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EDUCATION

Harvard University, 2015-2017. MPH Epidemiology.

Cambridge University, 2009-2010. MPhil Education.

University of Virginia, 2000-2010. BAMT Education. PhD Research, Statistics, & Evaluation.

ACADEMIC POSITIONS

2019-Present Associate Professor, New York University College of Dentistry

2017-Present Director, MS Program in Clinical Research, New York University

2017-Present Director, Biostatistics Core, New York University

2014-Present Associated Professor, New York University School of Global Public Health

2017-2019 Assistant Professor, New York University College of Dentistry

2014-2017 Research Assistant Professor, New York University College of Dentistry

2012-2014 Adjunct Associate Professor, NYU Global Institute of Public Health

OTHER EMPLOYMENT HISTORY

2012-2019 Instructor, Columbia University

2011-2014 Director, Research & Evaluation Unit, New York City Department of Health

2010-2011 Director of Research & Evaluation, New York City Department of Education

2006-2009 Graduate Research Assistant, University of Virginia

HONORS/AWARDS

2020 Dean's Honor, NYU College of Dentistry

2019 Paper selected as one of five "Highlights of 2018" in *BMC Oral Health*

2018 Delta Omega Honor Society, New York University

- 2018 NYU Faculty Honors Recognition, New York University
- 2018 Dean's Honor, NYU College of Dentistry
- 2017 Elected to Academy of Distinguished Educators, NYU College of Dentistry
- 2017 Dean's Honor, NYU College of Dentistry
- 2012 Distinguished Service Award, NYC Department of Health
- 2008 DuPont Fellow, University of Virginia
- 2007 Doctoral Fellowship, University of Virginia
- 2006 Doctoral Fellowship, University of Virginia

RESEARCH EXPERIENCE

Funded Research – Competitive Awards

As Principal Investigator

- 2019-2020 New York University Mega Grant Support Initiative #RA633, “The role of the oral microbiome in disparities in dental caries and responsiveness to caries prevention: A pilot study.” \$15,000
- 2018-2023 Patient Centered Outcomes Research Institute grant #PCS160936724, “Comparative effectiveness of school-based caries prevention for children: A cluster randomized pragmatic clinical trial.” \$13,352,988
- 2017-2022 National Institute on Minority Health and Health Disparities grant #R01 MD011526, “Statewide implementation and evaluation of a rural caries prevention program.” \$3,617,644
- 2016-2018 National Institute of Dental and Craniofacial Research grant #R03 DE025289, “Analysis of longitudinal data from a school-based caries prevention program.” \$317,000

As co-investigator or other role

- 2015-2016 National Institute of Dental and Craniofacial Research grant #R01 DE018729, “Quality of life in children with cleft.” \$3,231,498 (Hillary Broder PI)
- 2014-2015 National Institute on Minority Health and Health Disparities grant #U24 MD006964, “Effectiveness and improvement of rural, school-based, caries prevention programs.” \$7,100,000 (Richard Niederman PI)
- 2013-2014 NYU Community and Translational Science Institute grant, “Understanding obesity among public housing residents in NYC: A community-based geospatial project.” \$35,000 (Dustin Duncan PI)

2013-2014 Robert Wood Johnson Foundation grant #71637, “Assessing the impact of food restrictions under the Supplemental Nutrition Assistance Program on food choice by families.” \$170,000 (Chen Zhen PI)

Grants Pending

2020 National Institute of Dental and Craniofacial Research grant, “The role of the oral microbiome in disparities in dental caries and responsiveness to caries prevention” (PI, \$3,384,191)

2020 National Institute of Dental and Craniofacial Research grant, “COHQoL measures in caries: comparison of psychometrics and cross-sectional and longitudinal responsiveness.” (PI, \$752,875)

2020 National Institute of Dental and Craniofacial Research grant, “EPI-MOUTH: An epidemiologic dental model for simulating oral health interventions.” (PI, \$304,629)

2020 National Institute of Dental and Craniofacial Research grant, “Intermittent fasting, dental health, and quality of life: The IFAD Study.” (PI, \$431,000)

Funded Research – Other

2018 New Hampshire Women, Infants, and Children Pay for Prevention Program Epidemiologist/Biostatistician (\$9,125). Analyzed data from a longitudinal caries prevention program amongst pregnant women and children in rural NH counties.

2017-2018 New York City Department of Health and Mental Hygiene Consultant (\$40,000). Subject-matter expert regarding an oral health data registry and survey system.

PUBLICATIONS

Peer-reviewed Articles

** denotes joint first or senior authorship*

1. Khoully I, Pardinias-Lopez S, **Ruff RR**, Strauss FJ. Efficacy of growth factors for the treatment of peri-implant diseases: A systematic review and meta-analysis. *Clinical Oral Investigations*. 2020. DOI: 10.1007/s00784-020-03240-5.
2. **Ruff RR**, Saxena D, Niederman R. School-based caries prevention and longitudinal trends in untreated decay: An updated analysis with Markov chains. *BMC Research Notes*. 2020;13(25). DOI: 10.1186/s13104-020-4886-8.
3. **Ruff RR**. Street-level research in public health nutrition: A cross-sectional study of dietary behavior in New York City. *SAGE Research Methods Cases: Medicine & Health*. 2020. DOI: 10.4135/9781529709698.

4. Qi L, Pushalkar S, Kamer A, Corby P, Mota R, Paul B, Guo Y, **Ruff RR**, Alekseyenko A, Li X, Saxena D. The influences of bioinformatics tools and reference databases in analyzing human saliva microbial community. *BMC Bioinformatics*. 2020. In press.
5. Yang C, Crystal Y, **Ruff RR**, Niederman R. Quality appraisal of child oral health-related quality of life measures: A scoping review. *JDR Clinical & Translational Research*. 2020;5(2). DOI: 10.1177/2380084419855636.
6. Huang S, **Ruff RR**, Niederman R. An economic evaluation of a comprehensive school-based caries prevention program. *JDR Clinical & Translational Research*. 2019;4(4):378-387. DOI: 10.1177/2380084419837587.
7. **Ruff RR**. State-level autonomy in the era of accountability: A comparative analysis of Virginia and Nebraska education policy through No Child Left Behind. *Education Policy Analysis Archives*. 2019;27(6):1-31. DOI: 10.14507/epaa.27.4013.
8. **Ruff RR**, Senthil S, Susser S, Tsutsui A. Oral health, academic performance, and school absenteeism in children and adolescents: A systematic review and meta-analysis. *J Am Dent Assoc*. 2019;150(2):111-121. DOI: 10.1016/j.adaj.2018.09.023.
9. **Ruff RR**, Niederman R. Silver diamine fluoride versus therapeutic sealants for the arrest and prevention of dental caries in low-income minority children: Study protocol for a cluster randomized controlled trial. *Trials*. 2018;19(1):523. DOI: 10.1186/s13063-018-2891-1.
10. **Ruff RR**. Total observed caries experience: Assessing the effectiveness of community-based caries prevention. *Journal of Public Health Dentistry*. 2018;78(4):287-290. DOI: 10.1111/jphd.12284.
11. **Ruff RR**, Niederman R. School-based caries prevention, tooth decay, and the community environment. *JDR Clinical & Translational Research*. 2018;3(2):180-187. DOI: 10.1177/2380084417750612.
12. **Ruff RR**, Niederman R. Comparative effectiveness of school-based caries prevention: A prospective cohort study. *BMC Oral Health*. 2018;18(1):53. DOI: 10.1186/s12903-018-0514-6. (Recognized as one of five “Highlights of 2018” published in journal).
13. **Ruff RR**, Crerand CE, Sischo L, et al. Surgical care for school-aged youth with cleft: Results from a multicenter, prospective observational study. *The Cleft Palate-Craniofacial Journal*. 2018;55(8):1166-1174. DOI: 10.1177/1055665618765776.
14. **Ruff RR**, Niederman R. Comparative effectiveness of treatments to prevent dental caries given to rural children in school-based settings: Protocol for a cluster randomized controlled trial. *BMJ Open*. 2018;8(4). DOI: 10.1136/bmjopen-2018-022646.

15. **Ruff RR**, Sischo L, Chinn CH, Broder HL. Development and validation of the Child Oral Health Impact Profile - Preschool version. *Community Dental Health*. 2017;34(3):176-182. DOI: 10.1922/CDH_4110Ruff07.
16. Huang SS, **Ruff RR***, Niederman R. The benefit of early preventive dental care for children. *JAMA Pediatrics*. 2017;171(9):918. DOI:10.1001/jamapediatrics.2017.2066.
17. Broder HL, Crerand CE, **Ruff RR**, Peshansky A, Sarwer DB, Sischo L. Challenges in conducting multicenter, multidisciplinary, longitudinal studies in children with chronic conditions. *Community Dentistry and Oral Epidemiology*. 2017;45(4):1-6. DOI: 10.1111/cdoe.12293.
18. Rajendra A, Veitz-Keenan A, Oliveira BH, **Ruff RR**, Wong MCM, Innes NPT, Radford J, Seifo N, Niederman R. Topical silver diamine fluoride for managing dental caries in children and adults (Protocol). *Cochran Database of Systematic Reviews*. 2017;7. DOI: 10.1002/14651858.CD012718.
19. **Ruff RR**, Sischo L, Broder HL. Minimally important difference of the Child Oral Health Impact Profile for children with orofacial anomalies. *Health and Quality of Life Outcomes*. 2016;14(140). DOI: 10.1186/s12955-016-0544-1.
20. **Ruff RR**, Broder H, Sischo L. Resiliency and socioemotional functioning in youth receiving surgery for orofacial anomalies. *Community Dentistry and Oral Epidemiology*. 2016;44(4):371-80. DOI: 10.1111/cdoe12222.
21. **Ruff RR**. The impacts of retention, expenditures, and class size on primary school completion in Sub-Saharan Africa: A cross-national analysis. *International Journal of Education Policy and Leadership*. 2016;11(8).
22. **Ruff RR**, Ng J, Jean-Louis G, Elbel B, Chaix B, Duncan DT. Neighborhood stigma is associated with poor sleep health in a pilot study of low-income housing residents in New York City. *Behavioral Medicine*. 2016;44(1). DOI: 10.1080/08964289.2016.1203754.
23. Duncan DT, **Ruff RR**, Chaix C, Regan SD, et al. Perceived spatial stigma, body mass index, and blood pressure: A GPS study among low-income housing residents in New York City. *Geospatial Health*. 2016;11(2). DOI: 10.4081/gh.2016.399
24. **Ruff RR**. Sugar-sweetened beverage consumption is linked to global adult mortality through diabetes mellitus and adiposity-related diseases including cardiovascular disease and cancer. *Evidence Based Medicine*. 2015;20(6):223-4. DOI: 10.1136/ebmed-2015-110267.
25. **Ruff RR**, Zhen C. Estimating the effects of a calorie-based sugar-sweetened beverage tax on weight and obesity in New York City adults using dynamic loss models. *Annals of Epidemiology*. 2015;25(5):350-357. DOI: 10.1016/j.annepidem.2014.12.008.

26. **Ruff RR**, Adjoian T, Akhund A. Small convenience stores and the local food environment: An analysis of resident shopping behavior using multilevel modeling. *American Journal of Health Promotion*. 2015;30(3):172-180. DOI: 10.4278/ajph.140326-QUAN-121.
27. Yi SS, **Ruff RR**, Jung M, Waddell EN. Racial/ethnic residential segregation, neighborhood poverty and urinary biomarkers of diet in New York City adults. *Social Science and Medicine*. 2014;122:122-129. DOI: 10.1016/j.socscimed.2014.10.030.
28. Duncan DT, Regan SD, Shelley D, Day K, **Ruff RR**, Al-Bayan M, Elbel B. Using Global Positioning System (GPS) methods to study the spatial contexts of obesity and hypertension risk among low-income housing residents in New York City: A feasibility study. *Geospatial Health*. 2014;9(1):57-70.
29. Miller-Archie SA, Jordan HT, **Ruff RR**, Chamany S, Cone JE, Brackbill RM, et al. Posttraumatic stress disorder and new-onset diabetes among adult survivors of the World Trade Center disaster. *Preventive Medicine*. 2014;66:34-38. DOI: 10.1016/j.ypmed.2014.05.016
30. Zhen C, Brissette I, **Ruff RR**. By ounce or by calorie: The differential effects of alternative sugar-sweetened beverage tax strategies. *American Journal of Agricultural Economics*. 2014;96(4):1070-1083. DOI: 10.1093/ajae/aau052. Published online June 2, 2014.
31. Day K, Loh R, **Ruff RR**, Rosenblum R, Fischer S, Lee K. Does bus rapid transit promote walking? An examination of New York City's Select Bus Service. *Journal of Physical Activity and Health*. 2014;11(8):1512-1516. DOI: 10.1123/jpah.2012-0382.
32. **Ruff RR**, Akhund A, Adjoian T, Kansagra SM. Calorie intake, sugar-sweetened beverage consumption, and obesity among New York City Adults: Findings from a 2013 population study using dietary recalls. *Journal of Community Health*. 2014;39(6):1117-1123. DOI: 10.1007/s10900-014-9865-3.
33. **Ruff RR**, Rosenblum R, Fischer S, Meghani H, Adamic J, Lee KK. Associations between building design, point-of-decision stair prompts, and stair use in urban worksites. *Preventive Medicine*. 2013;60:60-64. DOI: 10.1016/j.ypmed.2013.12.006.
34. **Ruff RR**. School counselor and school psychologist perceptions of accountability policy: Lessons from Virginia. *The Qualitative Report*. 2011;16(5):1270-1290.

Submitted

1. **Ruff RR**, Monse B, Duijster D, Naliponguit E, Benzian H. School-based strategies to prevent tooth decay in a high-risk child population in the Philippines: Results of a longitudinal cohort study. Submitted, *Journal of Dental Research*.

2. Aldosari MA, Bukhari OM, **Ruff RR**, Douglass CW, Niederman R, Starr JR. Comprehensive, school-based dentistry: Program details and students' unmet dental needs. Submitted, *Journal of School Health*.

Working

3. Xu F, Saxena D, Crystal Y, **Ruff RR**. Differential bacterial abundance in saliva in children exhibiting non-responsiveness to silver diamine fluoride for caries arrest: A pilot study.
4. **Ruff RR**, Sierra MA, Xu F, Crystal Y, Saxena D. Predicting treatment nonresponse in children receiving silver diamine fluoride using artificial neural networks: A pilot study.
5. Ibrahem F, Giugliano T, Goldstein GR, **Ruff RR**, Choi M. Digital analysis of the dimensional change of irreversible hydrocolloid impression.
6. Alsaeid W, Zhivago P, Zhang Y, **Ruff RR**, Giugliano T, Choi M. Fracture load comparison between 3D printed and milled provisional restoration.
7. **Ruff RR**, Niederman R. Silver diamine fluoride is non-inferior to therapeutic sealants in the two-year arrest of dental caries: Results from the *CariedAway* cluster randomized pragmatic trial.
8. **Ruff RR**, Niederman R. Silver diamine fluoride versus therapeutic sealants for the prevention of dental caries: Results from the *CariedAway* cluster randomized pragmatic trial.
9. **Ruff RR**. Nurses are non-inferior to hygienists in the retention and effectiveness of silver diamine fluoride for the arrest of dental caries in pragmatic settings.
10. **Ruff RR**. Group trajectories in dental caries in children: Results from the *CariedAway* trial.
11. **Ruff RR**, Niederman R. Semiannual versus annual treatment of silver diamine fluoride for the prevention of dental caries
12. **Ruff RR**. Oral health, academic achievement, and the impact of school-based caries prevention: Results from the *CariedAway* trial.
13. **Ruff RR**. Oral health, student attendance, and the impact of school-based caries prevention.
14. **Ruff RR**, Niederman R. Quality of life and dental caries in low-income minority children: Results from the *CariedAway* study.
15. **Ruff RR**, Niederman R. Quality of life and dental caries: A joint trajectory model.

16. **Ruff RR**, Whittemore R, Barry-Godin T, Niederman R. Precision targeting of caries prevention programs: Leveraging schools and community outreach to improve consent rates.
17. **Ruff RR**, Barry-Godin T, Whittemore R, Reitz J, Santiago-Galvin N, Gibbs H, Niederman R. Implementation of a large cluster-randomized pragmatic trial for the prevention of dental caries in school-based settings: Lessons from the *CariedAway* study.
18. **Ruff RR**. Measurement matters: A simulation of caries index performance and risk classification with varying disease severity.

Invited presentations

- Oct 2017 Assessing additional options for school-based caries prevention (“Improving determinants of child development” Symposium). Presented at the IADR World Congress on Preventive Dentistry, New Delhi, India.

Other Selected Presentations

- June 2020 Predicting treatment nonresponse in children receiving silver diamine fluoride: A pilot study. Oral presentation, 9th International Conference on Methodological Issues in Oral Health Research, New York, USA (canceled due to COVID-19).
- Sep 2019 Measuring responsiveness to preventative treatments for dental caries: Towards a predictive model using machine learning (Ruff RR, Saxena D). Oral presentation given at the CED-IADR Oral Health Research Congress, Madrid, Spain.
- Oct 2019 Should dental insurers implement comprehensive school-based caries prevention programs? (Huang S, Ruff RR, Niederman R). 41st Annual Meeting of the Society for Medical Decision Making
- July 2018 Applications of virtual reality in training oral and maxillofacial surgery techniques (Ruff RR). NYU Academy of Distinguished Educators teaching and learning club, New York, USA.
- May 2018 Research to optimize school-based caries prevention (Ruff RR). Oral presentation given at the 8th International Conference on Methodological Issues in Oral Health Research, Hong Kong.
- April 2018 Development and validation of the Child Oral Health Impact Profile – Preschool Version (Broder HL, Sischo L, Ruff RR, et al). 75th Meeting of the American Cleft Palate Craniofacial Association.
- April 2017 Analysis of school-based caries prevention programs (Ruff RR). New York University Faculty Research Symposium, New York, USA.

March 2017	CariedAway: Outcomes of school-based caries prevention (Ruff RR, Niederman R). 95 th General Session of the IADR, California, USA.
March 2017	Patient-centered outcomes in periodontitis patients (Rego R, Russell S, Burukunte S, Ruff RR, et al). 95 th General Session of the IADR, California, USA.
March 2017	SDF for Caries Prevention Primary Teeth: A systematic review (Oliveira B, Rajendra A, Keenan A, Ruff RR, Niederman R). 95 th General Session of the IADR, California, USA.
Feb 2015	Spatial stigma and drug use among low-income housing residents in NYC (Ruff RR, Duncan DT). New York City Epidemiology Forum, New York, NY.
Sep 2014	Estimating the effects of sugar-sweetened beverage taxes on weight and obesity in NYC (Ruff RR, Zhen C). American College of Epidemiology annual meeting, Maryland, USA.
March 2014	An analysis of the bodega food environment in New York City (Ruff RR, Akhund A, Adjoian T). 24 th annual Art & Science of Health Promotion Conference
Feb 2014	Dietary sources of sugar and drink-specific calorie intake in New York City Adults (Adjoian T, Ruff RR, Akhund A). New York City Epidemiology Forum

SERVICE ACTIVITIES

New York University

Spring 2018	College faculty representative, NYU Faculty Urban Research Day
2014-2016	Teaching fellow, Center for the Promotion of Research Involving Innovative Statistical Methodology (PRIISM)

College

2019-Pres	Faculty Council Representative
2016-Pres	Director, MS Program in Clinical Research
2016-Pres	Director, Biostatistics Core
2017-Pres	Member, NYU Academy of Distinguished Educators
2018-Pres	Member, Curriculum Committee
2016-Pres	Member, Graduate Council on Ethics and Professionalism
2016-2019	Member, Council on Humanitarianism and Culture Change
2017-2018	Mentor, Summer D1 Research Experience

2014-2015	Teaching and Learning Club
2014-2015	Statistics Unit Head, College of Dentistry and School of Nursing
2014-2016	Technology Enhanced Learning Committee (NYU CGPH)

Department

2019	Planning Committee, 2020 Methodology in Oral Health Research Conference
Spring 2017	Hiring Committee
2015-2016	Chair, Curriculum Committee, MS Program in Clinical Research
2015-2016	Admissions Committee
2014-2015	Curriculum Committee

Other

2011-2014	Surveillance and Epidemiology Unit, NYC Incident Command System
2010-2011	Member, NYC Department of Education Institutional Review Board

Student Advising

2019	Analyzing the impact of prevention on new dental caries over time in schoolchildren with preexisting untreated decay: The Forsyth Study (Kajal Desai, MPH thesis)
2019	The comparative performance and appropriateness of caries indices for use in oral epidemiology research: a prospective cohort example (Dhawani Shah, MPH thesis)
2017	Factors related to periodontitis prevalence and dental care utilization in US Hispanic women with changes in progesterone and estrogen levels (Ifrah Choudhary, MPH thesis)
2016	Periodontitis and the risk of psoriasis in the US population using the National Health and Nutrition Examination Survey, 2009-2012 (Zhen Li, MS capstone)

Peer and Editorial Review

Reviewer: *PLOS One, BMJ Open, Preventive Medicine, JDR Clinical and Translational Research, BMC Oral Health, JPHD, Community Dentistry & Oral Epidemiology, Evidence-Based Medicine, BMC Public Health, Journal of Clinical Periodontology, Journal of the American Dental Association, Medicine, International Dental Journal, Clinical Implant Dentistry and Related Research*

Editor: *Medicine*

Community Service

- 2017 Grant Reviewer, Oral Disease and Dental Health Review Committee, California Tobacco-Related Research Program (TRDRP). Content expert for oral disease epidemiology and biostatistics.
- 2014 Consulting, Fiji National University, for the 2014 Fijian Oral Health Survey. Sampling procedures, data management and analysis, and reporting for government release.

EDUCATIONAL ACTIVITIES

Courses Taught

- Spring 2020 Scientific Writing (MS), 15 hours
- 2018-2019 Epidemiology of Dental Caries (D2 DDS students), 3-hour module
- 2014-2019 Biostatistics for Public Health (MPH/PhD/DDS), 45 hours
- 2014-2015 Data Management using SAS I (MS), 30 hours
- 2014-2015 Data Management using SAS II (MS), 30 hours
- 2016-2018 Clinical Research Practicum I (MS), 45 hours per semester
- 2016-2018 Clinical Research Practicum II (MS), 45 hours per semester
- 2012-2014 Biostatistics I (MPH/PhD), 45 hours per semester
- 2012-2014 Biostatistics II (MPH/PhD), 45 hours per semester
- 2014-2019 Propensity Score Matching (Post-graduate), 15 hours
- 2013 Methods of Causal Inference (Post-graduate), 35 hours
- 2012 Survey Research (Post-graduate, co-taught), 5 hours
- Spring 2009 Qualitative Data Analysis (PhD) 45 hours per semester

Educational Materials Developed

- 2016 MS Program in Clinical Research
In 2016 I was asked to assume the role of Director of the MS Program in Clinical Research in the department of Epidemiology and Health Promotion. In so doing, I evaluated and revised the program curriculum, moving from 50 credits to 30, updated all syllabi for new competencies and state requirements, and successfully applied for state approval. I am responsible for reviewing and admitting outstanding applicants and developing new educational materials each year including advertising and new program options, such as a dual MS/MS with Biomaterials and a joint BS/MS with the NYU College of Arts and Sciences.
- 2014 Biostatistics for Public Health

In collaboration with the NYU Global Technology Service and the College of Global Public Health, I created a fully-online course in Biostatistics to be offered to students at CGPH, the College of Dentistry, and the School of Medicine. This project required creating a new syllabus, all educational materials (including lessons, datasets, problem sets, and lab sheets), writing lecture scripts, and recording professional-quality videos for use in the online classroom.

- 2014 Data Management II
For Data Management II, I created a new syllabus with updated competencies and focused the core course on a set of skills necessary for students pursuing careers in Clinical Research. Development for this course included a new syllabus, writing new SAS code for every course module, and creating problem sets/projects for student assessment.
- 2012 Propensity Score Matching
The PSM course is a fully online course using the Canvas Instructure framework. It is a five-module course on the theory and practice of causal inference and propensity scores to analyze epidemiologic data. For this course I created the syllabus, lessons, lecture videos, all datasets, laboratory problem sets, and worksheets.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Member	Cochrane Collaboration
Fellow	Royal Society of Medicine
Member	New York Academy of Sciences
Fellow	Royal Society of Public Health
Member	International Association of Dental Research
Member	American Dental Education Association

BRIEF RESEARCH STATEMENT

My research in oral health epidemiology focuses on (1) oral health and child development and (2) intermittent fasting, oral health, and quality of life. In oral health and child development, I primarily study the association between school-based caries prevention and student academic achievement. This has included serving as principal investigator for several mega-grant initiatives conducting pragmatic cluster randomized trials on the non-inferiority of silver diamine fluoride for the arrest and prevention of dental caries. It also includes partnering with microbiologists to study the multilevel determinants of non-responsiveness to caries prevention. Additional areas of research in this field include the psychosocial development of children with cleft lip and palate and the measurement of oral health-related quality of life in children.

While intermittent fasting has been studied extensively in relation to obesity and cardiometabolic outcomes, research on fasting and oral health or quality of life is virtually nonexistent. In this line of inquiry, my research focuses on the changes in oral health-related quality of life in response to calorie restricted feeding, the changes experienced in the oral microbiome, and the incidence of caries and periodontitis in long-term fasters. This research connects my prior experience as a research scientist at the NYC Department of Health, where I focused on chronic disease prevention and obesity research.