#### Updated: 1.2.2024

# Erin Ryan Kulick, PhD MPH

Assistant Professor, Temple University

### **CONTACT**

Department of Epidemiology and Biostatistics Temple University College of Public Health 1301 Cecil B Moore Avenue

Philadelphia, PA 19122

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#### **EDUCATION**

2013-2018 PhD, Epidemiology

Columbia University Mailman School of Public Health, Department of

Epidemiology, New York, NY

Dissertation: "Long-term exposure to ambient air pollution and trajectories of

cognitive decline in Northern Manhattan" Committee chair: Dr. Mitchell Elkind

2007-2009 MPH, Epidemiology

Drexel University School of Public Health, Department of Epidemiology and

Biostatistics, Philadelphia, PA

Thesis: "Occupational Risks of Hepatitis B Virus and Hepatitis C Virus National

Health and Nutrition Examination Survey Data (1999-2004)

Advisor: Dr. Allison Evans

2001-2005 **B.S.**, **Biology** 

Villanova University, Villanova, PA

Minor: Psychology

#### **POST-DOCTORAL TRAINING**

2018-2020 NIH/NHLBI T32 Post-doctoral Fellowship, Environmental Epidemiology

Brown University School of Public Health

Mentor: Gregory Wellenius

# PROFESSIONAL APPOINTMENTS

2020- Present Assistant Professor

Department of Epidemiology and Biostatistics, College of Public Health

Temple University, Philadelphia, PA

2016-2018 Research Associate

Department of Neurology, NeuroCORPS Division Columbia University Medical Center, New York, NY

2014-2016 Graduate Research Assistant

Department of Neurology, NeuroCORPS Division Columbia University Medical Center, New York, NY

2014-2015 **Data Analyst** 

Department of Epidemiology

Columbia University Mailman School of Public Health, New York NY

2014 Consulting Statistician

Department of Geriatrics & Palliative Medicine Weill Cornell Medical College, New York, NY

2011-2013 Epidemiologist II

Paul Coverdell Acute Stroke Registry & Heart Disease and Stroke Prevention and

Control Program

Massachusetts Department of Public Health, Boston, MA

2010-2011 Epidemiologist I

Heart Disease and Stroke Prevention and Control Program Massachusetts Department of Public Health, Boston, MA

2008-2010 Senior Research Assistant

Einstein Center for Urban Health Policy & Research, Philadelphia, PA

2005-2007 Researcher I

Department of Physiology, Head Trauma and Neurology Lab Temple University School of Medicine, Philadelphia, PA

### **HONORS AND DISTINCTIONS**

2015-2016 Hearst Doctoral Fellowship in Aging and Public Health

Columbia University Mailman School of Public Health

### **CURRENT RESEARCH SUPPORT**

Enhanced spatial analysis assessing the association between PFAS-contaminated water and cancer

incidence.

Funder: CDC/RTI International Project Period: 7/1/2022-6/30/2025

Role: Co-I (PI: Jones)

Early detection and treatment of emerging cognitive-linguistic impairment in minority cognitive aging

and primary progressive aphasia

Funder: NIH/NIDCD (2R01DC013063-10)

Project Period: 02/2024-01/2029

Role: Co-I (PI: Reilly)

### PEER-REVIEWED JOURNAL ARTICLES

\*student co-author

- 1. Feiler, MO<sup>+</sup>, **Kulick ER**<sup>+</sup>, Sinclair K\*, Habel SM\*, Spiegel N\*, Castello OG. *Toxic Metals and Pediatric Immune Dysfunction: A Scoping Review*. STOTEN. *In revisions* <sup>+</sup>Authors contributed equally to this work.
- 2. \*Kociolek AJ, **Kulick ER**, Kaufman JD, Gu Y, Elkind MSV, Manly JJ, Mayeux R. *Ambient air pollution exposures and functional decline in a sample of non-demented community-dwelling elders in Northern Manhattan*. AJE. *In revisions*.
- 3. \*Nori-Sarma A, Eliot MA, Whitsel EA, Sauquib N, Bhatti P, Mu L, Kaufman JD, Sears CG, Wellenius GA, Kulick ER. Impact of Long-Term Exposure to Ambient Particulate Matter and Nitrogen Dioxide on Chronic

- Obstructive Pulmonary Disease: Results from the Women's Health Initiative Cohort. Environmental Research: Health. *In revisions.*
- 4. Ibeh C. **Kulick ER,** Bello N, Boehme AK, Miller EC. *Incident Stroke in Individuals with Peripartum Cardiomyopathy*. American Heart Journal. *In review*.
- 5. Hirsch JA, Besser LM, Jimenez MP, Dickinson ST, Cornelius TM, Francisco S, Abdel Magid HS, Albrecht S, Allen NB, Balte P, Barber S, Bateman L, Block J, Brown SC, Buhr R, Chambers EC, Chang A, Daviglus M, Diez Roux, AV, Elkind MSV, Gallo LC, Gordon-Larsen P, Guiterrez J, Isasi CR, James P, Judd S, Kaufman JD, Kershaw, K, Kucharska-Newton A, Kulick ER, Lovasi G, Mauger D, McClure L, Melly S, Merkin S, Michael YL, Oates G, Palta P, Phillips B, Reese J, Regan E, Reimer C, Rodriguez DA, Rundek T, Shembri M, Schneiderman N, Sims M, Wilson C, Zhang Y, Oelsner E. Spatial and Neighborhood Data in the Collaborative Cohort of Cohorts for COVID-19 Research (C4R). Health and Place. In review.
- 6. Zhou H\*, **Kulick ER.** Social Support and Depression among Stroke Patients: A Topical Review. IJERPH. 20 (2023,) 7157
- 7. \*Kalia V, **Kulick ER**, Vardarajan B, Gu Y, Manly JJ, Elkind MSV, Kaufman JD, Jones DP, Baccarelli A, Mayeux A, Kioumourtzoglou MA, Miller GW. *Linking air pollution exposure to blood-based metabolic features in community-based aging cohort.* Journal of Alzheimer's Disease. *96(2023)1025-1040*
- 8. Shen J, Heller Murray E, **Kulick ER**. The effect of breathy vocal quality on speech intelligibility and listening effort in background noise. Trends in Hearing. 2023;27. doi:10.1177/23312165231206925
- 9. Gurel K, Khasiyev F, Spagnolo A, Liu M, **Kulick ER**, Boehme AK, Rundek T, Sacco R, Elkind SV, Bos D, Gutierrez J. Role of Intracranial artery calcification (ICAC) stroke subtype and risk of vascular events. J Stroke Cerebrovasc Dis. 2023 May 13; 32(8) DOI: 10.1016/j.jstrokecerebrovasdis.2023.107185
- 10. Adkins-Jackson PB, George KM, Besser LM, Hyun J, Lamar M, Hill-Jarret TG, Bubu PM, Flatt JD, Heyn PC, Cicero EC, Krall AZ, Zanwar PP, Peterson R, Kim B, Turner RW, Viswanathan J, Kulick ER, Zuelsdorff M, Stites SD, Renteria MA, Tsoy E, Seblova D, Ng TKS, Manly JJ, Babulal G. The structural and social determinants of Alzheimer's disease related dementias. Alzheimer's and Dementia. 2023 April 19; 1-15. DOI: 10.1002/alz.13027
- 11. **Kulick ER**, Eliot MN, Szpiro A, Coull BA, Tinker L, Eaton CB, Whitsel E, Stewart JD, Kaufman JD, Wellenius GA. *Long-Term Exposure to Ambient Particulate Matter and Incident Stroke in the Women's Health Initiative*. Environmental Research. *2023 May 1;224:115519*. https://doi.org/10.1016/j.envres.2023.115519
- 12. **Kulick ER**, Sack C, Kaufman JD. *Ambient Air Pollution and Stroke An Updated Review*. Stroke. *Invited Manuscript.*2023:54 (1).
- 13. Shen J, Fitzgerald L, **Kulick ER**. Interactions between acoustic challenges and processing depth in speech perception as measured by task-evoked pupil response. Frontiers in Psychology.2022: 13:959638.
- 14. Vollmer BL, Soloway J, Chen X, Chang B, Williams O, **Kulick ER**, Elkind MSV, Boehme AK. *Individual and joint effects of influenza-like illness and influenza vaccinations on stroke in the young: A case-control study.* Stroke. 2022: 53(8)
  - Published with Editorial: Individual and Joint Effects of Influenza-Like Illness and Vaccinations on Stroke in the Young: A Case-Control Study: Can You Catch a Stroke? Larry B. Goldstein. Stroke. 2022: 53(8)
- 15. \*Hunter MD, **Kulick ER**, Miller EC, Willey JZ, Boehme AK, Branas CC, Elkind MS *Rural-Urban differences in Diagnosed Cervical Artery Dissection in New York State*. Cerebrovascular Disease. 2022.

- 16. **Kulick ER,** Canning M, Alvord T, Elkind MSV, Chang BP, Boehme AK. *Risk of Stroke and Myocardial Infarction after Influenza-like Illness*. BMC Public Health. *2021*; *21*(864).
- 17. \*Nori-Sarma A, Thimmulappa R, Venkataraman GV, Warren JL, Berman JD, Whittaker SD, **Kulick ER**, Wellenius GA, Rao MV, Bell ML. *NO*<sub>2</sub> exposure and Lung Function Decline in Adults in Mysore, India. Environmental Research Communications. 2021: 3:055001
- 18. Weinberger KR, **Kulick ER,** Boehme AK, Dominici F, Wellenius GA. Association Between Hurricane Sandy and Emergency Department Visits in New York City by Age and Cause. AJE. 2021 Oct; 190(10):2138-2147.
- 19. \*Vollmer B, Chen X, **Kulick ER**, Elkind MSE, Boehme AK. *Differences in healthcare visit frequency and type one year prior to stroke among young versus middle-aged adults.* BMC Health Serv Res. 2021 Jan 22;21(1):84.
- 20. \*Hunter MD, Moon YP, **Kulick ER**, Boehme AK, Elkind MSV. *Influenza-like Illness is Associated with Increased Short-Term Risk of Cervical Artery Dissection*. Journal of Stroke and Cerebrovascular Disease.2021; 30(2)
- 21. Pohl D, Seblova D, Avila JF, Dorsman KA, Casey J, **Kulick ER**, Mayeux R, Manly JJ. *Relationship of Residential Segregation and Memory across Race-Ethnicity and Measure of Segregation.* International Journal of Environmental Research and Public Health. 2021;18 (11233)
- 22. **Kulick ER**, Canning M\*, Parikh NS, Elkind MSV, Boehme AK. *The Seasonality of influenza and acute cardiovascular disease are related regardless of vaccine effectiveness*. JAHA.2020;9
  - Published with Press Release: (https://www.doctorslounge.com/index.php/news/hd/98633)
- 23. Levine DA, Gross AL, Briceno EM, Tilton N, Kabeto MU, Hingtgen SM, Giordani BJ, Sussman JB, Hayward RA, Burke JF, Eklind MSV, Manly JJ, Moran AE, **Kulick ER**, Gottesman RF, Walker KA, Yano Y, Gaskin DJ, Sidney S, Yaffe K, Sacco RL, Wright CB, Roger VL, Allen NB, Galecki AT. *Blood Pressure over the Life Course and Later-life Cognition in Blacks and Whites (BP-COG): A Pooled Cohort Analysis of ARIC, CARDIA, CHS, FOS, and NOMAS.* JAMA Neurology. *Published Online April 13, 2020*
- 24. **Kulick ER**, Wellenius GA, Boehme AB, Joyce NR, Schupf N, Kaufman JD, Sacco RL, Mayeux R, Manly JJ, Elkind MS. *Long-term exposure to Ambient Air Pollution and Trajectories of Cognitive Decline in Northern Manhattan*. Neurology.2020; 94(17).

Published with Editorial: Are we ready to call exposure to air pollution a risk factor for dementia? Jennifer Weuve. Neurology. 2020. 94(17).

### Published with Press Release:

https://journals.lww.com/neurotodayonline/Fulltext/2020/05210/Air\_Pollution\_May\_Be\_Linked\_to\_Cognitive\_Decline.16.aspx

- 25. **Kulick ER**, Boehme AB, Wellenius GA, Schupf N, Elkind MS, Manly JJ. *Long-term Exposure to Ambient Air Pollution, APOE-ε4 status, and Cognitive Decline in a Cohort of Older Adults in Northern Manhattan.* Environment International. 2020; 136 (105440).
- 26. Suglia SF, **Kulick ER**, Brown J. *Childhood Adversities and Prior Involvement with Child Protective Services*. Injury Epidemiology. 2019; 6(48)
- 27. Kummer BR, Lerario MP. Hunter MD, Wu X, Efraim E, Omran SS, Diaz I, Sacchetti D, Lekic T, **Kulick ER**, Pishanidar S, Mir S, Zhang Y, Asaeda G, Bosker J, Navi BB, Marshall R, Fink ME. *Geographic Analysis of*

- Mobile Stroke Unit Treatment in a Dense Urban Area: the New York City METRONOME Registry. J Am Heart Assoc. 2019; 8(e013529).
- 28. \*Khaksari BJ, **Kulick ER**, Elkind MSV, Boehme AK. Weekend effect on 30-day readmissions among stroke survivors: an analysis of the National Readmission Database. Cerebrovascular Diseases. 2019; 9(2).
- 29. Boehme AK, **Kulick ER**, Canning M, Alvord T, Khaksari B, Omran S, Willey J, Elkind MSV. *Infections increase the risk of 30-day readmissions among stroke survivors: An analysis of the National Readmission Database*. Stroke. 2018; 49(12)
- 30. Willey JZ, Moon YP, Dhamoon MS, **Kulick ER**, Bagci A, Alpern N, Cheung YK, Wright CB, Sacco RL, Elkind MSV. *Regional subclinical cerebrovascular disease is associated with balance in an elderly multi-ethnic population*. Neuroepidemiology. 2018; (51):57-63
- 31. Miller EC, Gallo M, **Kulick ER**, Friedman A, Elkind MSV, Boehme AK. *Infections increase risk of stroke during delivery admissions*. Stroke. 2018 April 49(4).
- 32. Boehme AK, Luna J, **Kulick ER**, Kamel H, Elkind MSV. *Influenza-like Illness as a trigger for Ischemic Stroke*. Annals of Clinical and Translational Neurology. 2018; 5(4): 456-463
- 33. **Kulick ER**, Wellenius GA, Boehme AK, Sacco RL, Elkind MS. *Residential proximity to major roadways and risk of incident ischemic stroke in the Northern Manhattan Study*. Stroke. 2018 April 49 (4).
- 34. Baker DR, **Kulick ER**, Boehme AK, Noble JM. *Effects of the New York State Concussion Management and Awareness Act (Lystedt Law) on Concussion-Related Healthcare Utilization among Adolescents, 2005-2015*. American Journal of Sports Medicine. 2018 Feb 46 (2); 396-401
- 35. Gutierrez J, **Kulick ER**, Moon YP, Dong C, Cheung K, Bagci A, , Stern Y, Alperin N, Rundek T, Sacco RL, Wright CB, Elkind MSV. *Brain arterial diameters and cognitive performance: the Northern Manhattan Study.* J International Neurological Society. Epub 2017 Nov 23
- 36. Willey JZ, Moon YP, **Kulick ER**, Cheung YK, Wright CB, Sacco RL, Elkind MS. *Physical inactivity and slow gait speed in an elderly multi-ethnic cohort study: the Northern Manhattan Study (NOMAS).*Neuroepidemiology. 2017 Aug 49 (1-2); 24-30
- 37. **Kulick ER**, Wellenius GA, Kauffman JD, DeRosa JT, Kinney P, Cheung K, Wright CB, Sacco RL, Elkind MSV. *Long-term exposure to ambient air pollution and subclinical cerebrovascular disease in the Northern Manhattan Study*. Stroke. 2017 July 48 (7); 1966-1968
- 38. Cheung YK, Moon YP, **Kulick ER**, Sacco RL, Elkind MSV, Willey JZ. *Leisure-Time Physical Activity and Cardiovascular Mortality in the Elderly Population in Northern Manhattan: A Prospective Cohort Study*, Journal of General Internal Medicine. 2017 Feb 32 (2); 168-174
- 39. **Kulick ER**, Moon YP, Cheung YK, Willey JZ, Sacco RL, Elkind MSV. *Racial-Ethnic Disparities in the Association between Risk Factors and Diabetes: Northern Manhattan Study*. Preventive Medicine. 2016 Feb 4:83;31-6
- 40. Daudelin DH, **Kulick ER**, D'Amore K, Donovan JS, Barrientos MT, Foell K. *The Massachusetts Emergency Medical Service Stroke Quality Improvement Collaborative*. Preventing Chronic Disease 2013:10:130126

### Manuscripts in Final Stages of Preparation:

1. **Kulick ER**, Wellenius GA, Kaufman JD, Mayeux R, Manly JJ. *Long-term exposure to ambient air pollution and incident dementia in older urban adults.* 

- 2. **Kulick ER**<sup>†</sup>, Feiler, MO<sup>†</sup>, McClamrock J\*, Smithers C\*, Boehme AK. *Predictors and Trends of New York State Pediatric Respiratory Disease.* <sup>‡</sup>Authors contributed equally to this work.
- 3. **Kulick ER**, Eliot MN, Chen JC, Wellenius GA. *Long-term exposure to traffic related air pollution and small vessel ischemic disease: Women's Health Initiative Memory Study-MRI*. Environmental Research.
- 4. Vollmer B<sup>‡</sup>, **Kulick ER**<sup>‡</sup>, Battaglia N, Baccarelli A, Manly JJ, Kioumourtzoglou MA, Mayeux R, Elkind MSV, Boehme AK. *Exposure to Air Pollution, oxidative stress, and telomere length in older adults*. Ethnicity and Disease. <sup>‡</sup>Authors contributed equally to this work.
- 5. Sims K, Kim B, Babulal G, Besser L, **Kulick ER**, Okoye S, Seblova N, Orenales-Van Horne Y, Szanton S, Adkins-Jackson PB. *Structural-related neighborhood and built environmental racism on dementia, cognitive function, and related outcomes*. JAMA Neurology
- 6. Jones RM, Kulick ER, Snead R, Wheeler DC, Taylor Wilson R, Lilys, TP. *Enhanced spatial analysis assessing the association between PFAS-contaminated water and cancer incidence: Rationale, Study Design, and Methods.* AJE.

### **BOOKS AND MONOGRAPHS**

- 1. Phipps, EJ, Stites S, & Kulick ER (2010). *Greater Philadelphia Jewish Population Study:2009.* Philadelphia, PA. Jewish Federation of Greater Philadelphia
- 2. Stites, SD, **Kulick**, **ER**, Madison, N, & Phipps, EJ (2009). Assessing Need, Service Availability, and Support for Aging in Place: Using GIS to map population characteristics of seniors and their communities in Philadelphia and neighboring counties. Harrisburg, PA

### **CONFERENCE ABSTRACTS**

- 1. **Kulick ER**, Feiler MO, McClamrock J. Predictors of Pediatric Respiratory Disease in New York State. Society for Epidemiologic Research. 2024
- 2. Sinclair K\*, Habel S\*, Spiegel N\*, Castello O, **Kulick ER**, Feiler MO. *Toxic Metals and Pediatric Immune Dysfunction: A Scoping Review.* Society for Pediatric and Perinatal Epidemiology 2023
- 3. Kalia V\*, **Kulick ER**, Vardarajan B, Elkind MSV, Jones DP, Mayeux R, Kioumourtzoglou MA, Miller GW. Long-term exposure to PM<sub>2.5</sub> and plasma metabolomics in an ethnically diverse aging population. New York City Exposome Symposium 2022
- 4. Parson C, Seblova D, Casey JA, **Kulick ER**, Brickman A, Dorsman KA, Mayeux R, Manly JJ. *Neighborhood Variability in Cognitive Function*. International Neuropsychological Society, 2022
- 5. Dorsman KA, Seblova D, Pohl DJ, **Kulick ER**, Casey JA, Mayeux R, Manly JJ. *Ethnic Enclaves, Nativity, and their Relationship to Cognitive Ability in Hispanic/Latinx WHICAP Participants.* International Neuropsychological Society, 2022
- 6. **Kulick ER**, Wellenius GA, Kaufman JD, Mayeux R, Manly JJ. *Long-term exposure to ambient air pollution and incident dementia among older adults in Northern Manhattan*. International Society of Environmental Epidemiology, 2021

- 7. Kociolek A\*, **Kulick ER**, Kaufman JD, Gu Y, Elkind MS, Manly JJ, Mayeux R. *Ambient air pollution exposures and functional decline in a sample of non-demented community -dwelling older adults in Northern Manhattan*. International Society of Environmental Epidemiology, 2021
- 8. Kalia V\*, **Kulick ER**, Vardarajan B, Elkind MSV, Jones DP, Mayeux R, Kioumourtzoglou MA, Miller GW. Long-term exposure to PM<sub>2.5</sub> and plasma metabolomics in an ethnically diverse aging population. International Society of Environmental Epidemiology, 2021
- 9. Pohl D, Seblova D, Casey J, **Kulick ER**, Avila-Rieger J, Mayeux RP, Manly JJ. *The Relationship of Residential Segregation and Memory across Race-Ethnicity*. International Neuropsychological Society, 2021
- 10. Ibeh, C. **Kulick ER**, Bello N, Boehme AK, Miller EC. *Peripartum Cardiomyopathy Associated Stroke: Incidence, Characteristics, and Outcomes.* American College of Cardiology, 2021
- 11. Nori-Sarma A, Thimmulappa R, Venkataraman GV, Warren JL, Berman JD, Whittaker SD, **Kulick ER**, Wellenius GA, Mahesh PA, Bell ML. "NO<sub>2</sub> Exposure and Lung Function Decline in a Cohort of Adults in Mysore, India" International Society of Environmental Epidemiology, 2020
- 12. **Kulick ER**, Boehme AK, Joyce NR, Schupf N, Kaufman JD ,Sacco RL, Mayeux R, Manly JJ, Elkind MS, Wellenius GA. "Long-term Exposure to Ambient Air Pollution, APOE-ε4, and Trajectories of Cognitive Decline in an Urban Cohort of Older Adults" International Society of Environmental Epidemiology, 2019.
- 13. Weinberger KR, **Kulick ER**, Boehme AK, Dominici F, Wellenius GA. "Cause-specific emergency hospitalizations in New York City following Hurricaine Sandy." International Society of Environmental Epidemiology, 2019.
- 14. Levine DA, Gross AL, Briceño EM, Tilton N, Kabeto MU, Okullo D, Hingtgen SM, Giordani, BJ, Sussman JB, Hayward RA, Burke JF, Manly JJ, Elkind MSV, **Kulick ER**, Gottesman RF, Yano Y, Gaskin DJ, Sidney S, Yaffe K, Galecki AT. "Blood Pressure over the Life-Course and Later-Life Cognition in Blacks, Hispanics, and Whites (BP-COG): Pooled cohort Analysis of ARIC, CARDIA, CHS, FOS, and NOMAS. European Stroke Organisation Conference, 2019
- 15. **Kulick ER**, Wellenius GA, Boehme AK, Schupf N, Sacco RL, Mayeux R, Manly JJ, Elkind MS. "Long-term Exposure to Ambient Air Pollution and Trajectories of Cognitive Decline among Older Adults in Northern Manhattan" American Academy of Neurology, 2019.
- 16. Rastogi S, Canning M, **Kulick ER**, Omran S, Willey J, Elkind MS, Boehme AK. "*Infections Present on Admission, Hospital Acquired Infections and Short Term Outcomes in Ischemic Stroke Patients*" International Stroke Conference 2018
- 17. Alvord R, **Kulick ER**, Canning M, Elkind MS, Boehme, AK. "Influenza-like Illness on Stroke Risk and at Risk Populations" International Stroke Conference 2019
- 18. Hunter M\*, Moon YP, **Kulick ER**, Boehme AK, Elkind MS. "Influenza-like Illness May Trigger Cervical Artery Dissection" International Stroke Conference 2019
- 19. Levine DA, Gross AL, Briceño EM, Okullo D, Hingtgen S, Galecki AT, Giordani BJ, Sussman JB, Hayward RA, Burke JF, Kabeto MU, Manly MM, Elkind MSV, **Kulick ER**, Gottesman RF, Yano Y, Gaskin DJ, Sidney S, Yaffe K, Roger VL, Allen NB, Rogers MAM "Design of the BP-COG Study of Blood Pressure Over the Life Course and Later-Life Cognition in Blacks, Hispanics, and Whites: A Pooled Cohort Analysis of ARIC, CARDIA, CHS, FOS, MESA, and NOMAS" International Stroke Conference 2019
- 20. Kummer B, Lerario MP, Hunter MD, Efraim ES, Wu X, Omran SS, Diaz I, Lekic T, Sacchetti D, **Kulick ER**, Pishandiar S, Mir SA, Zhang Y, Asaeda G, Navi BB, Marshall R, Fink M. *Geographic Analysis of Mobile*

- Stroke Unit Treatment in a Densely Populated Urban Area: The New York City METRONOME Registry" International Stroke Conference 2019
- 21. Canning M\*, **Kulick ER**, Parikh N, Elkind MS, Boehme AK. "Seasonality of Influenza and Stroke Are the Seasonal Fluctuations Related? International Stroke Conference 2018
- 22. Khaksari B\*, **Kulick ER**, Omran S, Elkind MS, Boehme AK. "Infections increase the risk of 30-day readmissions among stroke survivors" International Stroke Conference 2018
- 23. Mamoon R, **Kulick ER**, Canning M, Elkind MS, Boehme AK. "Geographic Disparities and Thirty Day Readmissions after Stroke" New York City Epidemiology Forum 2018
- 24. Shao Y\*, **Kulick ER**, Kamel H, Elkind MS, Boehme AK. "Risk Factors and Composite Risk Score for Predicting Stroke after Sepsis" International Stroke Conference 2017
- 25. Gutierrez JC, **Kulick ER**, Santiago M, Rundek T, Sacco RL, Wright C, Elkind MS. "Differential Risk of Embolic Stroke among Stroke-Free Community Dwellers with Distinct Categories of Subcortical Infarct" International Stroke Conference 2017
- 26. Willey J, Moon M, DeRosa J, **Kulick ER**, Wright C, Sacco RL, Elkind MS. "Subclinical cerebrovascular disease is associated with worsening gait and balance in an elderly multi-ethnic population" AHA Epidemiology|Lifestyle Scientific Sessions 2017
- 27. **Kulick ER**, Boehme AK, Varela D, Sacco RL, Elkind MS. "Residential Proximity to High-Traffic Roadways and Incident Ischemic Stroke in Northern Manhattan." New York City Epidemiology Forum 2017
- 28. Baker D\*, **Kulick ER**, Boehme AK, Noble J. "Effects of the New York State Lystedt Law on Concussion-Related Emergency Healthcare Visits among Adolescents, 2005-2014" American Academy of Neurology 2017
- 29. Kulick ER, Boehme AK, Varela D, Sacco RL, Elkind MS. "Effect of residential proximity to high traffic roadways and modification by smoking on incident ischemic stroke in the Northern Manhattan Study" Society For Epidemiological Research 2017
- 30. **Kulick ER,** Pan R, Boehme AK. "Geographic Disparities in Risk of Acute Ischemic Stroke after Hospitalization for Influenza Like Illness" Society For Epidemiological Research 2017
- 31. Daudelin D, **Kulick ER** ,Donoval J, Barrientos M, D'Amore K, Ruthazer R, Foell K. "The Massachusetts Emergency Medical Service Stroke Quality Improvement Collaborative". National Association of EMS Physicians Scientific Assembly 2013
- 32. Barrientos M, **Kulick ER**. "Impact of Regional Emergency Medical Service Stroke Alert Policies on Inhospital Stroke Time Targets in Massachusetts". International Stroke Conference 2013
- 33. Rahman C, **Kulick ER**, D'Amore K, Schwamm LH. "Hospital Financial Health and Variation in Rates of IVtPA Adherence in Massachusetts". International Stroke Conference 2012
- 34. Svencer S., Kulick ER. "Evaluating Media Campaigns" CDC Soundbites Series Webinar, February 2012
- 35. **Kulick ER**, Land T, Schwamm LH "Use of Linked Datasets to Analyze Post-Stroke Outcomes in Massachusetts". Quality of Care and Outcomes Research (QCOR) 2012 Scientific Sessions.
- 36. **Kulick ER**, Barrientos M, LaBelle J. "Gaining Buy-in for Quality Improvement: A Data-Driven Approach" Massachusetts Association for Healthcare Quality 2012

- 37. **Kulick ER**, Land T, Schwamm LH. "Development of a Linked Dataset to Analyze Stroke Systems of Care in Massachusetts". NorthEast Cerebrovascular Consortium (NECC) Summit 2012
- 38. Barrientos M, **Kulick ER**, Daudelin D. "Improvements in Pre-Hospital Stroke Care: Results from the Massachusetts EMS Stroke Quality Improvement Collaborative" NorthEast Cerebrovascular Consortium (NECC) Summit 2012
- 39. Coe LJ, D'Amore K, Magdon-Ismail Z, **Kulick ER**, Schwamm LH. "Hospital Participation in a Voluntary Stroke Quality Improvement Collaborative in Massachusetts" NorthEast Cerebrovascular Consortium (NECC) Summit 2011
- 40. Kulick ER, D'Amore K, Barrientos M, Coe LJ. "Assessing the Impact of Prehospital Care on Hospital Acute Stroke Care using Linked Clinical Datasets" NorthEast Cerebrovascular Consortium (NECC) Summit 2011
- 41. Barrientos M, Coe LJ, **Kulick ER**, LaBelle J. "Description of Case Identification Methods and Abstraction Processes used by Hospitals Participating in the Massachusetts Paul Coverdell National Acute Stroke Registry". NorthEast Cerebrovascular Consortium (NECC) Summit 2011
- 42. **Kulick ER**, D'Amore K, "Hotspot Analysis of Chronic Disease Burden for Statewide Program Planning" ESRI International User Conference 2011
- 43. D'Amore K, **Kulick ER**. "Innovative and Enhanced Chronic Disease Surveillance and Program Planning Using GIS". Council of State and Territorial Epidemiologists (CSTE) Conference 2011
- 44. **Kulick ER**, D'Amore K, "Burden of Chronic Disease Hospitalizations and Division of Prevention and Wellness Programs across Massachusetts". ESRI Health GIS Conference 2010.

# **PROFESSIONAL AFFILIATIONS**

American Academy of Neurology International Society for Environmental Epidemiology Society for Epidemiologic Research Alzheimer's Association (ISTAART)

# **JOURNAL REVIEW (ad hoc)**

Alzheimer's and Dementia
American Journal of Epidemiology
Environmental Health Perspectives
Environment International
Environmental Research
European Journal of Stroke
Journal of Alzheimer's Disease
Journal of the American Heart Association
Journal of Exposure Science and Environmental Epidemiology
Lancet Planetary Health
Neurology
Nature Communications
PLoS One
Preventative Medicine
Stroke

### **CONFERENCE REVIEWING AND PROGRAM COMMITTEES**

2018-2019	Education Chair, Society for Epidemiologic Research, Student-Post Doctoral Committee
2021-2022	Abstract Reviewer, Society for Epidemiologic Research Annual Conference
2021-2023	Abstract Reviewer, International Society for Environmental Epidemiology Annual Conference
2023	Alzheimer's Association PIA Publication of the year award Committee
2023-Present	Co-Chair Alzheimer's Association, ISTAART, Diversity and Disparities PIA, S/SDOH Workgroup

### **GRANT REVIEW PANELS**

October 2022 NIH: Social Sciences and Population Studies (B) Study Section

October 2023 NIH: Neurotoxicology and Alcohol Study Section February 2024 NIH: NIA U01 Review: 2024/05 ZAG1 ZIJ-P (M2)

### **TEACHING EXPERIENCE**

Ir	nstri	ictor	Ωf	Record
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Fall 2021-2023 Concepts and Methods in Health Research (EPBI 8401)

Temple University, Department of Epidemiology and Biostatistics

Spring 2022-2023,

Summer II 2003 Environmental Health (ENVH 5004)

Temple University, College of Public Health

Fall 2022 Epidemiologic Research Methods I (EPBI 5201)

Temple University, Department of Epidemiology and Biostatistics

Spring 2023 Application of Research Methods (EPBI 8403) – Group Taught

Temple University, Department of Epidemiology and Biostatistics

Spring 2024 Spatial Analysis in Public Health (EPBI 5003)

Temple University, Department of Epidemiology and Biostatistics

Spring 2024 Fieldwork I (EPBI 9289)

Temple University, Department of Epidemiology and Biostatistics

Summer 2024 Fieldwork II (EPBI 9389)

Temple University, Department of Epidemiology and Biostatistics

**Teaching Assistant** 

2014-2018 Application of Epidemiology Research Methods

3 semesters as lead TA, Guest Lecturer

Columbia University Mailman School of Public Health

2014-2017 Applied Epidemiologic Analysis \*

Columbia University Mailman School of Public Health

2014 Design and Conduct of Observational Epidemiology

Columbia University Mailman School of Public Health

2015 **Public Health Surveillance** 

Columbia University Mailman School of Public Health

2016 Cardiovascular Epidemiology

Columbia University Mailman School of Public Health

2017-2018 **Neurological Epidemiology** 

Columbia University Mailman School of Public Health

### STUDENT MENTORSHIP AND OUTPUTS

2020-2021	<b>Artin Prel</b> – High school student with the Ardsley Science Research Program. Assisted with project to study early identification of cognitive decline in primary care settings.
2020-2023	Alaska Fairbanks - High school student at Byram Hills High School. Primary external mentor on research project studying Air Pollution and Stroke Risk in Young Populations and subsequent submission to the Regeneron Science Competition. She also submitted this research at the NYS Upstate Junior Science and Humanities Science Competition. We are currently working on a paper stemming from this work. Alaska is graduating this year and has been accepted to Duke University to study Environmental Studies
2020 - 2023	<b>Haoyu Zhou</b> , Epidemiology PhD Student. Manuscript stemming from final project of EPBI 8401. Submitted August 2023
2021- current	Scoping review with three Epidemiology MPH students ( <b>Nitzana Spiegel, Sonia Habel, Krystin Sinclair</b> ), plans to submit paper in August 2023
2023- current	Preparing manuscript with Epidemiology MPH student ( <b>Cam Smithers</b> ) and TUMC Medical student ( <b>Jack McClamrock</b> ), plans to submit August 2023
2023- current	Faculty advisor for Krystin Sinclair, Jill Brandis Memorial Award Project
Fall 2023- current	Zeinah Al-Darsari, Epidemiology PhD Student, Primary Mentor

# **INVITED SPEAKER AND GUEST LECTURES**

# **Environmental Impacts of Dementia**

Philadelphia VA – University of Pennsylvania Dementia Systems of Care Group – October 2023

### **Bias in Epidemiological Studies**

TUMC Department of Thoracic Medicine and Surgery - January 2022, March 2023, April 2024

# **Basics of Epidemiology**

TUMC Department of Thoracic Medicine and Surgery – January 2023

# **Epidemiological Study Design**

TUMC Department of Thoracic Medicine and Surgery - November 2022, 2021, January 2024

# The Environment and our Brains

Temple University Association of Interdisciplinary Sciences – October 2022

### **Air Pollution and Environmental Toxins**

Epi 360 – October 2022

### Air Pollution and Alzheimer's Disease

Alzheimer Association ISTART Diversity and Disparities PIA - March 2022

### **SER-SPC Career Panel**

SER Annual Conference – June 2021

### **ADMINISTRATIVE SERVICE**

2020 -	Epidemiology PhD Admissions Committee (2020-2021 Member; 2021- present, Chair)
2020 -	PhD Preliminary Exam Committee (Member)
2020-2022	National Public Health Week Committee (Member)
2020-2022	Faculty Abstract Reviewer, NPHW Research and Evidence Based Practice Day
2021	Faculty Judge, NPHW Research and Evidence Based Practice Day
2021-2022	Curriculum Committee – Environmental Health MPH Workgroup (Member)
2022-2023	Department of Epidemiology and Biostatistics Seminar Planning Group
2022-	Alzheimer's Association Diversity and Disparities PIA: Social Determinants of Health Advisory
	Committee (Member and Co-Author)
2023-	CPH Aging Research Group (Co-Lead)
2023 -	Faculty Advisor, Epidemiology & Biostatistics Student Association (EBSA)

### RESEARCH SUPPORT COMPLETED

# **T-32 Training Grant**

Funder: National Heart, Lung, and Blood Institute (T32HL134625)

**Project Period**: 08/01/2018-7/31/2020

**Role**: Trainee (PIs: Harrington, Bennett, Levy, Rounds)

# Genetic Contribution to Brain Arterial Dilation and its Role in Cognition and Dementia

**Funder**: NIH/National Institutes of Aging (R01AG057709)

Project Period: 08/15/2018-04/30/2023

Role: Consultant (PI: Gutierrez)

### Racial Disparities, Influenza Like Illness and the Association between Short-term Exposure to Ambient

**Air Pollution and Cardiovascular Outcomes** 

Funder: NIH/National Institute on Minority Health and Health Disparities (R21MD012451)

Project Period: 09/24/2017-06/30/2020

Role: Consultant (PI: Boehme)

# Air Pollution, Oxidative Stress, and Cognitive Decline in a Multiethnic Cohort

Funder: Internal, Columbia University Project Period: 05/01/2018-04/30/2020

Role: Consultant (PI: Boehme)

# Health Disparities in Sepsis as a Risk Factor of Stroke

Funder: National Institute of Neurological Disorders and Stroke (R03 NS101417)

Project Period: 09/01/2017-08/31/2019

Role: Graduate Research Assistant (PI: Boehme)

# Air Pollution and Subclinical Cerebrovascular Disease in Northern Manhattan

Funder: Internal, NIEHS Center for Environmental Health in Northern Manhattan

Project Period: 2014-2016

Role: Graduate Research Assistant (PI: Elkind)

### **PRESS**

- 1. Interviewed author in "Online First: Why Living Near a Highway May Increase the Risk of Ischemic Stroke" by Lizette Borreli. Neurology Today. Posted April 17, 2018. https://journals.lww.com/neurotodayonline/blog/breakingnews/pages/post.aspx?PostID=721
- 2. Interviewed author in "Air Pollution May be Linked to Cognitive Decline in Older Adults" by Eve Bender. Neurology today. Posted May 21, 2020.
  <a href="https://journals.lww.com/neurotodayonline/Fulltext/2020/05210/Air\_Pollution\_May\_Be\_Linked\_to\_Cognitive\_Decline.16.aspx">https://journals.lww.com/neurotodayonline/Fulltext/2020/05210/Air\_Pollution\_May\_Be\_Linked\_to\_Cognitive\_Decline.16.aspx</a>
- Subject matter expert on "Air Pollution Could Increase Risk for Cognitive Decline, Study Suggests" by Susan Fitzgerald. Neurology Today. Posted April 1 2021. <a href="https://journals.lww.com/neurotodayonline/Fulltext/2021/04010/Air\_Pollution\_Could\_Increase\_Risk\_for\_Cognitive.4.aspx">https://journals.lww.com/neurotodayonline/Fulltext/2021/04010/Air\_Pollution\_Could\_Increase\_Risk\_for\_Cognitive.4.aspx</a>
- **4.** Interviewed author in "Patients Hospitalized for Influenza may have Increased Risk of Heart Attack and Stroke" by Don Steinberg. Posted July 1, 2021. <a href="https://cph.temple.edu/about/news-events/news/patients-hospitalized-influenza-may-have-increased-risk-heart-attack-and">https://cph.temple.edu/about/news-events/news/patients-hospitalized-influenza-may-have-increased-risk-heart-attack-and</a>
- 5. Subject matter expert on "Two New Studies Link Air Pollution, Particularly Fine Particulate Matter to Neurodegenerative Disease and Stroke" by Gina Shaw. Neurology Today.

  <a href="https://journals.lww.com/neurotodayonline/fulltext/2023/11160/new\_studies\_link\_air\_pollution,\_particularly\_fine.6.aspx">https://journals.lww.com/neurotodayonline/fulltext/2023/11160/new\_studies\_link\_air\_pollution,\_particularly\_fine.6.aspx</a>