie A, Davis L. (2016). Occupational Health of Home Care Aides: Results of the Safe Home Care Survey. *Occupational and Environmental Medicine*. Vol. 73(4):237-45, Apr 2016. DOI:10.1136/oemed-2015-103031. Available open access.

- Nankongnab N, Silpasuwan P, <u>Markkanen P</u>, Kongtip P, Woskie S. (2015). Occupational Safety, Health, and Wellbeing Among Home-based Workers in the Informal Economy of Thailand. *New Solutions*. Vol 25(2): 212-231, Aug 2015. DOI: 10.1177/1048291115589148.
- Markkanen P, Galligan C, Laramie A, Fisher J, Sama S, Quinn M. (2015). *Understanding sharps injuries in home healthcare: The Safe Home Care qualitative methods study to identify pathways for injury prevention*. BioMed Central Public Health. 15:359, 2015. DOI: 10.1186/s12889-015-1673-x. Available open access
- Galligan C, <u>Markkanen</u> P, Fantasia L, Gore R, Sama S, Quinn M. (2015). A growing fire hazard in communities: home oxygen therapy and continued smoking habits. *New Solutions*. Vol 24(4): 535-554, Feb 2015. DOI: 10.2190/NS.24.4.g. Available open access.
- Markkanen P, Quinn M, Sama S. (2015). When the Home is a Workplace: Promoting Safety and Health for a Vulnerable Workforce. Book chapter in: Armenia A, Duffy M, Stacey C (Eds). Caring on the Clock: The Complexities and Contradictions of Paid Care Work. pp. 94-103. Rutgers University Press, Rutgers, NJ. 2015.
- Markkanen P, Quinn M, Galligan C, Sama S, Brouillette N, Okyere D. (2014). Characterizing the Nature of Home Care Work and Occupational Hazards: Developmental Intervention Study. *American Journal of Industrial Medicine*. Vol. 57(4): 445-57 DOI: 10.1002/ajim.22287.
- Markkanen P, Abdallah LM, Lee JA, Gautam R. (2012). Long-term care in the United States and Finland: Policy lessons to be learned. *J Gerontol Nurs*. 2012 Dec; 38(12):16-21, DOI: 10.3928/00989134-20121102-89.
- McLellan D, Harden E, Markkanen P, Sorensen G. (2012). *SafeWell Practice Guidelines: An Integrated Approach to Worker Health*. Version 2.0. The Harvard School of Public Health Center for Work, Health and Wellbeing. Available at: http://centerforworkhealth.sph.harvard.edu/resources/safewell-resources
- Kriebel D, Jacobs M, <u>Markkanen P</u>, Tickner J. (2011). *Lesson Learned: Solutions for Workplace Safety and Health*. Case study report funded by the Public Welfare Foundation. Available at: http://www.sustainableproduction.org/downloads/LessonsLearned-FullReport.pdf.
- Markkanen P. (2009). Shoes, Glues, and Homework: Dangerous Work in the Global Footwear Industry. Work, Health, and Environment Series (Series Editors: Levenstein C, Forrant R, Wooding J). Baywood Publishing, Amityville, NY.
- Quinn M, Markkanen P, Galligan C, Kriebel D, Chalupka S, Kim H, Gore R, Sama S, Laramie A, Davis L. (2009). Sharps injuries and other blood and body fluid exposures among home healthcare nurses and aides. American Journal of Public Health. Vol 99(S3): S710 S717. DOI: 10.2105/AJPH.2008.150169.
- Markkanen P, Quinn M, Galligan C, Bello A. (2009). Cleaning in healthcare facilities: Reducing human health effects and environmental impacts. Healthcare Research Collaborative Paper Series. Healthcare Without Harm & Global Health and Safety Initiative. Available http://www.sustainableproduction.org/downloads/CleaninginHealthcareFacilities.pdf
- Markkanen P, Chalupka S, Galligan C, Sama S, Gore R, Kim H, Bello A, Kriebel D, Quinn M. (2008). Studying home health care nurses and aides: research design and challenges. *Journal of Research in Nursing*. Vol. 13, pp 480-495. DOI: 10.1177/1744987108092055
- Chalupka S, <u>Markkanen P</u>, Galligan C, Quinn M. Needlestick and Sharps Injury Prevention: Are We Reaching Our Goals? AAACN Viewpoint. March/April 2008.
- Chalupka S, <u>Markkanen P.</u>, Galligan CJ, Quinn M. (2008). Sharps injuries and bloodborne pathogen exposures in home healthcare. *American Association of Occupational Health Nurses Journal*. Vol. 1 (56), pp.15-29. DOI: 10.3928/08910162-20080101-02
- Bond M, Kalaja A, Markkanen P, Cazeca D, Daniel S, Tsurikova L, Punnett, L. (2007). Expanding Our Understanding of the Psychosocial Work Environment: A Compendium of Measures of Discrimination, Harassment & Biases. U.S. National institute of Occupational Safety and Health, the Centers of Disease Control and Prevention, Atlanta. Available at: http://www.cdc.gov/niosh/docs/2008-104/
- Markkanen P, Quinn M, Galligan C, Chalupka S, Davis L, Laramie A. (2007). There is no place like home: A qualitative study of the working conditions of home healthcare providers. *Journal of Occupational and Environmental Medicine*. Vol. 49 (3), pp.327-337. DOI: 10.1097/JOM.0b013e3180326552.
- Barbeau EM, Li Y, Calderon P, Hartman C, Quinn M, Markkanen P, Roelofs C, Frazier L, Levenstein C. (2006). Results of a union-based smoking cessation intervention for apprentice iron workers. *Cancer Causes and Control*. Vol. 17(1), pp 53-61. DOI: 10.1007/s10552-005-0271-0.
- Markkanen P. (2005). The stranded standard: What happened to the proposed ILO Convention on work in the fishing sector? *New Solutions*. Vol. 15 (4), pp. 309-314. DOI: 10.2190/6BRC-BY0J-1G9L-VPM0.

- Lahiri S, <u>Markkanen P</u>, Levenstein C. (2005). The cost-effectiveness of occupational health interventions: Preventing occupational back pain. *American Journal of Industrial Medicine*. Vol. 48, pp.515-529. DOI: 10.1002/ajim.20193.
- Markkanen P. (2005). Dangers, delights, and destiny on the sea: Fishers along the east coast of North Sumatra, Indonesia. A Report. *New Solutions*. Vol. 15 (2), pp 113-133. DOI: 10.2190/7PJH-YHA9-LE8P-N0RM
- Markkanen P and Levenstein C. (2004). New points of production: Homework and shoemaking in Asia. *New Solutions*. Vol. 14 (4), pp. 301-318. DOI: 10.2190/X28H-Y3BN-XFHV-5J4E.
- Markkanen P. (2004). Shoes, glues, and families: Working conditions in informal sector footwear manufacturing. Doctoral dissertation. The University of Massachusetts Lowell
- Markkanen P (2004). Working Paper on Occupational Safety and Health in Indonesia. ILO-Manila Subregional Office. Available at: http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-manila/documents/publication/wcms 126058.pdf
- ILO-IPEC Bandung Footwear Team and Markkanen P. (2002). *Improving Safety, Health and the Working Environment in the Informal Footwear Sector*. ILO-Jakarta Area Office. Available at: http://www.ilo.org/jakarta/whatwedo/publications/WCMS 120634/lang--en/index.htm
- Stellman JM, Osinsky D, Markkanen P. (1998). Chapter 104: Guide to Chemicals. Vol 4, pp. 104.1-104.416. *The ILO Encyclopaedia of Occupational Health and Safety*. The Fourth Edition, International Labour Organization, Geneva.

Scientific conference presentations

- Eastern Sociological Society (ESS) Annual Meeting. The Work of Care: Challenges and Inequalities EES Carework Mini-conference. Markkanen P (presenter), Karlsson ND, Kriebel D, Galligan C, Quinn MM. Home care aides' job experiences of verbally abusive client behaviors. Feb 28 Mar 1, 2020. Philadelphia.
- The 2nd Global Carework Summit. Markkanen P (presenter), Quinn M, Goodyear N, Galligan C, Sama S, Karlsson N, Sheikh N. Cleaning and Disinfection in Home Care: A Qualitative Study to Characterize Aides' Cleaning Work and Assess Safety and Health. June 9-11, 2019. Toronto, Canada.
- The 32nd International Congress on Occupational Health (ICOH). Markkanen P, Quinn M, Goodyear N, Galligan C, Kriebel D, Sama S, Gore R, Lindberg J, Beato-Melendez C, Karlsson N, Mohamed H, Sheikh N, Parker-Vega A. Cleaning and Disinfection in Home Healthcare: Integrating Qualitative and Quantitative Methods to Assess Caregivers' Exposure to Cleaning and Disinfection Products. April 29 May 4, 2018, Dublin, Ireland. Occup Environ Med, 75 (Suppl 2), A348.
- The 1st Global Carework Summit. Markkanen P (presenter), Quinn M, Galligan C, Sama S, Gore R, Sun C, Okyere D, Brouillette N. Homecare Work: Integrating Qualitative and Quantitative Research Methods to Assess Musculoskeletal Strain among Aides. June 1-3, 2017. Lowell (MA), USA
- The 8th International Conference on the Science of Exposure Assessment in Epidemiology and Practice. P6-3

 Markkanen P (presenter in a keynote session), Quinn M, Galligan C, Sama S, Gore R, Sun C, Okyere D,
 Brouillette N. Combining Qualitative and Quantitative Research Methods to Assess Occupational

 Exposures and Interventions among Homecare Aides. September 6-8, 2016, Barcelona, Spain. Occup

 Environ Med, 73(Suppl 1), A94–A94.
- The 25th International Epidemiology in Occupational Health (EPICOH) Conference. Quinn M (presenter), Markkanen P, Galligan C, Sama S, Gore R, Goodyear N, Brouillette N, Kriebel, D, Lindberg, J, Vega, A, others. O16-4 An integrated approach to infection and respiratory illness prevention in home healthcare: preliminary results of the safe home care cleaning and disinfecting study. September 6-8, 2016, Barcelona, Spain. Occup Environ Med, 73 (Suppl 1), A30–A30.
- The 25th International Epidemiology in Occupational Health (EPICOH) Conference. Okyere D, Quinn M, Kriebel D, Cifuentes M, Markkanen P, Galligan C, Sama S, Gore R. O31-3 Evaluating the connection between healthcare worker and patient safety using the care bond framework. September 6-8, 2016. Barcelona, Spain. *Occup Environ Med*, 73 (Suppl 1), A57–A57.
- One-Day Program at the National Academy of Infusion Therapy, Dallas, TX. November 6, 2015. Markkanen P (presenter). Safety in Home Care.
- The 10th IOHA International Scientific Conference, London, UK, April 30, 2015. Quinn M (presenter), Markkanen P, Galligan C, Sama S, Kriebel D, Gore R, Punnett L, Davis L, Laramie A, Brouillette N, Okyere D, Sun C. Hazardous Occupational Exposures and Injuries in Home Care: Results from the Safe Home Care Survey.

- The 20th World Congress of Safety and Health at Work. Frankfurt, Germany. August 25, 2014. Markkanen P (presenter), Galligan C, Santos-O'Connor F, You D, Kawakami T. Occupational Safety and Health Situation among Migrant Workers in the Americas.
- The 24th International Epidemiology in Occupational Health (EPICOH) Conference. Quinn M (presenter), Markkanen P, Galligan C, Sama S, Kriebel D, Gore R, Punnett L, Davis L, Laramie A, Brouillette N, Okyere D, Sun C. 0317 Quantifying hazardous occupational exposures and injuries in home care:

 Results from the Safe Home Care survey. Occup Environ Med. 2014 Jun; 71 Suppl 1:A39.
- The 24th International Epidemiology in Occupational Health (EPICOH) Conference. Kriebel D (presenter), Brouillette N, Markkanen P, Galligan C, Sama S, Gore R, Laramie A, Okyere D, Sun C, Davis L, Quinn M. 0289 Preventing needlesticks and other sharps injuries to home care aides: results of a survey to identify hazards during home visits. Occup Environ Med. 2014 Jun; 71 Suppl 1:A36-7.
- Eastern Sociological Society (ESS) Annual Meeting. Baltimore, MD. February 20, 2014. *Carework II: Out of the Shadows. Effects of Extending Labor Protections for Home Care Workers Mini-conference: The Invisible Work of Care.* Markkanen P (panel discussion participant).
- American Association of Public Health (APHA). APHA 141st Annual Meeting and Exposition. Boston, MA. November 6, 2013. Markkanen P (presenter), Quinn M, Laramie A, Fisher J, Galligan C, Sama S, Brouillette N, Okyere D, Davis L. Why are needlesticks and other sharps injuries occurring in home healthcare?
- American Association of Public Health (APHA). APHA 141st Annual Meeting and Exposition. Boston, MA. November 5, 2013. Quinn M (presenter), Markkanen P, Quinn M, Galligan C, Sama S, Kriebel D, Gore R, Punnett L, Laramie A, Davis L, Brouillette N, Okyere D, Chuan Sun. Risks of occupational safety and health hazards among home care aides.
- American Association of Public Health (APHA). APHA 140th Annual Meeting and Exposition. San Francisco, CA. October 29, 2012. Markkanen P (presenter), Quinn M, Galligan C, Sama S, Brouillette N, Okyere D, Bello A, Laramie A, Davis L. Occupational safety and health hazards among home care aides.
- The 3rd Conference on International Advances in Cleaner Production, Sao Paolo, Brazil. May 18, 2011.

 Alvarez-Chávez CR (presenter), Grano MM, Arce Corrales ME, Velazquez Contreras LE, Markkanen P,

 Galligan C, Burgos Hernández M, Quinn MM. Elimination of Mercury (Hg) in the Health Sector: the Case of a Hospital in the City of Hermosillo, Sonora, Mexico. Winner of the Clean Production 2011 Price Award.
- Harvard School of Public Health, Boston, MA. September 27, 2010. Education and Research Center (ERC) & Work Health and Well-being Seminar Series. Markkanen P (presenter), Quinn MM, Galligan C, Chalupka S, Kim H, Gore R, Sama S, Kriebel D, Laramie A, Davis L. Combining Qualitative and Quantitative Measures in Occupational Health A Case Study on Bloodborne Pathogen Exposures in Home Healthcare.
- The 6th International Occupational and Environmental Exposure Assessment Conference, Boston MA.

 August 20, 2009. Markkanen P (presenter), Quinn MM, Galligan C, Chalupka S, Kim H, Gore R, Sama S, Kriebel D, Laramie A, Davis L. Methods for qualitative measures informing quantitative measures in occupational health a case study.
- The 6th International Occupational and Environmental Exposure Assessment Conference, Boston MA, USA. August 18, 2009. Quinn M (presenter), Markkanen P, Galligan C, Chalupka S, Kim H, Gore R, Sama S, Kriebel D, Laramie A, Davis L. Assessment of blood exposures among home healthcare workers: linking qualitative and quantitative methods for more precise exposure estimation.
- Massachusetts Nurses Association Conference: Workplace Hazards to Nurses & Other Healthcare Workers *Beyond the Salary: Safety at Work.* Shrewsbury, MA. June 4, 2009. Markkanen P (presenter) and Galligan C (presenter). *Improving safety for nurses in home care.*
- American Association of Public Health (APHA). APHA 136th Annual Meeting and Exposition. San Diego, CA. October 29, 2008. Quinn M (presenter), Markkanen P, Galligan C, Chalupka S, Kim H, Gore R, Sama S, Kriebel D, Laramie A, Davis L. Risk of sharps injuries and blood exposures among home health care workers.
- American Association of Public Health (APHA). APHA 135th Annual Meeting and Exposition.

 November 3-7, 2007. Washington DC, U.S. <u>Markkanen P</u> (presenter), Chalupka S,
 Galligan C, Sama S, Gore R, Kim H, Bello A, Kriebel D, Quinn M. *Project SHARRP: Survey methods and recruitment of a population of home healthcare providers*.
- The 19th International Epidemiology in Occupational Health (EPICOH) Conference. October 9-11, 2007. Banff, Alberta Canada. Quinn M (presenter), Markkanen P, Galligan C, Chalupka S, Kim H, Sama S, Gore R,

- Kriebel D, Bello A, Davis L, Laramie A, Firsova N. Sharps Injuries & Blood Exposures Among Home Health Care Workers.
- Massachusetts Nurses Association/ University of Massachusetts Conference: Workplace Hazards to Nurses and Other Healthcare Workers, Marlborough, MA. June 7-8, 2007. Chalupka S (presenter) and Markkanen P. Preventing Injuries to Nurses in Home Care Settings.
- American Industrial Hygiene Conference and Exposition (AIHce), June 2-7, 2007. Philadelphia, US.

 Presentation at the Prevention through Design (Ptd) Panel: *Prevention through design: Experience from the healthcare sector* by Markkanen P, Quinn M, Galligan C, Bello A.
- American Association of Public Health (APHA). APHA 134th Annual Meeting and Exposition.

 November 4-7, 2006. Boston, U.S. Two presentations: (i) Assessing occupational health hazards of home healthcare workers: Comparison of qualitative research methods, by Markkanen P (presenter), Quinn M, Chalupka S, Chaulk D, Firsova N, Davis L, Galligan C, Laramie A; and (ii) Home healthcare nursing: Risk factors for blood exposures and sharps injuries, by Chalupka S (presenter), Markkanen P, Chaulk D, Davis L, Firsova N, Galligan C, Laramie A, Quinn M
- The 28th International Congress on Occupational Health (ICOH), Milan, Italy. June 11-16, 2006. *Home Healthcare: safety and health in the work-home environmen*t, by Markkanen P, Quinn M, Chalupka S, Chaulk D, Davis L, Galligan C, Laramie A
- The 4th International Congress on Women, Work and Health, New Delhi, India. November 27-30, 2005.

 Two presentations: (i) Working Conditions and the Gendered Division of Labour in Informal Sector Shoemaking, by Markkanen P (presenter); and (ii) Home as Work Environment for Healthcare Practitioners, by Markkanen P (presenter), Quinn M, Chalupka S, et al.

VII. DOCTORAL DISSERTATION SUPERVISORY COMMITTEE MEMBERSHIPS

- Christian G. Beato-Melendez. Completed in May 2020. PhD in Biomedical Engineering and Technology. Department of Biomedical Engineering and Biotechnology, UMASS Lowell. *Detection and prevention of Clostridioides difficile at the community level*. (Committee Chair: Dr. Nancy Goodyear).
- **Nicole Karlsson**. Completed in August 2019. ScD in Work Environment. Department of Public Health, UMASS Lowell. *Violence against workers in home health care*. (Committee Chair: Dr. Margaret Quinn)
- **Virginia Noon**. Completed in May 2019. ScD in Work Environment. Department of Public Health, UMASS Lowell. Dissertation research title: *Mauretania's home-based textile and apparel dyeing industry: Work Culture, Health and the questions of sustainability in the 21st Century.* (Committee Chair: Dr. Quinn)
 - Qualifying exam supervisory committee memberships
- **Khafayat Khadiri**, doctoral candidate at UMASS Lowell Department of Public Health. *Identifying effective mold remediation strategies to improve asthma control in older adults*. October 27, 2023. (Qualifying Exam Committee Chair: Dr. Wenjun Li; Committee Chair: Dr. David Turcotte)

VIII. ACADEMIC INSTRUCTIONS, TRAINING, LECTURES, PRESENTATIONS

This is a selected list of academic instructions, training courses, keynote speeches, or presentations where I have been the primary instructor, lecturer, or presenter/speaker:

Department of Public Health, UMASS Lowell, USA

• Primary Instructor of PUBH 2080 Principles of Environmental Health Science

Fall 2022, 2023

• Primary Instructor of PUBH 4011 Implementation and Evaluation in Health Promotion

Fall 2023

Primary Instructor of PUBH 2050 Social Determinants of Health
 Primary Instructor of PUBH 5061 Environmental Health online course

Spring 2023, 2024 Spring & Summer 2024

Primary Instructor of PUBH 5510 Work Environment Policy and Practice

2020 2022 2024

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Spring 2020-2022, 2024

- Three guest lectures for the PUBH 2080 Principles of Environmental Health Science: Spring 2023, 2024 Climate Change Overview; Climate Change, Air Pollution Health Impacts, and Solutions; OSH
- Three guest lectures for the PUBH 5061 Environmental Health course: Fall 2022, 2023, Spring 2023

 Using Qualitative Methods in Environmental and Occupational Exposure Assessment

• Department of Public Health Research Talk on *March 26, 2021*. A recorded research presentation on Zoom: *It changed everything*": A qualitative study on the COVID-19 pandemic's impact on the home care industry

Co-instructor of PUBH 5510 Work Environment Policy and Practice course

Fall 2016-2018

• Guest lectures at the Exposure Assessment class: Combining Oualitative and Ouantitative Exposure Assessment Techniques

Feb 2017-2019

Department of Work Environment, UMASS Lowell

• Primary Instructor of Work Environment Policy and Practice course

Fall 2015; Spring 2007

• Co-instructor of Work Environment Policy and Practice course

Fall 2013-2014; Spring 2008-2013

• Guest lectures at Environmental Law and Policy class:

✓ History of Environmentalism in the United States (3 lectures)

Sep 2006, 2008, 2011

✓ Clean Air Act (2 lectures)✓ Solid Waste Management

Oct 2009, 2010 Nov 2011

✓ International Initiatives in Environmental Protection (4 lectures)

Nov/Dec 2006, 2009-2012

• Guest lectures at the Exposure Assessment class:

Combining Qualitative and Quantitative Exposure Assessment Techniques

Sep/Oct 2007-2013

• Sustainability Summer Action Institute: Sustainable Practices in the Workplace

Jun 2010

• Presentation at the Globalization and Health class: The ILO International Labor Standards

Feb 2007

• Presentation at the Work Environment Policy class:

International Occupational Safety and Health Management System

April 2006

 Presentation at the Department of Sociology, the Sociological Research II -Qualitative Methods class: Qualitative Interviewing March 2005

Dartmouth College, Hannover, New Hampshire, USA

 Presentations at the Center for Evaluative Clinical Sciences of the Dartmouth Medical School, the Occupational and Environmental Health class: Environmental Justice (2 presentations)

March 2011 & 2004

Clark University, Worcester (MA), USA

• Presentation at the Department of International Development, Community, and Environment; the Epidemiologic Perspectives on Global Health class:

Home-based Shoemaking in Indonesia and the Philippines

Oct 2010

• Presentation at the School of Management, the Health Policy class: *Women's Occupational Safety and Health*

Oct 2003

Harvard School of Public Health/ Center for Community-based Research (CCBR), Dana Farber Cancer Institute, Boston (MA), USA

• Science discussion at the CCBR: *Home-based shoemaking in Indonesia and the Philippines*.

Feb 2010

University of Massachusetts Boston, Dorchester (MA), USA

Apr 2005

• Presentation at the Labor Resource Center of the College for Public and Community Service: Shoes, Glues, and Families- Working Conditions in Informal Sector Footwear Manufacturing in Indonesia and the Philippines

Brandeis University, Waltham (MA), USA

• Lectures at the Department of Women's Studies, the Health Policy class: Women's Occupational Safety and Health (2 lectures)

Feb 2005 & Apr 2004

Bandung, West-Java, Indonesia

Apr 2004

- Primary training instructor at a four-day ILO-IPEC training course: OSH in Footwear Manufacturing
- Four-day ILO-IPEC training course: OSH and Child Labor in Footwear Manufacturing

Oct 2002

Bangkok, Thailand

 Primary training instructor and organizer at a four-day training course under the ILO's Asian-Pacific Regional Programme on Occupational Safety and Health: Training of Trainers Course on Occupational Safety and Health Information Systems

Jul 2001

 Primary organizer and instructor at a four-day training course under the ILO's Asian-Pacific Regional Programme on Occupational Safety and Health: Training Course on Occupational Safety and Health Information Systems

Nov 1999

Beijing, China

• Primary training instructor and organizer at a four-day training course under the ILO's Asian-Pacific Regional Programme on Occupational Safety and Health:

Training of Trainers Course on Occupational Safety and Health Information Systems

Jul 2000

• Primary training instructor and organizer at a four-day training course under the ILO's Asian-Pacific Regional Programme on Occupational Safety and Health: Training Course on Occupational Safety and Health Information Systems

Sep 1999

Ho Chi Minh City, Viet Nam

May 2000

 Primary training instructor and organizer at a four-day training course under the ILO's Asian-Pacific Regional Programme on Occupational Safety and Health: Training Course on Occupational Safety and Health Information Systems

Jakarta, Indonesia Jan 2000

• The ILO's Keynote speaker at the National Occupational Safety and Health Month: Occupational Safety and Health Management Systems during the Era of Globalization

Hanoi, Viet Nam

 Primary organizer and training instructor at the ILO's Asian-Pacific Regional Programme on Occupational Safety and Health:
 Training Course on Occupational Safety and Health Information Systems

Aug 1999

 Primary organizer, the ILO keynote speaker, and a presenter at the Annual Meeting of the National Occupational Safety and Health Information Network of Viet Nam Dec 1999

Manila, the Philippines

Dec 1999

• The ILO's keynote speaker at the Annual Meeting of the Asian-Pacific Occupational Safety and Health Organization (APOSHO): Occupational Safety and Health Management Systems

IX. AWARDS AND RECOGNITIONS

- Finnish Work Environment Fund Development Stipend, 2005: €1,200 to support the participation in the Fourth International Congress on Women, Work and Health, New Delhi, India.
- **Scholarship Award, June 2004:** selected by the faculty of the Department of Work Environment for an outstanding graduating doctoral candidate and accomplished dissertation.
- UMASS Lowell Graduate Research Grant Award, 2003: \$1,000 to support the dissertation research.
- Finnish Work Environment Fund Research Stipend, 2003: €2,000 to support the dissertation research.