Huabin Luo, PhD

Associate Professor Department of Public Health, Brody School of Medicine East Carolina University 115 Heart Drive, Greenville, NC 27834 Email - <u>luoh@ecu.edu</u>

Education

September 2001 – August 2005 **Ph.D. in Administration-Health Services** University of Alabama at Birmingham (UAB), School of Health Professions and School of Business

Master of Law Central China Normal University, Wuhan, China

Bachelor of Arts Central China Normal University, Wuhan, China

Work Experience

March 2024 – present Adjunct Associate Professor, Department of Foundational Sciences, School of Dental Medicine, East Carolina University

July 2020 - present Associate Professor with tenure, Department of Public Health, Brody School of Medicine, East Carolina University Coordinator, MPH/HPAL (January 2019-)

July 2013 - June 2020 Assistant Professor, Department of Public Health, Brody School of Medicine, East Carolina University

August 2010 - June 2013 Associate Professor, Health Care Management Program, Mount Olive College, North Carolina

January 2006 - July 2010 Assistant Professor, Mount Olive College, North Carolina

January 2011 - 2014 CDC ORISE Fellow, Office for State, Tribal, Local and Territorial Support, CDC, Atlanta, GA May 2012 Adjunct professor, HIM program, East Carolina University

August 2009 - Present Adjunct professor, MHA program, Pfeiffer University

January 2006 - April 2010

Assistant Professor, Program Designer, Health Care Management Program, Mount Olive College.

August 2005 - December 2005

Adjunct Assistant Professor, University of Alabama at Birmingham (UAB), School of Health Professions, B.S. Health Sciences Program. Teaching Business Statistics; Research Methods.

September 2001- July 2005 Graduate Assistant, Teaching Assistant, University of Alabama at Birmingham (UAB), School of Health Professions, School of Public Health, and School of Nursing.

February 1999 - September 2001 **Deputy Director**, General Office, Health Department of Hubei Province, Wuhan, China. Supervising and coordinating work in the Department; officiating as a Member of the Strategic Planning Committee.

1995 - 1999

Project Officer, International Division, Health Department of Hubei Province, Wuhan, China..

1992 - 1994

Secretary-General, Liaison Office of Chinese Medical Teams in Algeria. Directing and mobilizing Chinese doctors for medical rescues; working with International Department of Algerian Ministry of Health in coordinating Chinese Medical Teams in 15 Algerian hospitals; helping with protocol negotiation between Chinese Embassy in Algeria and Algerian Ministry of Health.

1988 - 1989

Fellow (translator), Western Pacific Regional Office, World Health Organization (WHO), Manila, the Philippines. Provided assistance in WHO collaborative projects with China.

1987 - 1992

Project Officer, International Division, Health Department of Hubei Province, Wuhan, China.

Professional Memberships

2011- Present Member of American Public Health Association
2014- Present Member of North Carolina Public Health Association
2020- 2022 Present Member of Gerontological Society of America
2020- 2022 Member of American Association of Public Health Dentistry
2006- 2013 Member of Academy Health

RESEARCH & SCHOLARSHIP

Peer-Reviewed Publications

My Bibliography

2025 (up to April 2025)

- Luo H, Xu HD, Stancil M, Pardi V, Moss ME. Dental Services Use Among Adults With Disabilities: Results From the 2015-2016 and 2017-2018 National Health and Nutrition Examination Survey. *Public health reports* Apr 12 2025:333549251314315. doi:10.1177/00333549251314315
- Qi X, Luo H, Wu B. Reflections on The Lancet's Commission on dementia prevention, intervention, and care. *Lancet*. Feb 22 2025;405(10479):625. doi:10.1016/s0140-6736(25)00149-7
- Liu R, Qi X, Mao W, Luo H, Xu Z, Wu B. Social context matters: Neighborhood environment as a moderator of the longitudinal relationship between edentulism and cognitive function among older adults in the United States. *Arch Gerontol Geriatr*. Mar 5 2025;133:105806. doi:10.1016/j.archger.2025.105806
- Liu R, Qi X, Luo H, Wu B. Trajectory of Cognitive Decline Across Different Racial/Ethnic Groups: The Role of Edentulism. *Research on aging*. Jan 20 2025:1640275251315850. doi:10.1177/01640275251315850
- Liu R, Luo H, Qi X, Xu Z, Wu B. Edentulism, Social Mobility, and Cognitive Aging: A Life Course Perspective. *Journals of Gerontology: Series B (Psychological Science) In print.* 2025;
- Gao C, Iles MM, Bishop DT, **Luo**, **H**. et al. Genetic risk factors for periodontitis: a genome-wide association study using UK Biobank data. *Clin Oral Investig*. Feb 14 2025;29(2):129. doi:10.1007/s00784-025-06205-8

- Luo H, Wu B, Wu Y, Moss ME. Dental Caries and Preventive Dental Visits Among Children in the U.S.: The Impact of Race/Ethnicity and Immigration. *AJPM focus*. Aug 2024;3(4):100230. doi:10.1016/j.focus.2024.100230
- Luo H, Wu B, Qi X, Moss M. TRENDS OF ORAL HEALTH STATUS OF OLDER ADULTS BY IMMIGRATION STATUS IN THE UNITED STATES: 1999–2018. *Innovation in Aging*. Dec 2024;8(Suppl 1):439. doi:10.1093/geroni/igae098.1427
- Pardi V, Castilho GT, Stewart R, **Luo H**, Wright WG, Moss ME. May family routines impact oral health in American children? *Front Oral Health*. 2024;5:1477036. doi:10.3389/froh.2024.1477036

• Qi X, Zhu Z, Luo H, Schwartz MD, Wu B. Age at diagnosis of diabetes, obesity, and the risk of dementia among adult patients with type 2 diabetes. *PLoS One*. 2024;19(11):e0310964. doi:10.1371/journal.pone.0310964

2023

- Luo H, Moss ME, Webb MD, Wright, W. The most common types of nontraumatic dental conditions among emergency department visits in North Carolina before and during the COVID-19 pandemic. *Journal of the American Dental Association (1939)*. 2023. PMID: 38069961
- Piro L, Luo H, Jones K, Lazorick S, Cummings DM, Saeed SA. Racial and Ethnic Differences Among Active-Duty Service Members in Use of Mental Health Care and Perceived Mental Health Stigma: Results From the 2018 Health Related Behaviors Survey. *Preventing chronic disease*. 2023;20: E85.PMC10557975
- Luo H, Moss ME, Basu R, Grant FT. Rural-Urban Differences in Use of Dental Services and Procedures Among Medicare Beneficiaries in 2018. *Public health reports (Washington, DC: 1974).* 2023;138(5):788-795.PMC10467503
- Wu B, Luo H, Tan C, et al. Diabetes, Edentulism, and Cognitive Decline: A 12-Year Prospective Analysis. *Journal of dental research*. 2023:220345231155825. PMID: 36908186 PMCID: PMC10399080
- Moss ME, Wright W, Luo H. Decline in Non-Traumatic Dental Conditions at Emergency Departments in North Carolina, 2010-2020. *Academic emergency medicine: official journal of the Society for Academic Emergency Medicine.* 2023. PMID: 37739802
- Luo H, Moss ME, Wright W, Webb M, Pardi V, Lazorick S. Racial/ethnic disparities in preventive dental services use and dental caries among children. *J Public Health Dent.* 2023. PMID: 36883255 PMC: PMC10258156
- Luo H, Cummings DM, Xu L, Watson A, Payton C. Diabetes Self-management education and Support Completion Before and During the COVID-19 Pandemic: Results From Local Health Departments in North Carolina. *Journal of public health management and practice:* 2023;29(5):686-690. PMID:_37071075
- Ayangunna E, Kalu K, Shah G, Nguyen T, **Luo H**, Tung H. Predisposing, Enabling, and Need Factors Associated with Health Information Technology Use for Personal Health Management among Adults in the United States: Application of Andersen's Behavioral Model. *Health Man & Info Sci Dec 2023; 9(4): 201-210*

2022

• Luo H, Wu B, González HM, et al. Tooth loss, periodontal disease, and mild cognitive impairment among Hispanic/Latino immigrants: The moderating effects of age at immigration. *The journals of gerontology Series A, Biological sciences and medical sciences*. 2022. PMID: 36049219. PMC PMC10235192

- Luo H, Qu H, Basu R, Rafferty AP, Patil SP, Cummings DM. Willingness to Get a COVID-19 vaccine and reasons for hesitancy among Medicare beneficiaries: Results From a national survey. *Journal of public health management and practice:* 2022;28(1):70-76. PMID: 34081668
- Wu B, Tan C, Luo H, Qi X. The impacts of changes in diabetes and oral health conditions on cognitive trajectories. *Innovation in Aging*. 2022;6(Suppl 1): 276-277.PMC 9765695
- Tan C, Luo H, Qi X, Wu B. Self-reported dental conditions and memory decline: The Mediation role of stroke. *Innovation in Aging*. 2022;6(Suppl 1):277. PMC 9765639

- Rafferty AP, Luo H, Winterbauer NL, Bell RA, Little NRG, Imai S. Health Literacy Among Adults With Multiple Chronic Health Conditions. *Journal of public health management and practice*. 2021. PMID: 33938484
- Moss ME, Luo H, Rosinger AY, Jacobs MM, Kaur R. High sugar intake from sugarsweetened beverages is associated with prevalence of untreated decay in US adults: NHANES 2013-2016. *Community dentistry and oral epidemiology*. 2021. PMID: 34939664 PMCID: PMC9786558
- Mao W, Pei Y, Luo H. Oral Health and Dental Care Among Older Adults in China: What Are the Risk and Protective Factors? *Innovation in Aging*. 2021;5(Suppl 1):30-31. PMC 8679210
- Luo H, Wu Q, Bell RA, et al. Rural-Urban Differences in Dental Service Utilization and Dental Service Procedures Received Among US Adults: Results From the 2016 Medical Expenditure Panel Survey. *The Journal of rural health*. 2021;37(3):655-666.PMC7855605
- Luo H, Wu B, Kamer AR, et al. Oral Health, Diabetes, and Inflammation: Effects of Oral Hygiene Behavior. *International dental journal*. 2021. PMID: 34857389 PMCID:PMC9259379
- Luo H, Tan C, Plassman B, et al. Effects of the Co-Occurrence of Diabetes and Tooth Loss on Cognitive Function. *Innovation in Aging*. 2021;5(Suppl 1):205-206.PMC8682480
- Luo H, Tan C, Adhikari S, et al. Effects of the Co-occurrence of Diabetes Mellitus and Tooth Loss on Cognitive Function. *Current Alzheimer research*. 2021;18(13):1023-1031. PMCID: PMC8810293
- Luo H, Basu R, Bell RA, et al. Rural-urban differences in uptake of diabetes selfmanagement education among Medicare beneficiaries: Results from the 2016 to 2018 Medicare Current Beneficiary Survey. *The Journal of rural health:* 2021. PMID: 33978980
- Ju X, Mejia GC, Wu Q, **Luo H**, Jamieson LM. Use of oral health care services in the United States: unequal, inequitable-a cross-sectional study. *BMC oral health*. 2021;21(1):370. PMC 8299583
- Fosse C, Luo H, Laniado N, Okunseri C, Badner V. Dental access and expenditures for adults with intellectual and other disabilities. *J Public Health Dent.* 2021;81(4):299-307. PMID: 34695877

- Chen Z, Zhang Y, Luo H, et al. Narrowing but persisting gender pay gap among employees of the US Department of Health and Human Services during 2010-2018. *Human resources for health*. 2021;19(1):65.PMC 8120826
- Bell R, Imai S, Rafferty A, Little NRG, Winterbauer N, Luo H. Influenza and Pneumonia Vaccinations among North Carolina Adults with Diabetes. *American journal of health behavior*. 2021;45(2):216-225. PMID: 33888183
- Wu B, Tan C, Plassman B, **Luo**, **H**. et al. Diabetes Mellitus, Edentulism, and Trajectory of Cognitive Decline Among Older Adults. *Innovation in Aging*. 2021;5(Suppl 1):205.PMC 8682613
- Tan C, Luo H, Sloan F, **Luo**, **H**. et al. The Impact of Diabetes and Edentulism on All-Cause Mortality: Racial and Ethnic Disparities. *Innovation in Aging*. 2021;5(Suppl 1):205. PMC 8682671
- Basu R, Wu B, **Luo H**, Allgood L. Association between home health agency ownership status and discharge to community among Medicare beneficiaries. *Home health care services quarterly*. 2021;40(4):340-354. PMID: 34698614
- Basu R, Wu B, Luo H. Caregiving relationship and the healthcare utilization for care recipients: Does spousal caregiving matter? *International Journal of Applied Economics*. 2021;18(1):1-16.
- Basu R, Luo H, Steiner A, Stevens A. Living Arrangements and Psychosocial Well-Being Among Older Adults: Evidence From the Health and Retirement Study. *Innovation in Aging*. 2021;5(Suppl 1):121. PMC 8680548

- Rafferty AP, Luo H, Little NRG, Imai S, Winterbauer NL, Bell RA. Self-reported Health Literacy Among North Carolina Adults and Associations with Health Status and Chronic Health Conditions. *North Carolina medical journal*. 2020;81(2):87-94. PMID:_32132247
- Luo H, Wu Q, Bell RA, Wright WG, Garcia RI, Quandt SA. Trends in use of dental care provider types and services in the United States in 2000-2016: Rural-urban comparisons. *Journal of the American Dental Association (1939)*. 2020;151(8):596-606. PMID: 32718489 PMCID: PMC7387749
- Luo H, R IG, Moss ME, Bell RA, Wright W, Wu B. Trends of children being given advice for dental checkups and having a dental visit in the United States: 2001-2016. *J Public Health Dent.* 2020;80(2):123-131.PMC7299770
- Luo H, Chen Z, Bell R, Rafferty AP, Gaskins Little NR, Winterbauer N. Health Literacy and Health Behaviors Among Adults With Prediabetes, 2016 Behavioral Risk Factor Surveillance System. *Public health reports (Washington, DC: 1974)*. 2020;135(4):492-500.PMC7383752
- Luo H, Bell RA, Winterbauer NL, et al. Trends and Rural-Urban Differences in Participation in Diabetes Self-management Education Among Adults in North Carolina: 2012-2017. *Journal of public health management and practice:* 2020. PMID: 32810070

- Jones K, Luo H, Mansfield CJ, Imai S. Tracking Trends in the Opioid Epidemic in North Carolina: Early Results from the Opioid Action Plan Metrics. *North Carolina medical journal*. 2020;81(6):355-362. PMID:_33139463
- Bhoopathi V, Luo H, Moss M, Bhagavatula P. Unmet Dental Care Need and Associated Barriers by Race/Ethnicity among US Adults. *JDR clinical and translational research*. 2020:2380084420923576. PMID: 32437630
- Xu L, Richman A, Mitchell L, Luo H, Jiang Y. Factors Influencing Decisions About Prenatal Genetic Testing for Autism Among Mothers of Children with Autism Spectrum Disorders. *Advances in Neurodevelopmental Disorders*. 2020; https://doi.org/10.1007/s41252-020-00151-0.

2019 (2013-2019 Pre-tenure)

- Luo H, Patil SP, Cummings DM, Bell RA, Wu Q, Adams AD. Health Literacy, Selfmanagement Activities, and Glycemic Control Among Adults With Type 2 Diabetes: A Path Analysis. *Journal of public health management and practice:* 2019. PMID: 30969274
- Luo H, Chen ZA, Xu L, Bell RA. Health Care Access and Receipt of Clinical Diabetes Preventive Care for Working-Age Adults With Diabetes in States With and Without Medicaid Expansion: Results from the 2013 and 2015 BRFSS. *Journal of public health management and practice:* 2019;25(4):E34-e43. PMID: 31136523
- Luo H, Bell RA, Garg S, Cummings DM, Patil SP, Jones K. Trends and Racial/Ethnic Disparities in Diabetic Retinopathy Among Adults with Diagnosed Diabetes in North Carolina, 2000-2015. *North Carolina medical journal*. 2019;80(2):76-82. PMID: 30877152
- Wu B, Luo H. THE IMPACT OF DIABETES AND POOR ORAL HEALTH ON COGNITION: IMPLICATIONS TO IMPROVE DENTAL CARE ACCESS. *Innovation in Aging.* 2019;3(Suppl 1): S607. PMC 6841339
- Rafferty AP, Winterbauer NL, Luo H, Bell RA, Little NRG. Diabetes Self-Care and Clinical Care Among Adults With Low Health Literacy. *Journal of public health management and practice:* 2019. PMID:_31592981

- Xu L, Richman AR, Mitchell LC, Luo, H. et al. Evaluating Web-based Educational Modules on Genetic Testing for Autism among Parents of Children with Autism. *American journal of health behavior*. 2018;42(4):3-12. PMID: 29973306
- Luo H, Yu G, Wu B. Self-Reported Cognitive Impairment Across Racial/Ethnic Groups in the United States, National Health Interview Survey, 1997-2015. *Preventing chronic disease*. 2018;15:E06.PMC5772384
- Luo H, Shrestha S, Zhang X, Saaddine J, Zeng X, Reeder T. Trends in Eye Injuries and Associated Medical Costs among Children in the United States, 2002-2014. *Ophthalmic epidemiology*. 2018;25(4):280-287. PMID: 29473762

- Luo H, Patil SP, Wu Q, et al. Validation of a combined health literacy and numeracy instrument for patients with type 2 diabetes. *Patient education and counseling*. 2018;101(10):1846-1851. PMID: 29805071
- Luo H, Hybels CF, Wu B. Acculturation, depression and oral health of immigrants in the USA. *International dental journal*. 2018;68(4):245-252. PMID: 29270981. PMCID: PMC9378934
- Luo H, Bell RA, Wright W, Wu Q, Wu B. Trends in annual dental visits among US dentate adults with and without self-reported diabetes and prediabetes, 2004-2014. *Journal of the American Dental Association (1939)*. 2018;149(6):460-469. PMID: 29615188
- Luo H, Bell RA, Cummings DM, Chen ZA. Diabetes Preventive Care Practices in North Carolina, 2000-2015. *Preventing chronic disease*. 2018;15:E35.PMC5871352
- Gao F, Luo H, Jones K, Nicholson W, Bell RA. Gestational Diabetes and Health Behaviors Among Women: National Health and Nutrition Examination Survey, 2007-2014. *Preventing chronic disease*. 2018;15: E131.PMC6219848
- Xu L, Mitchell LC, Richman AR, **Luo H.** et al. Parental Knowledge and Perceptions of Pediatric Genomic Testing for Autism Spectrum Disorders in Rural Settings. 2018

Luo H, Wu B. Self-awareness of "Gum Disease" Among US Adults. *Journal of public health management and practice:* 2017;23(2):e1-e7. PMID: 27606887

- Shah GH, **Luo H**, Winterbauer N, Madamala K. Addressing psychological, mental health and other behavioural healthcare needs of the underserved populations in the United States: the role of local health departments. *Perspectives in public health*. 2016;136(2):86-92. PMID: 26318968
- Shah GH, Leider JP, **Luo H**, Kaur R. Interoperability of Information Systems Managed and Used by the Local Health Departments. *Journal of public health management and practice:* 2016;22 Suppl 6, Public Health Informatics: S34-s43.PMC5049946
- Shah GH, Leider JP, Castrucci BC, Williams KS, Luo H. Characteristics of Local Health Departments Associated with Implementation of Electronic Health Records and Other Informatics Systems. *Public health reports (Washington, DC: 1974).* 2016;131(2):272-282.PMC4765976
- Luo H, Wu B. Acculturation and Dental Service Use Among Asian Immigrants in the U.S. *American journal of preventive medicine*. 2016;51(6):939-946. PMID: 27720339
- Luo H, Winterbauer NL, Shah G, Tucker A, Xu L. Factors Driving Local Health Departments' Partnerships With Other Organizations in Maternal and Child Health, Communicable Disease Prevention, and Chronic Disease Control. *Journal of public health management and practice*. 2016;22(4): E21-28. PMID: 26480282

- Wu B, Luo H, Flint E, Qin L. Dental care utilization among caregivers who care for older adults. *Research on aging*. 2015;37(4):388-412.PMC4393712
- Winterbauer NL, Bridger CM, Tucker A, Rafferty AP, **Luo H**. Adoption of Evidence-Based Interventions in Local Health Departments: "1-2-3 Pap NC". *American journal of preventive medicine*. 2015;49(2):309-316. PMID: 26190805
- Luo H, Sotnikov S, Winterbauer N. Provision of Personal Healthcare Services by Local Health Departments: 2008-2013. *American journal of preventive medicine*. 2015;49(3):380-386.PMC4831056
- Luo H, Sotnikov S, McLees A, Stokes S. Factors driving the adoption of quality improvement initiatives in local health departments: results from the 2010 profile study. *Journal of public health management and practice:* 2015;21(2):176-185.PMC4831055
- Luo H, Pan W, Sloan F, Feinglos M, Wu B. Forty-Year Trends in Tooth Loss Among American Adults With and Without Diabetes Mellitus: An Age-Period-Cohort Analysis. *Preventing chronic disease*. 2015;12:E211. PMC 4674438

2014

- Shah GH, Luo H, Sotnikov S. Public Health Services Most Commonly Provided by Local Health Departments in the United States. *American journal of public health*. 2014;104(12):e39. PMC 4232170
- Luo H, Zhang X, Cook B, Wu B, Wilson MR. Racial/Ethnic Disparities in Preventive Care Practice Among U.S. Nursing Home Residents. *Journal of aging and health*. 2014;26(4):519-539. PMID: 24626378
- Luo H, Beckles GL, Zhang X, Sotnikov S, Thompson T, Bardenheier B. The relationship between county-level contextual characteristics and use of diabetes care services. *Journal of public health management and practice:* 2014;20(4):401-410.PMC4834855

- Wu B, Liang J, Luo H, Furter R. Racial and Ethnic Variations in Preventive Dental Care Utilization among Middle-Aged and Older Americans, 1999-2008. *Frontiers in public health.* 2013;1:65.PMC3866511
- Luo H, Sotnikov S, Shah G, Galuska DA, Zhang X. Variation in delivery of the 10 essential public health services by local health departments for obesity control in 2005 and 2008. *Journal of public health management and practice:* 2013;19(1):53-61.PMC4834859
- Luo H, Sotnikov S, Shah G. Local health department activities to ensure access to care. *American journal of preventive medicine*. 2013;45(6):720-727.PMC4831054

2012 (Pre-employment at ECU)

- Luo, H., Lin, M., & Castle, N. G. The Correlates of Nursing Staff Turnover in Home and Hospice Agencies: 2007 National Home and Hospice Care Survey. Research on Aging. 2012, 35(4), 375-392. https://doi.org/10.1177/0164027512443072
- Luo H, Beckles GL, Fang X, Crews JE, Saaddine JB, Zhang X. Socioeconomic status and lifetime risk for workplace eye injury reported by a us population aged 50 years and over. *Ophthalmic epidemiology*. 2012;19(2):103-110. PMID: 22364578

2011

Luo H, Lin M, Castle N. Physical restraint use and falls in nursing homes: a comparison between residents with and without dementia. *American journal of Alzheimer's disease and other dementias*. 2011;26(1):44-50. PMID: 21282277

2010

- Zhang X, Luo H, Gregg EW, et al. Obesity prevention and diabetes screening at local health departments. *American journal of public health*. 2010;100(8):1434-1441.PMC2901291
- Zhang X, Decker FH, **Luo H**, et al. Trends in the prevalence and comorbidities of diabetes mellitus in nursing home residents in the United States: 1995-2004. *Journal of the American Geriatrics Society*. 2010;58(4):724-730. PMID: 20398154
- Luo H, Fang X, Liao Y, Elliott A, Zhang X. Associations of special care units and outcomes of residents with dementia: 2004 national nursing home survey. *The Gerontologist*. 2010;50(4):509-518. PMID: 20462932

2009

Zhang X, Williams DE, Beckles GL, **Luo**, **H**. et al. Diabetic retinopathy, dilated eye examination, and eye care education among African Americans, 1997 and 2004. *Journal of the National Medical Association*. 2009;101(10):1015-1021. PMID: 19860301

2006

Appel SJ, Floyd NA, Giger JN, **Luo**, **H**. et al. African-American women, metabolic syndrome, and national cholesterol education program criteria: a pilot study. *Journal of National Black Nurses' Association: JNBNA*. 2006;17(1):9-16. PMID: 17004421

2005

Appel SJ, Floyd NA, Giger JN, **Luo, H.** et al. African American women, metabolic syndrome, and national cholesterol education program criteria: a pilot study. *Nursing research*. 2005;54(5):339-346. PMID: 16224320

Grant Funded

Post tenure, 5 grants

NIH grant: R01AG089856-01 (Co-PI) (20%) Elucidating the Link Between Oral Health and Dementia Subtypes: A Multifaceted Study on the Biological Pathways and Social Determinants 08/15/2024-04/30/2029 \$3,890,776

NIH grant: 1R56AG067619 (Co-PI) (20%) Pathways from co-occurrence of poor oral health and diabetes to Alzheimer's disease and related dementia (ADRD) and mortality 09/2020-08/2024 \$45,890.21

HRSA grant: D88HP37544 (Co-I) (13%) ECU Leadership Training in Special Needs Population Oral Health Care Disciplines of the residency program: Pediatric Dentistry and General Dentistry 07/01/2020-06/30/2025 \$3,013,643.65

NIH grant: 1R21DE031368-01 (Co-I) (10%) 06/01/2022-05/31/2025 Geofencing: mobile technology to increase the utilization of oral health services among adolescents in rural North Carolina \$415,250

NIH Grant: 1R03DE032754-01A1(Co-I) (3.5%) 09/06/2023-08/31/2025 Overcoming early childhood caries disease burden through the words of mothers (WOM project) \$300,200

Pre-tenure, 2 awards

NIH/NIDCR grant: 5R03DE027436 (PI) (30%) Rural Urban Disparities and Determinants of Dental Services and Provider Mix, 07/01/2018-06/30/2020 \$282,841.00 ORISE Fellowship (PI) (45%) ORISE Fellowship, Office for State, Tribal, Local and Territorial Support (OSTLTS), Centers for Disease Control and Prevention (CDC), Atlanta, Georgia. Nov 2011- Nov 2014. \$73,886

End-of-Study Survey of HCM Graduates, Mount Olive College Mini-grant (PI). Summer 2008. \$1,500

Grants under Review/Pending

R01 "Oral health and cognitive impairment: The joint effects of race/ethnicity and immigration" (Role: PI)

R21 "Improving DSMES completion in rural communities: A stakeholder-informed strategy to promote health equity" (Role: PI)

Presentations (Oral Presentations and Selected Poster Presentations)

Luo, H., Wright, W. Stancil, M Moss, M Trends of dental visits by immigration status in the United States: 1999-2018. Poster presentation, 2024 APHA Conference, Minneapolis, MN Oct 26-30

Luo, H., Xu, D,. Moss, M Unmet dental care needs among persons with disabilities: Results from a national survey. Poster presentation 2024 APHA Conference, Minneapolis, MN Oct 26-30

Luo, H., Bei Wu, B., Xiang Qi, Xi., & Moss, M. Trends of Oral Health Status of Older Adults by Immigration Status in the United States: 1999–2018. Oral presentation. 2024 GSA Annual Meeting, Seattle, WA. Nov 13-16, 2024

Luo, H. Moss, M. Dental visits and oral health of immigrant children: Results from the 2020-2021 National Survey of Children's Health. Podium presentation. 2023 APHA Conference, Atlanta, Nov 12-15.

Huabin Luo. Chenxin Tan, Bei Wu, & Xiang Qi Dental conditions and Memory Decline: The mediation role of cardiovascular disease. Podium presentation at GSA 2022 Conference, Indianapolis, IN, Nov 2-6.

Wu, B., Tan, C., **Luo**, H., & Qi, X. Impacts of changes in diabetes and oral health conditions on cognitive trajectories. Podium presentation at GSA 2022 Conference, Indianapolis, IN, Nov 2-6.

Luo, H., Basu, R., Moss, M., & Wright, W. Dental use and financial burdens among Medicare beneficiaries with Type 2 diabetes. Poster presentation at the 2022 APHA Annual Conference, Nov 5-10, Boston, MA

Luo, H, Wu, B. Kamer, A., Adhikari, S., Frank Sloan, F., Brenda L. Plassman, B., Chenxin Tan, C MA, Qi, X, Schwartz, M. Poor oral health, diabetes, and inflammation: A path model analysis. Presented at 2021 IADR online, Oral Presentation

Bell R, Imai S, Rafferty N, Little NRG, Winterbauer N, **Luo H**. Influenza and Pneumonia Vaccinations among North Carolina Adults with Diabetes: The North Carolina Behavioral Risk Factor Surveillance System. (Virtual Oral Presentation). North Carolina Public Health Association 2020 Virtual Fall Education Conference, October 7 - 9, 2020.

Luo H, Chen Z, Bell R, Rafferty A, Little R, Winterbauer N. Health literacy and health behaviors in pre-diabetes: Results from the 2016 BRFSS. Poster Presentation, American Public Health Association 2019 Annual Meeting and Expo, Philadelphia PA, Nov 2-6, 2019.

Wu B & Luo H. Diabetes, poor oral health, and cognitive function: Findings from a national survey in the U.S. Poster presentation at the Alzheimer's Association International Conference, in Los Angeles, CA, Jul 14-18, 2019

Luo, H., Mark E. Moss, Ronny A. Bell, Wanda Wright. Trends of children being given advice for dental checkups and having a dental visit in the United States: 2001-2016. Poster presentation, 2019 National Oral Health Conference, Memphis, TN, Apr 11-16.

Luo, H, Shiv Patil, Qiang Wu, Ronny Bell, Doyle Cummings, Alyssa Adams, Bertha Hambridge, Kay Craven, Fei Gao. Validation of a New Health Literacy Test for Patients with Type 2 Diabetes, Podium Presentation. 2018 APHA Annual Conference, San Diego, Nov 10-14, 2018

Luo, H, Hybels C, & Wu B. Acculturation, depression and oral health of immigrants in the United States. Paper Presentation at the AADR/CADR Annual Meeting (Oral Presentation, Virtual), Fort Lauderdale, FL, Mar 21-24, 2018

Luo, H, Yu G, Wu B. Self-Reported Cognitive Impairment Across Racial/Ethnic Groups in the United States, National Health Interview Survey, 1997–2015. Poster presetation at APHA Annual Conference, Atlanta, Nov 4-8, 2017.

Luo, H, Bell R, Wright W, Wu Q. Dental and other health care visits among adults with diabetes in North Carolina. Oral Presentation, North Carolina Public Health Association Fall Education Conference, September 28, 2017, Asheville, NC.

Luo H, Zeng X. Premature mortality in rural and urban counties: Results from County Health Ranking 2010 and 2015. Paper presentation at the 2016 143rd APHA Annual Meeting and Exposition, Denver, Colorado.

Haiyan Qu, **Luo, H.** The Association between County-level Obesity Prevalence and Local Health Department Policy Intervention for Obesity Control. Podium presentation at 2015 Academy Health Annual Conference, June 14-16, Minneapolis

Luo, H, Nancy Winterbauer, Ashley Tucker, Gulzar Shah. Factors driving local health department's collaboration with other organizations in the provision of personal healthcare services. Podium presentation at 2015 2015 PHSSR Keeneland Conference, Apr 20-22, Lexington

Luo, H, Sergey Sotnikov, Timothy Van Wave. Assessing Variation in Revenue-Generating Strategies of Local Health Departments, Oral Presentation (Round Table) at 2014 APHA Annual Conference, New Orleans, Nov 15-19

Luo, H, Sergey Sotnikov, Nancy Winterbauer, Local Health Department Capacities in Medically Underserved Areas. Poster presentation at 2014 APHA Annual Conference, New Orleans, Nov 15-19

Luo, H. Sergey Sotnikov; Anita McLees; Saira Nawaz. "Quality Improvement Implementation in Local Health Departments: Results from the 2010 Profile Study", Oral Presentation (Round Table), ARM Conference, Baltimore, MD, June 24-26, 2013

Wu, Bei & Luo, H. Dental Care Utilization among Caregivers Who Care for Older Adults. Accepted for presentation at IADR/AADR General Session, Poster presentation, March 20-23, 2013. Seattle, Washington.

Luo, H & Gulzar Shah, "Factors Associated with Local Health Departments' Strategy to Assure Access to Health Care Services" Poster presentation at American Public Health Association 2012 Annual Conference at San Francisco, CA. October 27-31, 2012

Luo, H. The relationship between county-level contextual characteristics and use of diabetes care services. Poster Presentation, 2012 ARM Conference, Orlando, June 24-26

Luo, H. Factors associated with poor health-related quality of life among people with eye diseases: Findings from the 2008 BRFSS. Poster Presentation at APHA 2011 Conference, Washington, DC, Oct 29-Nov 2

Zhang, Xinzhi & Luo, H. Association between Age-related Eye Diseases and Falls in U.S. Nursing Home Residents. Poster presentation at APHA 2011 Conference, Washington, DC, Oct 29-Nov 2.

Luo, H, Dwyer L, Brown C, Saydah S, Gregg E, & Zhang X. Health care service use among home health care patients with and without diabetes. Poster presentation at 2011 ADA Conference at San Diego June 24-28, 2011

Luo, H, Sotnikov S, Shah G, Galuska DA, & Zhang X. Factors Associated with Policy Interventions for Obesity Control at Local Health Departments. Poster presented at 2009 ARM conference at Chicago, June 2009

Luo, H, Dyer C, Rosen J, & Olatosi B. Assessing Barriers and Roles of Local Health Departments toward a Successful Obesity Control in Local Communities. Poster presented at the 2009 ARM conference at Chicago, IL. Luo, H, Zhang X, Gregg E, Mukhtar Q, Rivera M, & Albright A. Obesity Prevention and Diabetes Screening at Local Health Departments. Poster presented the 2008 ARM conference, Washington, DC.

Luo H, Shewchuk R, & Burkhardt J. Institutional pressures and strategic responsiveness: The case for hospital diversification. Podium presentation, Annual Academy of Management Meeting, August 2006, Atlanta, GA.

Luo, H, Shewchuk R, & Burkhardt J. The Determinant Factors of Hospital Diversification Poster presented at the 2006 ARM conference, Seattle, WA.

Susan J. Appel, Natalie A. Floyd, Joyce Newman Giger, **Luo**, **H**, Michael T. Weaver, Jeri Segrest, & Fernando Ovalle. Identification of risk for stroke among southern African American women. Paper presented at the American Heart Association's International Stroke Conference February 2005, New Orleans.

Appel SJ, Floyd NF, Giger J, Weaver MT, **Luo, H,** Segrest J, & Ovalle F. Identification of cardiovascular risk among African- American women: Are the NECP criteria enough? Paper presented at Southern Nursing Research Society (SNRS). February 2005, Atlanta, GA.

Luo, H & Appel SJ. Predictors of central obesity among African American women. Poster presented at Southern Nursing Research Society (SNRS) February 2005, Atlanta, GA.

Press and Media Coverage (2017-Present)

National

Persons with diabetes lose more teeth Healio new CBS news RDH

Disparity in dental care utilization in Asian immigrants <u>News Wise</u> <u>Dentistry today</u> <u>Medical Press</u>

Diabetes patients were less likely to see a dentist despite higher risk <u>Healthday</u> <u>Medscape</u> News24

Racial/ethnic disparities in dental caries and preventive dental care <u>ADA Huddle</u>

University

Oral health, diabetes, and inflammation <u>ECU News</u>

R56 grant to study ADRD <u>ECU News</u>

Cognitive impairment among older adults <u>NYU News</u> Racial differences in self-reported cognitive decline <u>NYU NEWs</u>

TEACHING

Current Courses (Developed* and taught)

Doctoral level:

2018-Present PUBH 8130 Strategic Planning, Theory and Practice*
2021-Present PUBH 9000 Dissertation Research*
2021-Present PUBH 8684 Field Experience

Masters-Level:

2014-Present MPH 6020 Research Methods*
2015-Present MPH 6810 Strategic and Financial Management of Healthcare Organizations*
2014-Present MPH 6991 MPH Professional Paper
2014-Present MPH 6992 MPH Professional Paper

Directed Graduate Student Research: Master's level (MPH)

Completed MPH Student Propapers (2014-2023)

Semester			
/Year	Student	Title	Role
Summer 2014	Carpaccio Owens	Life Coach Based Approach to Losing Weight: Results from a Community-based Study	Primary advisor
Summer 2014	Lamia C. Nasrallah	Nutrition in the Childcare Setting: A Plate Waste Study	Primary advisor
Summer 2014	Joseph L. Brothers	A Cross-Sectional Analysis of Quality of Care Indicators in Federally Qualified Health Centers of North Carolina2011	Content advisor
Summer 2014	Courtney Lugo	Bullying in middle schools: Results from a survey of students in Eastern North Carolina	
Fall 2014	David J. Oliver III	Impact of Initial Length of Stay on 30-day and 90-day Hospital Readmissions of Patients with a Primary Diagnosis of Heart Failure	Primary advisor

Semester /Year	Student	Title	Role
Spring 2015	Tracy D. Newkirk	Investigating Factors that Contribute to Dental Caries in Children of Minorities in Duplin County, North Carolina	Primar
Fall 2016	Logan Dunn	Fit to Farm – Does knowledge lead to behavior change in North Carolina farmers	Primar advisor
Spring 2017	Alexandria Baker	County Health Rankings in North Carolina: A comparison between 2010 and 2015	Primar advisor
Fall 2017	Czarina Cowo	Community Engagement Project: Assessing the Oral Health Barriers as perceived by Promotoras compared to the Barriers expressed by Parents of Latino Children in Eastern North Carolina.	Primar advisoi
Spring 2018	Fei Gao	Trend in rates of gestational diabetes and health behaviors among US women of reproductive age: Results from the 2007-2014 National Health and Nutrition Examination Survey (NHANES)	Primar advisor
Spring 2018	Priyanka Patil	The association between glucose checking and quality of life among individuals with diabetes	Primar advisor
Fall 2019	Kalynn Hosea	Cost-Related Medication Nonadherence in Patients with Diabetes	Primar advisor
Fall 2020	Alan Burke	Environmental Factors Affecting Pandemic Spread Across Countries	Primar advisor
Spring 2021	Cameron Dove	The Use of Emergency Departments for Non- Traumatic Dental Conditions in two North Carolina Counties	Primar advisor
Fall 2021	Lauren Piro	Racial Differences in Mental Health Stigma and Mental Health Utilization Among Active-Duty Service Members: Results From the 2018 Health- Related Behaviors Survey	Primar advisor
Fall 2022	Dina Fahmey	Job Training, Satisfaction and the Implications of Nursing Turnover in Skilled Nursing Facilities	Primar advisor
Spring 2023	Jiwon Lim	A Survey of North Carolina Dentists in Treating Patients with Special Healthcare Needs	Primar advisor
Fall 2023	Steve Glinka	A Comparison of Two Testing Devices Of Sleep Apnea: NightOwl and WatchPAT	Primar adviso:

Noteworthy Mentoring Achievements

CDC Preventing Chronic Disease) Best student paper award

Under my guidance, Fei Gao participated in the 2018 National Student Research Paper Contest sponsored by *Preventing Chronic Disease*. About 150 students competed for the award. His paper entitled "Prevalence of gestational diabetes and health behaviors among women: Findings from the National Health and Nutrition Examination Survey, 2007-2014" got the award (1 of the 2 winners). He is the first ECU MPH student to win this prestigious national award.

Publication Achievement: Lauren (MPH graduate in 2023) published her Propaper in Preventing Chronic Disease. Under my guidance, Lauren Piro published her Propaper "Racial and Ethnic Differences Among Active-Duty Service Members in Use of Mental Health Care and Perceived Mental Health Stigma: Results From the 2018 Health Related Behaviors Survey". Due to its high impact, the paper was chosen by the editor to be simultaneously published at Medscape.

Directed Student Research: Doctorate-level (DrPH)

Semester /Year Student Title Role Improving Mental Well-Being Through Culture-2021-**Missy Stancil** Chair 2023 Specific Outdoor Learning: A Mixed-Methods Study Quinnette Assessing current status of teaching LGBTQ and developing a standard curriculum 2023-Jones Chair Investing barriers and facilitators of use of patient portal Helene 2024-Edwards at Hoke County Health Department (Tentative title) Member Assessing and comparing the trend of full-time Kristen Richmondemployees at local health departments (Tentative title) 2024-Hoover Member

Completed or ongoing dissertation committees (Fall 2021-present)

SERVICE

Service to the Department of Public Health (DPH)

2014-2015	MPH/HPAL program committee, member
2015-2018	DrPH/HPAL program committee, member
2019-present	HPAL/MPH concentration, coordinator
2014-2022	Personnel Committee, member
2018-present	DrPH/HPAL admission committee, member
2016-present	MPH/HPAL admission committee, member
2019-present	Curriculum committee, member
2019-2021	Research committee, member
2018-2019	HPAL faculty search committee, Position #1, Chair

2020-2022	HPAL faculty search committee, Position # 2, Co-chair
2022-2023	HPAL faculty search committee, Position # 3, Chair

Service to the University

2017-2019	University Assessment Committee
2017-2019	Graduate Program Council
2024-2025	Faculty welfare/Governance (pending for appointment)
Jan- June 2023	Faculty mentoring program, Brody School of Medicine

Service to the community

2010-2014	As an ORISE fellow, I did research projects for OLSLTS/CDC.
2021-present	DSMES data analysis for Pitt County Health Department, and DSMES program, Community and Clinical Connections for Prevention and Health Branch, Division of Public Health, NC DHHS
2024-	DAC/Abstract Interest group, Community and Clinical Connections for Prevention and Health Branch, Division of Public Health, NC DHHS

Service awards and recognition

As a CDC/ORISE fellow (2010-2014), I undertook significant research projects for OLSLTS/CDC. My efforts were recognized with the DPHPI Distant Shining "STAR" Award (2014-2015) for research excellence in public health

Professional Organization Service and Special Service Appointments

Editorial board member

Member of the editorial board, Journal of Public Health Mangement and Practice (since 2021) Member of the editorial board, BMC Health Services Research (since 2018) Member of the editorial board, Frontier in Public Health (since 2021) Member of the editorial board, AIMs Public Health (since 2017)

NIH Grant Review

I was invited to the following grant review sessions:		
April 2015	Ad hoc study section for NIMHD	
July 2021	NIH/NIDCR grant review	
October 2021	NIH/NIDCR grant review	
June 2022	NIH/NIDCR grant review DSR standing committee	
July 2022	NIH/NIDCR grant review	
March 2024	NIH grant review	

December 2020 Grant reviewer for John Hopkins/Utah NRMN Grant Writing Coaching Group

External reviewer for tenure and promotion

In 2022, I was invited to serve as an external reviewer for colleagues' promotion and tenure application packages in other universities. I completed the review and submitted my reports for 3 faculty members in these universities:

- Jiann-Ping Hsu College of Public Health Georgia Southern University,
- Department of Interdisciplinary Health Sciences Augusta University,
- Henry W. Bloch School of Management, University of Missouri-Kansas City (UMKC)

Consulting for University of Leeds, UK

2023-

Help with a project investigating genetic factors of poor oral. The project is led by Dr Jing Kang, Associate Professor in Medical Statistics/Biostatistics Deputy Director of Postgraduate Research Studies School of Dentistry Faculty of Medicine and Health University of Leeds. The analyses will be conducted at a RDC in Rockville.

Other Professional Service: Reviewer for Journals (2017-2024)

- Journal of Public Health Management and Practice
- American Journal of Preventive Medicine
- American Journal of Public Health
- Research on Aging
- Journal of Geriatrics
- Scientific Reports
- Frontiers in Public Health,
- BMC Health Service Research, Inquiry,
- Preventing Chronic Disease
- Journal of Aging and Health
- Journal of Dentistry
- Journal of Dental Research
- Journal of Public Health Dentistry
- Annals of Medicine
- Preventive Medicine
- Heliyon
- Health Equity
- Patient Education and Counseling