Ryan Richard Ruff, PhD, MPH

CONTACT Information 380 Second Avenue, Suite 300, Office 309 Department of Epidemiology & Health Promotion New York University College of Dentistry

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Voice: (212) 998-9663

RESEARCH SUMMARY I am interested in school-based health and the association between oral health and child development. Within the College I am director of the Biostatistics Core, which supports additional collaborations

in pediatrics, molecular pathobiology, and clinical psychology.

EDUCATION University of Virginia, Charlottesville, VA USA

PhD in Research, Statistics, & Evaluation, December 2009

BAMT in Education, May 2005

Cambridge University, Cambridge, UK

MPhil in Education Policy, July 2010

Harvard University, Cambridge, MA USA

MPH in Epidemiology, May 2017

Honors and Awards 2022 Fellow of the American College of Epidemiology

2021 Sigma Xi Scientific Honor Society

2021 Elected Fellow, New York Academy of Medicine

2020 Goddard Junior Faculty Fellowship

2020 Dean's Honor, NYU College of Dentistry (2020, 2018, and 2017)

2019 Selected as one of top five papers published in 2018 in BMC Oral Health

2018 Delta Omega Honor Society, New York University

2018 NYU Faculty Honoree, New York University

2017 Elected to Academy of Distinguished Educators, NYU College of Dentistry

2012 Distinguished Service Award, NYC Department of Health

2008 DuPont Fellow, University of Virginia

2007 Doctoral Fellowship, University of Virginia (2007 and 2006)

ACADEMIC EXPERIENCE New York University College of Dentistry, New York, NY

Department of Epidemiology & Health Promotion

Associate Professor (tenure track)

2019 - Pres

Assistant Professor (tenure track)

2017 - 2019

Research Assistant Professor

2014 - 2017

Director, Biostatistics Core (2017-Present),

Director, MS Program in Clinical Research (2017-Present),

Head of the Statistics Unit (2015-2017)

New York University School of Global Public Health, New York, NY

	Associated Proj Adjunct Associa		2014 - Pres 2012 - 2014			
	Uniformed Services University of the Health Sciences					
	$Adjunct\ Associa$	·	2022 - Pres			
Professional Experience	Columbia Un Instructor	iversity, Epidemiology & Population Health Institute, New Y	York, NY 2012 - 2021			
	New York City Department of Health, New York, NY Director, Research & Evaluation Unit 2011 - 2014					
	New York City Department of Education, New York, NY					
	Director of Res	$earch \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	2010 - 2011			
RESEARCH	Funded Research - As Principal Investigator					
EXPERIENCE	2023 - 2024	4 Supplementary award, Patient-Centered Outcomes Research Institute (parent award #PCS160936724). "Optimizing school-based oral health programs that use silver diamine fluoride." \$394,472				
	2023 - 2028	3 - 2028 C38355GG, New York State Department of Health School-Based Dental Home Program (SBDHP), "CariedAway: A sustainable model for school-based dental programs in New York City." \$250,000.				
	2023 - 2024	23 - 2024 JSI22-1529, JSI Research & Training Institute and NH Department of Health & Human Services, "Sustainability of a school-based caries prevention program." \$249,022				
	2020 - 2022	2020 - 2022 R56 DE028933, National Institute of Dental and Craniofacial Research, "The role of the oral microbiome in disparities in dental caries and responsiveness to caries prevention." \$517,296				
	2019 - 2020 RA633, New York University Mega Grant Support Initiative, "The role of the oral microbiome in disparities in dental caries and responsiveness to caries prevention: A pilot study." \$15,000					
	2018 - 2024	PCS160936724, Patient-Centered Outcomes Research Institute, "Ceffectiveness of school-based caries prevention for children: A cluster pragmatic clinical trial." \$13,052,988 (MPI)	•			
	2017 - 2023	2017 - 2023 R01 MD011526, National Institute on Minority Health and Health Disparities "Statewide implementation and evaluation of a rural caries prevention program." \$3,617,644 (MPI)				
	2016 - 2018	R03 DE025289, National Institute of Dental and Craniofacial Researches of longitudinal data from a school-based caries prevention program	,			

As co-investigator or other role

- 2022 2023 JSI22-1529, US Department of Health & Human Services, "Situation analysis, planning, and proposal for a statewide school-based cavity prevention program" \$50,000 (Niederman PI)
- 2015 2016 R01 DE018729, National Institute of Dental and Craniofacial Research, "Quality of life in children with cleft." \$3,231,498 (Broder PI)
- 2014 2015 U24 MD006964, National Institute on Minority Health and Health Disparities, "Effectiveness and improvement of rural, school-based, caries prevention programs." \$7,100,000 (Niederman PI)
- 2013 2014 NYU Community and Translational Science Institute, "Understanding obesity among public housing residents in NYC: A community-based geospatial project." \$35,000 (Duncan PI)
- 2013 2014 RWJF71637, Robert Wood Johnson Foundation, "Assessing the impact of food restrictions under the Supplemental Nutrition Assistance Program on food choice by families." \$170,000 (Chen Zhen PI)

Other research funding

- New Hampshire Women, Infants, and Children Pay for Prevention Program. Served as epidemiologist/biostatistician for program evaluation and reporting (\$9,125)
- 2017 New York City Department of Health and Mental Hygiene. Subject-matter expert regarding oral health data registry and survey system development (\$40,000)

Grants under review or under development

- Submitted Pragmatic Research to Implement Sustainable Medicine in Schools (PRISMS), National Science Foundation Accelerating Translational Research, SRTP Project
- Submitted Making caries prevention SMART: A personalized approach to school-based oral medicine, National Institute of Dental and Craniofacial Research (R01)
- In progress School-based dental programs and the effects on academic performance and student attendance, Spencer Foundation Large Research Grants on Education

PUBLICATIONS

- [54] **Ruff RR**. Minimally invasive treatments for dental caries applied in a school-based model: The CariedAway pragmatic randomized trial. Washington, DC: Patient-Centered Outcomes Research Institute (PCORI); 2023 (draft final research report [DFRR]).
- [53] Ruff RR, Barry-Godin T, Niederman R. A school-based clinical trial of silver diamine fluoride for caries incidence. medRxiv. 2023; doi: 10.1101/2023.08.16.23294171.
- [52] Poudel SB, **Ruff RR**, Yildirim G, Dixit M, et al. Excess Growth Hormone Triggers Inflammation-Associated Arthropathy, Subchondral Bone Loss, and Arthralgia. American Journal of Pathology. 2023; 193(6):829-842. doi: 10.1016/j.ajpath.2023.02.010.

- [51] Yildiri G, Bergamo ETP, Poudel S, **Ruff RR**, et al. Effects of canagliflozin on skeletal morphology, bone mineral composition, and nano-mechanical properties in UM-HET3 mice. GeroScience. 2023; 45(3):1933-1951. doi: 10.1007/s11357-023-00803-8.
- [50] Ruff RR, Habib R, Barry-Godin T, Niederman R. School-based caries prevention and the impact on acute and chronic student absenteeism. Journal of the American Dental Association. 2023; 154(8):753-759. doi: 10.1016/j.adaj.2023.05.007.
- [49] Ruff RR, Barry-Godin T, Niederman R. Effect of silver diamine fluoride on caries arrest and prevention: the CariedAway school-based randomized clinical trial. JAMA Netw Open. 2023; 6(2). doi: 10.1001/jamanetworkopen.2022.55458
- [48] Poudel SB, Frikha-Benayed D, **Ruff RR**, Yildirim G, Dixit M, Korstanje R, Robinson L, Miller RA, Harrison DE, Strong JR, Schaffler MB, Yakar S. Targeting mitochondrial dysfunction using methylene blue or mitoquinone to improve skeletal aging. Aging. 2023; doi: 10.1101/2023.06. 16.545146.
- [47] Ruff RR, Barry-Godin T, Whittemore R, Small TM, Santiago-Galvin N, Sharma P. The impact of COVID-19 on the oral health needs of children participating in a school-based dental program. medRxiv. 2022. doi: 10.1101/2022.05.16.22 275165
- [46] **Ruff RR**, Barry-Godin T, Niederman R. Medical nurses may be as effective as dental hygienists in using silver diamine fluoride and fluoride varnish for caries prevention in a school-based oral health program. medRxiv. 2022. doi: 10.1101/2022.05.09.22274845.
- [45] Dixit M, Louis LD, Basta-Lkjakic J, ... **Ruff RR**, Schaffler MB, Yakar S. Lifelong excess in GH elicits sexual dimorphic effects on skeletal morphology and bone mechanical properties. J Bone Miner Res. 2022; 37(11). doi: 10.1002/jbmr.4699.
- [44] Choi M, Ibrahem F, **Ruff RR**, Giugliano T. Digital Analysis of the Dimensional Change Of an Irreversible Hydrocolloid Impression Material (Alginate) with Varying Storage Times. Primary Dental Journal. 2022; 11(4). doi: 10.1177/20501684221133417.
- [43] Ellis AW, Kosaraju A, Ruff RR, Miller CB, Francis JM, Vandewalle KS. Dental erosion as an indicator for gastroesophageal reflux disease. General Dentistry. 2022; 70(6):46-51.
- [42] **Ruff RR**, Barry-Godin T, Murray T, Niederman R. Silver diamine fluoride, atraumatic restorations, and oral health-related quality of life in children aged 5-13 years: Results from the Caried-Away school-based cluster randomized trial, BMC Oral Health. 2022; 22(125). doi: 10.1101/2021.04.19.21255478.
- [41] 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. Community Dentistry and Oral Epidemiology. 2022;51(2):219-227. doi: 10.1111/cdoe.12729.
- [40] **Ruff RR**, Whittemore R, Grocheki M, Bateson J, Barry-Godin T. Silver diamine fluoride and oral-health related quality of life: A network meta-analysis. PLoS One. 2022; 17(2). doi: 10.1371/journal.pone.0261627
- [39] **Ruff RR**. From Jomtien to Dakar: A quality assessment of Malawian Education for All policy, 1990-2010. EdArXiv. 2022. doi: 10.35542/osf.io/y5xfk.
- [38] Ruff RR, Sierra MA, Xu F, Crystal Y, Saxena D. Predicting treatment nonresponse in Hispanic/Latino children receiving silver diamine fluoride for caries arrest: A pilot study using machine

- learning. Frontiers in Oral Health. 2021; 2:695759. doi: 10.3389/froh.2021.695759.
- [37] Paul B, Sierra MA, Xu F, Crystal Y, Li X, Saxena D, **Ruff RR**. Microbial population shift and metabolic characterization of silver diamine fluoride treatment failure on dental caries. PLoS One. 2021; 16(3). doi: 10.1371/journal.pone.0242396.
- [36] Aldosari MA, Bukhari OM, **Ruff RR**, Palmisano JN, Nguyen H, Douglass CW, Niederman R, Starr JR. Comprehensive, school-based preventive dentistry: program details and students' unmet dental needs. Journal of School Health. 2021; 91(9). doi: 10.1111/josh.13063
- [35] Starr JR, **Ruff RR**, Palmisano J, Goodson JM, Niederman R. Longitudinal caries prevalence in a comprehensive, multi-component, school-based prevention program. Journal of the American Dental Association. 2021;152(3). doi: 10.1016/j.adaj.2020.12.005
- [34] 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(1). doi: 10:1186/s13104-020-4886-8.
- [33] 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.
- [32] Khouly I, Pardinas-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. 24(7):2141-2161. doi: 10.1007/s00784-020-03240-5
- [31] 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. Genes. 2020;11(878). doi: 10.3390/genes11080878.
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- [29] 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.
- [28] **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.
- [27] Ruff RR, Senthi 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.
- [26] 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.
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- ronment. JDR Clinical & Translational Research. 2018;3(2):180-187. doi: 10.1177/2380084417750612.
- [23] 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).
- [22] **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.
- [21] **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.
- [20] 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.
- [19] 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.
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- [15] **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/cdoe.12222.
- [14] 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).
- [13] **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.
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- [11] **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.
- [10] 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.
- [9] 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.
- [8] 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.
- [7] 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.
- [6] Miller-Archie SA, Jordan HT, Ruff RR, Chamany S, Cone JE, Brackbill RM, et al. Post-traumatic 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
- [5] 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.
- [4] 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.
- [3] 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.
- [2] 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.
- [1] **Ruff RR**. School counselor and school psychologist perceptions of accountability policy: Lessons from Virginia. The Qualitative Report. 2011;16(5):1270-1290.

Papers in Preparation

- Kosaraju A, Vader V, Ruff RR, Vandewalle K. Evaluating the Diagnostic Interrater Reliability between Virtual and In-person Sick-call Examinations at a Military Dental Treatment Facility.
- Ruff RR, Barry-Godin T. Seat-time requirements for non-surgical, minimally invasive treatments for dental caries applied in a pragmatic, school-based program.
- Huang, S.S., R.R. Ruff, S. Wang, and H.T. Gold. 2022. The impact of school-based caries prevention programs on health care system burden from dental needs among children during COVID-19: a NY Medicaid claims analysis.
- Huang, S.S., S. Wang, R.R. Ruff, and H.T. Gold. 2022. Do school-based caries prevention programs really treat the highest risk children? A NY Medicaid claims data analysis.
- Huang, S.S., S. Wang, R.R. Ruff, T. Barry-Godin and H.T. Gold. 2022. The Impact of Heterogeneity

in Resource Use in School-Based Caries Prevention Programs on Implementation Decisions.

Ruff RR. Average school performance following the introduction of a school-based caries prevention program.

Ruff RR. Making school-based caries prevention SMART: Reducing health inequities through adaptive interventions.

Barry Godín T, Ruff RR. Using delayed silver modified atraumatic restorations in a school oral health program.

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- Oct 2023 "The promise of engagement for school-based oral health". Invited speaker for the 2023 Annual Meeting of the Patient-Centered Outcomes Research Institute, session "Practicalities of Conducting Meaningful Engagement: A Menu of Tips and Resources from Experience". Washington, DC.
- Jun 2023 "School-based strategies to prevent dental caries in high-risk populations". Invited speaker for the 29th Congress of the International Association of Paediatric Dentistry, session "Joining forces in prevention: Global initiatives for caries preventive programs". Maastricht, the Netherlands.
- May 2023 Findings and implications from our 2023 paper in *JAMA Network Open* were presented by invitation to the Medicaid/Medicare/CHIP Services Dental Association (MSDA) Annual Symposium, Clinical Perspectives and Evidence Update session (team invitation). Washington, DC.
- Sep 2022 "Research and development in school-based health". Invited lecture given to the Medicine Grand Rounds speaker series, Vanderbilt University Medical Center, Division of Epidemiology. Nashville, TN, USA.
- Jun 2021 "Applications of machine learning in oral health: predicting treatment nonresponse in children receiving nonsurgical caries treatment". Invited speaker for the 9th International Conference on Methodological Issues in Oral Health Research, New York, USA
- Oct 2017 "Assessing additional options for school-based caries prevention: Improving determinants of child development". Invited speaker for the 11th IADR World Congress on Preventive Dentistry, New Delhi, India

ORAL PRESENTATIONS AND SYMPOSIA

- June 2023 CariedAway: One solution for a global disease. Oral presentation given at the 2023 National School-Based Health Care Conference, Washington, D.C., USA
- June 2023 Essential oral healthcare in a school context. Oral presentation given by invitation at 2023 International Association for Dental Research (invited presentation, senior author)
- Nov 2022 Building Sustainable, Effective School-Based Oral Health Programs. Oral Symposium. Three abstracts accepted as senior author, one as first author titled "School-based caries prevention with minimally invasive treatments: Results from phase one of the CariedAway cluster randomized pragmatic trial". Presented at the 2022 American Public Health Association Meeting, Boston, USA

Sep 2020 Silver diamine fluoride for school-based caries prevention. Oral presentation accepted at the PED-IADR Congress, Marseille, France (Conference cancelled due to COVID-19) Sep 2019 Measuring responsiveness to preventative treatments for dental caries: Towards a predictive model using machine learning. Oral presentation given at the CED-IADR Oral Health Research Congress, Madrid, Spain June 2018 Applications of virtual reality in training oral and maxillofacial surgery techniques. NYU Academy of Distinguished Educators teaching and learning club, New York, USA May 2018 Research to optimize school-based caries prevention. Oral presentation given at the 8th International Conference on Methodological Issues in Oral Health Research, Hong Kong July 2021 Silver diamine fluoride, dental caries, and quality of life in low-income minority children: Results from the CariedAway school-based cluster randomized trial. IADR/AADR General Session Apr 2018 Development and validation of the Child Oral Health Impact Profile Preschool Version. 75th Meeting of the American Cleft Palate Craniofacial Association Apr 2017 Analysis of school-based caries prevention programs. New York University Faculty Research Symposium, New York, USA Mar 2017 CariedAway: Outcomes of school-based caries prevention. 95th General Session of the IADR, California, USA Mar 2017 SDF for Caries Prevention in Primary Teeth: A systematic review. 95th General Session of the IADR, California, USA Feb 2015 Spatial stigma and drug use among low-income housing residents in NYC. New York City Epidemiology Forum, New York, NY Sep 2014 Estimating the effects of sugar-sweetened beverage taxes on weight and obesity in NYC. American College of Epidemiology annual meeting, Maryland, USA Mar 2014 An analysis of the bodega food environment in New York City. 24th Annual Art and Science of Health Promotion Conference, Denver, CO Feb 2014 Dietary sources of sugar and drink-specific calorie intake in New York City Adults. New York City Epidemiology Forum, New York, NY Aug 2023 By ounce or by calorie: The different effects of alternative sugar-sweetened beverage tax strategies (with C. Zhen). 2013 meeting of the Agricultural and Applied Economics Association, Washington, DC Jun 2013 Segregation, neighborhood poverty, and diet: Findings from a population-based survey of NYC adults (with S. Yi). 46th meeting of the Society for Epidemiologic Research, Boston, MA

SELECTED

Abstracts

Press & Media Coverage

Paper published in JAMA Network on non-inferiority of SDF in schools has been covered in *The Washington Post, Dentistry Today, Daily Mail, Semafor, Decisions in Dentistry, Dr. Bicuspid, Dentistry IQ, The New York Post, Brooklyn Eagle, HealthDay,* and international outlets including *Dental News* (Pakistan) and *Bite Magazine* (Australia). Television coverage includes News 1, News 12 New York, NBC Boston, NBC Connecticut, and Spectrum 1 (research site visit). Interviews conducted by News 1 New York and the ADHA Official Podcast.

Paper on total observed caries experience (TOCE) covered in Dr. Bicuspid

Trademarks & Intellectual Property

Trademarks

CariedAway, Secondary Innovator PRISMS, Primary Innovator

TEACHING & EDUCATIONAL ACTIVITIES

Courses Taught

Epidemiology (MS), 1 semester

Scientific Writing (MS), 1 semester

Epidemiology of Dental Caries (DDS, "Diagnosis and Treatment of Oral Disease" course), 4 semesters

Biostatistics for Public Health (MPH/PhD/DDS), 12 semesters

Data Management using SAS I (MS), 3 semesters

Data Management using SAS II (MS), 3 semesters

Clinical Research Practicum I (MS), 3 semesters

Clinical Research Practicum II (MS), 3 semesters

Biostatistics I (MPH/PhD), 2 semesters

Biostatistics II (MPH/PhD), 2 semesters

Propensity Score Matching (Post-graduate), 6 summer sessions

Methods of Causal Inference (Post-graduate), 2 summer sessions

Survey Research (Post-graduate, co-taught), 1 summer sessions

Qualitative Data Analysis (PhD), 1 semester

SERVICE & COMMITTEE ACTIVITIES

New York University

2023-Pres Strategies to Reduce Inequality Research Working Group

2021-Pres University Graduate Program Committee

Spring 2018 College faculty representative, NYU Faculty Urban Research Day

2014-2016 Teaching fellow, Center for the Promotion of Research Involving Innovative Sta-

tistical Methodology (PRIISM)

College

2016-Pres Director, MS Program in Clinical Research

2016-Pres Director, Biostatistics Core

2019-2023 Faculty Council

2017-2023	NYU Academy of Distinguished Educators
2018-2022	Curriculum Committee
$2016\text{-}\mathrm{Pres}$	Graduate Council on Ethics and Professionalism
2016-2019	Council on Humanitarianism and Culture Change
2017-2018	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 SGPH)

Department

Fall 2022	Chair, Faculty Search Committee (tenure track)
Fall 2022	Chair, Faculty Search Committee (research track)
$2020\text{-}\mathrm{Pres}$	Chair, Oral Health Epidemiology and Analysis Lab
Fall 2021	Faculty Search Committee
2019-2020	Planning Committee, 2020 Methodology in Oral Health Research Conference
Spring 2017	Faculty Search 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

Community & Professional Service

- 2023 World Workshop of Oral Medicine IX (WWOM). Invited to serve as Project Consultant for Group 5: Predoctoral Oral Medicine Curriculum.
- Oral Health Disparities and Inequities (OHDI) Research Think Tank participant, National Institute of Dental and Craniofacial Research. Summary results published online at https://www.nidcr.nih.gov/grants-funding/grant-programs/health-disparities-research-program/think-tank
- 2022 Study Section, National Institute of Dental and Craniofacial Research. Review panel for Oral Health Data Analysis and Statistical Methodology Development and Analyses of Existing Genomics Data applications.
- 2022 Study Section, National Institute of Dental and Craniofacial Research. Special Grants Review Committee (DSR).
- 2021 Study Section, National Institutes of Health. Oral, Dental, and Craniofacial Sciences (ODCS). Musculoskeletal, Oral, and Skin Sciences IRG.

- 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.

REVIEWING & EDITORIAL

Reviewer

PLOS One, BMJ Open, Preventive Medicine, JDR Clinical and Translational Research, BMC Oral Health, Journal of Public Health Dentistry, 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, Pediatrics, International Journal of Paediatric Dentistry, Education Policy Analysis Archives, American Journal of Preventive Medicine, Journal of American College Health

Editorial

JDR Clinical & Translational Research (Scientific Advisory Board, 2021-Present) Medicine (Academic Editor, 2016-2019)

MENTORING AND ADVISING

Thesis or capstone supervisor

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 - 2019)

Intermittent fasting and oral health (Jillian Bateson, Furman University Undergraduate Capstone Project, 2019 - later admitted to dental school)

Factors related to periodontitis prevalence and dental care utilization in US Hispanic women with changes in progesterone and estrogen levels (Ifrah Choudhary, MPH thesis - 2017)

Periodontitis and the risk of psoriasis in the US population using the National Health and Nutrition Examination Survey, 2009-2012 (Zhen Li, Master of Science capstone in Clinical Research - 2016)

Public health interventions for obesity in New York City (M. Seamans, HRTP Internship, NYC Department of Health and Mental Hygiene, 2013).

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- American College of Epidemiology (Fellow)
- American Statistical Association, Statistics in Epidemiology Section
- American Educational Research Association
- American Public Health Association
- New York Academy of Medicine (Fellow)
- New York Academy of Sciences
- Cochrane Collaboration
- Previously the Society for Epidemiologic Research, the International Association for Dental Research, the American Dental Education Association, and the Royal Society of Public Health

Software

• Statistical Packages: R, Stata, LISREL, AMOS, BUGS; SAS (rusty), SPSS.

• Applications: EpiMouth (built in R Shiny), LATEX, R-Markdown, REDCap, N'Vivo, EndNote, JMP, common Windows database, spreadsheet, and presentation software