

Kathryn (Katie) G. Burford, PhD

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Mailman School of Public Health
Columbia University Irving Medical Center
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CURRENT TITLE AND AFFILIATIONS

Post-Doctoral Research Fellow

Department of Environmental Health Sciences
Mailman School of Public Health
Columbia University Irving Medical Center, New York, NY
National Institute of Environmental Health Sciences T32 program for Advanced Training in Environmental Health and Data Science: Molecules to Populations
Grant number: 5T32ES007322-21. Factor-Litvak, Pam. (PI)

EDUCATION

- 2020-2023 **Ph.D., Epidemiology**
Minors: Biostatistics, Behavioral Science
The University of Texas Health Science Center at Houston (UTHealth)
School of Public Health, Austin, TX
- 2020 **M.S., Exercise Science**
The University of Texas at Austin, Austin, TX
- 2016 **B.S., Public Health**
The University of Texas at Austin, Austin, TX

PROFESSIONAL EXPERIENCE

- 2020-2023 **Graduate Research Assistant**
Michael & Susan Dell Center for Healthy Living
The University of Texas Health Science Center at Houston (UTHealth), Austin, TX
Project: *Evaluating the Effects of Municipal Funding of Safe Routes to School Infrastructure on Child Physical Activity: A Natural Experiment*
Grant number: NICHD R01HD097669. Hoelscher, Deanna M. (PI)
- 2022 **Research Scientist Intern**
Aptima, Inc.
Woburn, MA
- 2018-2020 **Graduate Research Assistant**
Exercise & Sports Psychology Lab
Department of Kinesiology and Health Education
The University of Texas at Austin, Austin, TX
- 2014-2016 **Undergraduate Research Assistant**
Exercise & Sports Psychology Lab
Department of Kinesiology and Health Education
The University of Texas, Austin, Texas

Project: *Building the Evidence Base for Physically Active Lessons in Elementary Schools*.

Grant number: NICHD R01HD070741. Bartholomew, John (PI).

RESEARCH SUPPORT

- 2024 National Institute of Alcohol Abuse and Alcoholism
Examining built environment factors to prevent alcohol-related bicyclist injuries
Grant number: 1K99AA032332-01. Burford, K. (PI). PENDING REVIEW
- 2023-2025 National Institute of Environmental Health Sciences
T32 program for Advanced Training in Environmental Health and Data Science:
Molecules to Populations
Grant number: 5T32ES007322-21. Factor-Litvak, Pam. (PI)

FELLOWSHIPS

- 2023- Fellow affiliate of the Columbia Population Research Center
- 2022 UTHealthLeads Fellowship
- 2021-2022 Fellow of the Equity and Resilience Workgroup for the Physical Activity Policy Research Network (PAPREN)

HONORS & AWARDS

- 2022 James A. Baker III Transformation and Hope Endowed Scholarship
- 2022 Ronald B. Harrist Scholarship in Public Health
- 2021 International Society of Physical Activity and Health Mini-Oral Presentation Trainee Award
- 2021 Aurelia Murphy Killian Endowment in Public Health
- 2020 Fall 2020 Outstanding New Student Scholarship Award, University of Texas Health Science Center (UTHealth)
- 2012-2016 Big 12 Commissioner's Honor Roll
- 2014-2016 The University of Texas Provost Award
- 2013-2016 Academic All-Big 12, First Team (Cross Country, Track and Field)
- 2015 USTFCCCA All-Academic Team

ADDITIONAL TRAINING

- 2022 Data Science Certificate. The University of Texas Health Science Center at Houston School of Public Health, Austin, Texas, 2022
- 2021 Introduction to GIS. Summer Statistics Institute. Department Of Statistics and Data Sciences. The University of Texas at Austin, Austin, Texas, May 24-27, 2021

PUBLICATIONS

Under Review, In Progress, Accepted

- 1) **Burford, K. G.**, Itzkowitz, N.G., Ortega A. G., Teitler J. O., Rundle, A. G. (2024). Identification of Helmet Status Among Patients with Micromobility Accidents Using

ChatGPT-4 to Analyze Unstructured Clinical Notes. *JAMA Network Open* (Accepted). DOI: 10.1001/jamanetworkopen.2024.25981.

- 2) **Burford KG**, Itzkowitz NG, Crowe RP, Wang HE, Lo AX, Rundle AG. Clinical Trauma Severity of Indoor and Outdoor Injurious Falls Requiring Emergency Medical Service Response. (2024). *Injury Epidemiology* (Accepted). DOI: 10.1186/s40621-024-00517-1.
- 3) Lo. A. X., **Burford, K.**, Crowe, R. P., Wang, H. E., Beard, J, Rundle, A. G. Volume of U.S. Pedestrians Injured from Falls Requiring Trauma Center Care Exceeds that of Pedestrians Injured by Motor Vehicles. (submitted, *Journal Transport & Health*).
- 4) Itzkowitz, N.G., **Burford, K.**, Crowe, R. P., Wang, H. E., Lo. A. X., Rundle, A. G. Volume of U.S. Pedestrians Injured from Falls Requiring Trauma Center Care Exceeds that of Pedestrians Injured by Motor Vehicles. (submitted, *Drug and Alcohol Dependence*).
- 5) Zhang, Y., **Burford, K.**, Perez, A., Lanza, K., Salvo, D., Baker, B.A., Hoelscher, D.M. Measuring weather in active living research: Agreement between objectively measured and teacher's perceived weather conditions from the National Safe Routes to School Tally. (in preparation).
- 6) Itzkowitz, N.G., **Burford, K.**, Crowe, R. P., Wang, H. E., Lo. A. X., Rundle, A. G. Prevalence of Indications of Alcohol and Drug Use Among Patients treated for Injurious Falls by Emergency Medical Services. (submitted, *Drug and Alcohol Dependence*).
- 7) **Burford, K. G.**, Itzkowitz, N.G., Rundle., A. G., DiMaggio C., Mooney., S.J. Burden of E-Bike, Powered Scooter, Hoverboard, and Bicycle Injuries in the US. (revisions, *American Journal of Public Health*).
- 8) **Burford, K.**, Salvo, D., Kohl, H.W. III, Bauer, C.X., Resendiz, E., Zhang, Y., Hoelscher, D.M. Assessing the relationship between objectively assessed macro- and micro-level neighborhood traffic safety features and active commuting to school in a US city. (in preparation, *Journal of Physical Activity & Health*).
- 9) **Burford, K.**, Salvo, D., Kohl, H.W. III, Bauer, C.X., Resendiz, E., Zhang, Y., Hoelscher, D.M. Examination of Traffic-Related Safety, Child, and Family Factors Associated with Active Commuting to School Among Children Residing in a Large Urban City. (under review, *Travel Behaviour and Society*).

Published

- 1) **Burford KG**, Rundle AG, Frangos S, Pfaff A, Wall S, Adeyemi O, DiMaggio C. Comparing alcohol involvement among injured pedalcycle and motorcycle riders across three national public-use datasets. (2024). *Traffic Inj Prev*. DOI: [10.1080/15389588.2024.2364358](https://doi.org/10.1080/15389588.2024.2364358)
- 2) Knell, G., **Burford, K.**, Calise, T., Dooley, E. E., Ferrerira Des Moraes, A.C., Ganzar, L.A., Han, H., Heredia, N., Jauregui, A., Johnson, A., Lanza, K., Nehme, E., Nicksic, H., Oluyomi, A., Porter, A., Varela., A. R., Robertson, M., Salvo, D., Walker, T., Zhang, Y. (2024). The Legacy of Dr. Harold W. (Bill) Kohl III From the Perspective of His Mentees. *Journal of Physical Activity and Public Health*. DOI: [10.1123/jpah.2024-0074](https://doi.org/10.1123/jpah.2024-0074)

- 3) Ganzar, L.A., **Burford, K.**, Salvo, D., Spoon, C., Sallis, J., Hoelscher, D.M. (2024). Development, Scoring, and Reliability for the Micro-scale Audit of Pedestrian Streetscapes for Safe Routes to School (MAPS-SRTS) Instrument. *BMC Public Health*. DOI: [10.1186/s12889-024-18202-9](https://doi.org/10.1186/s12889-024-18202-9)
- 4) Ganzar, L.A., **Burford, K.**, Zhang, Y., Gressett, A., Kohl, H.W., III, Hoelscher, D.M. (2023). Associations of Walking and Biking to School Policies and Student Active Commuting to School. *Journal of Physical Activity & Health*. DOI: [10.1123/jpah.2022-0376](https://doi.org/10.1123/jpah.2022-0376)
- 5) Ferrerira Des Moraes, A.C., **Burford, K.**, Medeiros-Oliveria, V.C., Schaan, B.D., Bloch, K., Baiocchi de Carvalho, K.M., Curea, F.V., Nascimento-Ferreira, M.V. (2023). Association between sleep time and pro- anti-inflammatory biomarkers is mediated by abdominal obesity among adolescents. *Journal of Physical Activity & Health*. DOI: [10.1123/jpah.2022-0468](https://doi.org/10.1123/jpah.2022-0468)
- 6) Bartholomew, J.B., Clutton, J., **Burford, K.**, Aadland, E., Resaland, G.K., Jowers., E., Errisuz., E. (2022). Individual- and Environmental- Level Predictors of Recess: Findings from the I-CAN! Study. *Translational Journal of the American College of Sports Medicine*. DOI: [10.1249/tjx.0000000000000212](https://doi.org/10.1249/tjx.0000000000000212)
- 7) Ganzar, L.A., Salvo, D., **Burford, K.**, Zhang, Y., Kohl, H.W., III, Hoelscher, D.M. (2022). Longitudinal Changes in Objectively-Measured Physical Activity and Sedentary Time Among School-Age Children in Central Texas, US During the COVID-19 Pandemic. *International Journal of Behavioral Nutrition and Physical Activity*. DOI: [10.1186/s12966-022-01299-9](https://doi.org/10.1186/s12966-022-01299-9)
- 8) Lanza, K., **Burford, K.**, Ganzar, LA. (2022). Who travels where: Behavior of pedestrians and micromobility users on transportation infrastructure. *Journal of Transport Geography*. DOI: [10.1016/j.jtrangeo.2021.103269](https://doi.org/10.1016/j.jtrangeo.2021.103269)
- 9) **Burford, K.**, Ganzar, L.A., Lanza, K., Kohl, H.W., III, Hoelscher, D.M. School-Level Economic Disparities in Police-Reported Crimes and Active Commuting to School. (2021). *Int. J. Environ. Res. Public Health*. DOI: [10.3390/ijerph182010885](https://doi.org/10.3390/ijerph182010885)
- 10) **Burford, K.**, Golaszweski, N, & Bartholomew, J.B. (2021). “I shy away from them because they are very identifiable”: A qualitative study exploring user and non-user’s perceptions of wearable activity trackers. *Digital Health*. DOI: [10.1177/20552076211054922](https://doi.org/10.1177/20552076211054922)
- 11) **Burford, K.**, Gillepsie, K., Bartholomew, J.B., Jowers, E. (2021). Children’s Enjoyment, Perceived Competency, and Physical Activity During High-Intensity Interval Training in Physical Education. *Research Quarterly for Exercise and Sport*. DOI: [10.1080/02701367.2021.1925207](https://doi.org/10.1080/02701367.2021.1925207)
- 12) Errisuriz, V.L., Dooley, E.E., **Burford, K.**, Johnson, A.M., Jowers E., & Bartholomew, J.B. (2021). Quality of Process Impacts Fourth Grade Students’ Participation in Physically Active Academic Lessons. *Prevention Science*. DOI: [10.1007/s11121-021-01233-8](https://doi.org/10.1007/s11121-021-01233-8)
- 13) **Burford, K.**, Dooley, E., Lanza, K., & Knell, G. (2020). Associations of Urbanicity and Sociodemographic Characteristics with Protective Health Behaviors and Reasons for Leaving the Home During COVID-19. *Health Psychology Bulletin*. DOI: [10.5334/hpb.24](https://doi.org/10.5334/hpb.24)
- 14) Knell, G., Robertson, M. C., Dooley, E. E., **Burford, K.**, & Mendez, K. S. (2020). Health Behavior Changes During COVID-19 Pandemic and Subsequent “Stay-at-Home” Orders.

International Journal of Environmental Research and Public Health.

DOI: [10.3390/ijerph17176268](https://doi.org/10.3390/ijerph17176268)

PROFESSIONAL PRESENTATIONS

Invited Talks

Burford, K. Examining the “Unit of Analysis” in Physical Activity and Injury Research.
Center for Transportation Research at the University of Texas at Austin. October 18, 2023.

Oral Presentations

Adeyemi, O., Wall, S., Frangos, S., Pfaff, A., **Burford, K.**, DiMaggio, C. Powered Scooter Injuries Among Older U.S. Adults: Results of TQIP Data Analyses. September 2024. *American Association for the Surgery of Trauma and Clinical Congress of Acute Care Surgery.* (submitted).

Zhang, Y., **Burford, K.**, Pérez, A., Lanza, K., Baker, B., Hoelscher, D. Measuring weather in active living research: Agreement between objective measure and teacher’s perceived weather conditions from the national Safe Routes to School tally. March 25-28, 2024. *Active Living Conference.* Chattanooga, TN, USA.

Burford, K., Salvo, D., Kohl, H.W. III, Bauer, C.X., Hoelscher, D.M. Moderating Effects of Sociodemographic Context on Objective and Perceived Traffic-Related Safety and Active Commuting to School. November 16, 2023. *American Public Health Association.* Atlanta, GA, USA. (could not present due to illness).

Burford, K., Zhang, Y., Weng., O., Ganzar, L.A., Hoelscher, D.M., Salvo, D. Inequities in active travel infrastructure coverage across school neighborhoods in Central Texas. March 2023. *Active Living Conference.* Bethesda, MD, USA.

Burford, K., Ganzar, L.A., Salvo, D., Zhang, Y., Kohl, H.W., III, Hoelscher, D.M. Longitudinal changes in objectively-measured physical activity and sedentary time among school-age children in Central Texas, US during the COVID-19 pandemic. September 2022. *The Digital Physical Activity and Diet (dPAD) Collaborative.* Houston, TX, USA.

Zhang, Y., **Burford, K.**, Weng., O., Ganzar, L.A., Hoelscher, D.M., Salvo, D. Longitudinal Availability & Distribution of Recreational Assets for Physical Activity across School Neighborhoods in Central Texas. September 2022. *The Digital Physical Activity and Diet (dPAD) Collaborative.* Houston, TX, USA.

Ganzar, L.A., Salvo, D., **Burford, K.**, Zhang, Y., Kohl, H.W., III, Hoelscher, D.M. Longitudinal changes in objectively-measured physical activity and sedentary time among school-age children in Central Texas, US during the COVID-19 pandemic. May 2022. *International Society of Behavioral Nutrition and Physical Activity.* Phoenix, AZ, USA.

Burford, K., Zhang, Y., Bartholomew, J.B. Gender differences in enjoyment for types of physical activity in children. *International Society for Physical Activity and Health (ISPAH) Congress.* Online. October 2021.

Burford, K., Ganzar, LA., Lanza, K. Associations of Reported Crime and Children's Active Commuting to School: The Safe TRavel Environments Evaluation in Texas Schools Study.

Active Living Conference. A Virtual Learning and Engagement Event, United States. Online. April 2021.

Golaszewski, N.M., **Burford, K.**, & Bartholomew, J.B. A Qualitative Study Exploring Perceptions Surrounding Devices in Wearable Users and Non-wearable Users. *Society of Behavioral Medicine*. April 2018. New Orleans, LA, USA.

Poster Presentations

Zhang, Y., **Burford, K.**, Weng, O., Ganzar, L.A., Hoelscher, D.M., Salvo, D. Longitudinal Availability & Distribution of Recreational Assets for Physical Activity across School Neighborhoods in Central Texas. March 2023. *Active Living Conference*. Bethesda, MD, USA.

Lanza, K., Allison, B., Chen, B., Hunt, E. T., **Burford, K.**, Zhang, Y., Ganzar, L. A., Wilson, P. S., & Keitt, T. H. Personal monitoring of ambient environmental exposures while cycling on a vegetated trail versus the road in an urban setting. *International Society of Exposure Science 2023 Annual Meeting*. Chicago, IL.

Weng, O., **Burford, K.**, Zhang, Y., Ganzar, L.A., Hoelscher, D.M., Salvo, D. Exploring food environment inequalities across public elementary school neighborhoods in Austin, Texas. *American Public Health Association*. November 2022. Boston, MA, USA.

Burford, K., Durand, C., Zhang, Y., Gabriel, K.P., Knell, G., Kohl, Kohl, H.W., III. Associations Between Psychosocial Factors and Transit-Use Status: The Houston Travel-Related Activities in Neighborhoods Study. *International Society of Behavioral Nutrition and Physical Activity*. May 2022. Phoenix, AZ, USA.

Burford, K., Dooley, E., Lanza, K., Knell, G. Associations of Urbanicity and Sociodemographic Characteristics with Protective Health Behaviors and Reasons for Leaving the Home during COVID-19. *St. David's CHPR 19th Annual Conference, Health Promotion in the COVID-19 Era*. February 2021. Austin, TX, USA.

Burford, K., Bartholomew, J.B., & Jowers, E. Autonomy Increases Children's Enjoyment of High-Intensity Interval Training During Physical Education. *American College of Sports Medicine*. May 2020. San Francisco, CA, USA. (Conference cancelled).

Burford, K., Bartholomew, J.B., & Golaszewski, N.M. A Qualitative Study Exploring Perceptions Surrounding Devices in Wearable Users and Non-wearable Users. *Society of Behavioral Medicine*. April 2018. New Orleans, LA, USA.

TEACHING EXPERIENCE

YEAR	COURSE NAME	ROLE	MODE	LEVEL	# of SECTIONS
<i>The University of Texas at Austin</i>					
2019-2020	Sports Psychology	TA	In-person	Undergraduate	1
2019	UGS: Physical Activity and Public Health	TA	In-person	Undergraduate	1

2019	Maymester: Sport, Society, and The International Olympic Movement. Lausanne, Switzerland	TA	In-person	Undergraduate	1
2018-2019	Physical Education	Instructor	In-person	Undergraduate	5
2018	Exercise Physiology	TA	In-person	Undergraduate	1
UTHealth School of Public Health					
2021	Physical Activity and Health: Epidemiology and Mechanisms	TA	In-person	Graduate	5
2023	Basic concepts of systematic review and meta-analysis for epidemiological studies	TA	In-person	Graduate	1

PROFESSIONAL SERVICE

External Service

Board Membership

2020-2022 Bike Austin Board Member, Austin, Texas

Ad-Hoc Peer Review

2023 Travel Behaviour and Society

2021 Translational Journal of Behavioral Medicine

Other service activities

2023- Member of Transportation Alternatives Manhattan, New York, New York

2023- Member of the Transportation Policy & Planning Work Group, Physical Activity Policy Research Network

2023- Member of the Built Environment and Health Research Group, Department of Epidemiology, Mailman School of Public Health, Columbia University

2022 Member of the Health Implications of Built & Social Environment Working Group, Center for Health and Environment, Education and Research, Dell Medical School

2021-2022 UTHealth Peer MentorSHIP: Students Helping to Inspire Progress program as a Peer Mentor for 2021 - 2022.

2021-2022 Social Chair for the Student Advisory Board, UTHealth School of Public Health in Austin

2020- Member of the Equity and Resilience Work Group, Physical Activity Policy Research Network

- 2020-2023 Member of the Physical Activity Workgroup, UTHealth School of Public Health in Austin
- 2012-2016 NCAA Division I Student-Athlete, University of Texas Women's Cross Country/Track and Field Teams

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- 2023 American Public Health Association (APHA)
- 2021 International Society for Physical Activity and Health (ISPAH)
- 2019 American College of Sports Medicine (ACSM)