# Erica Twardzik, PhD

Postdoctoral Scholar, Department of Epidemiology Johns Hopkins Bloomberg School of Public Health 2024 Monument Street, Suite 2-700, Baltimore, MD 21205

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#### **Research interests**

Health equity; kinesiology; social epidemiology; disability justice; aging; neighborhoods and health

#### **Education & Training**

2023	Postdoctoral Scholar, Johns Hopkins Bloomberg School of Public Health, Baltimore MD Department of Epidemiology Supervisor: Jennifer Schrack
2021	Ph.D., University of Michigan, Ann Arbor MI Major: Kinesiology and Epidemiology Dissertation title: Optimizing Post-Stroke Functioning: Using Mixed Methods to Understand the Role of Built and Social Environments for Physical Activity, Quality of Life, and Lived Experience Supervisors: Natalie Colabianchi and Philippa Clarke
2016	M.S., Oregon State University, Corvallis OR Major: Kinesiology, Adapted Physical Activity Thesis title: Transition from Part C to Part B services for children diagnosed with developmental delay in the state of Oregon: A secondary data analysis Supervisor: Megan MacDonald
2013	<b>B.S.</b> , University of Michigan, Ann Arbor MI <b>Major:</b> Movement Science

#### RESEARCH

#### **Academic Appointments**

2024 – pres. **Assistant Professor** 

School of Kinesiology MPACT Scholar

University of Michigan, Ann Arbor, MI, USA

ORCID: 0000-0002-3514-2610

- \*indicates authors contributed equally to the work
- 29. Assi, S., **Twardzik, E.**, Skow, L.F., Kucharska-Newton, A.M., Windham, B.G., Reed, N.S., Palta, P., & Martinez-Amezcua, P. (*In Press*). Hearing Loss, Hearing Aids, and Functional Status: The Atherosclerosis Risk in Communities Study. JAMA Otolaryngol.
- 28. Eisenberg, Y., Hofstra, A., & **Twardzik, E.** (2024). Quantifying active travel among people with disabilities in the US. Disabil Health J. 2024 Mar 16:101615. doi: 10.1016/j.dhjo.2024.101615. Epub ahead of print. PMID: 38565481.
- 27. Twardzik, E., Schrack, J.A., Pollack Porter, K.M., Coleman, T., Washington, K., & Swenor, B.K. (2024). TRansit ACessibility Tool (TRACT): Developing a novel scoring system for public transportation system accessibility. J Transp Health 34. https://doi.org/10.1016/j.jth.2023.101742
- 26. Assi, S., **Twardzik, E.,** Deal, J.A., Martin Ginis, K., Palta, P., Schrack, J.A., Reed, N.S., & Martinez-Amezcua, P. (2024). Hearing Loss and Physical Activity Among Older Adults in the United States. J Gerontol A Biol Sci Med Sci. 2024 Jan 1;79(1):glad186. doi: 10.1093/gerona/glad186. PMID: 37527509; PMCID: PMC10733191.
- 25. **Twardzik, E.**, Schrack, J.A., Freedman, V.A., Reed, N.S., Ehrlich, J.R., & Martinez-Amezcua, P. (2023). An Incomplete Model of Disability: Discrepancies Between Performance-Based and Self-Reported Measures of Functioning. J Gerontol A Biol Sci Med Sci.
- 24. **Twardzik, E.**, Guralnik, J.M., & Falvey, J.R. (2023). Community Mobility Among Older Adults Who Are Socioeconomically Disadvantaged: Addressing the "Poverty Penalty." Phys Ther.
- 23. **Twardzik, E.**, Falvey, J.R., Clarke, P.J., Freedman, V.A., & Schrack, J. (2023). Public Transit Stop Density is Associated with Walking for Exercise Among a National Sample of Older Adults. BMC Geriatrics 23, 596. https://doi.org/10.1186/s12877-023-04253-x.
- 22. Twardzik, E., Clarke, P.J., Lisabeth, L.D., Brown, S., Roth, D.L., Judd, S.E., & Colabianchi, N. (2022) Enhanced Street Crossing Features are Associated with Higher Post-Stroke Physical Quality of Life. Top Stroke Rehabil. 2022 Aug 4:1-11. doi: 10.1080/10749357.2022.2108970.

- 21. **Twardzik, E.**, Colabianchi, N., Duncan, L., Lisabeth, L.D., Brown, S., & Clarke, P.J. (2022). "Well in in this neighborhood I have walked, not at all": Stroke survivors lived experience in the outdoor environment. Social Science & Medicine, 305, 115107. doi: 10.1016/j.socscimed.2022.115107.
- 20. **Twardzik, E.,** Clarke, P.J., Lisabeth, L.D., Brown, S., Hooker, S.P., Judd, S.E., & Colabianchi, N. (2022). The Relationship Between Environmental Exposures and Post-Stroke Physical Activity. *American Journal of Preventive Medicine*, S0749-3797(22)00110-6. https://doi.org/10.1016/j.amepre.2022.01.026.
- Stulberg, E.\*, Twardzik, E.\*, Kim, S., Hsu, C., Xu, Y., Clarke, P.J., Morgenstern, L.B., & Lisabeth, L.D. (2021). Association of Neighborhood Socioeconomic Status With Outcomes in Patients Surviving Stroke. *Neurology*, 96(21), e2599–e2610. https://doi.org/10.1212/WNL.0000000000011988. \*co-first authors
- 18. Kim, Y.\*, **Twardzik**, **E.\***, Judd, S., & Colabianchi, N. (2021). Neighborhood socioeconomic status and stroke incidence: A systematic review. *Neurology*, 96(19), 897–907. https://doi.org/10.1212/WNL.000000000011892. \*co-first authors
- 17. **Twardzik, E.**, Williams, M., & Meshesha, H. (2021). Disability During a Pandemic: Student Reflections on Risk, Inequity, and Opportunity. *American Journal of Public Health*, 111(1), 85–87. https://doi.org/10.2105/AJPH.2020.306026
- 16. Beemer, L.R., **Twardzik, E.**, Colabianchi, N., & Hasson, R.E. (2020). Patterning of Physical Activity and Sedentary Behavior at and Away from School in Preadolescent Children. *American Journal of Health Education*, 1-8. https://doi.org/10.1080/19325037.2020.1853631
- 15. **Twardzik, E.**, Clarke, P.J., Judd, S., & Colabianchi, N. (2020). Neighborhood Participation Is Less Likely among Older Adults with Sidewalk Problems. *Journal of Aging and Health*, 898264320960966. Advance online publication. https://doi.org/10.1177/0898264320960966
- 14. Bromm, K. N., Lang, I.M., **Twardzik, E.**, Antonakos, C.L., Dubowitz, T., & Colabianchi, N. (2020). Virtual audits of the urban streetscape: comparing the inter-rater reliability of GigaPan® to Google Street View. *International Journal of Health Geographics*, 19(1), 1-15.
- 13. Clarke, P.J., **Twardzik, E.**, Meade, M.A., Peterson, M.D., & Tate, D. (2019). Social Participation Among Adults Aging With Long-Term Physical Disability: The Role of Socioenvironmental Factors. *Journal of aging and health*, *31*(10\_suppl), 145S-168S.
- 12. **Twardzik, E.**, Clarke, P.J., Elliott, M.R., Haley, W.E., Judd, S., & Colabianchi, N. (2019). Neighborhood Socioeconomic Status and Trajectories of Physical Health-Related Quality of Life Among Stroke Survivors. *Stroke*, *50*(11), 3191-3197.

- 11. **Twardzik E.**, Judd S., Bennett A., Hooker S., Howard V., Hutto B., Clarke P.J., & Colabianchi N. (2019). Walk Score and objectively measured physical activity within a national cohort. *J Epidemiol Community Health*, 73(6), 549-556.
- 10. **Twardzik E.,** Duchowny K., Gallagher N.A., Alexander N., Colabianchi N., & Clarke P. J. (2019). What features of the built environment matter most for mobility? Using wearable sensors to capture real-time outdoor environment demand on gait performance. *Gait & posture*, 68, 437-442.
- 9. Ross. S. M., Smit, E., **Twardzik, E.**, Logan, S., & McManus, B.M. (2018). Patient-centered medical home and receipt of part c early intervention among young CSHCN and developmental disabilities versus delays: NS-CSHCN 2009–2010. *Maternal and Child Health Journal*, 22(10), 1451-1461.
- 8. **Twardzik, E.**, Antonakos, C., Baiers, R., Dubowitz, T., Clarke, P.J., Colabianchi, N. (2018). Validity of environmental audits using GigaPan® and Google Earth Technology. *International journal of health geographics*, *17*(1), 26.
- 7. **Twardzik, E.,** Smit, E., Hatfield, B., Odden, M.C., Dixon-Ibarra, A., MacDonald, M. (2018). Limited access to special education services for school-aged children with developmental delay. *Research in Developmental Disabilities*, 72, 257-264.
- 6. Ross, S.M., Catena, M., **Twardzik, E.**, Hospodar, C., Cook, E., Ayyagari, A., Inskeep, K., Sloane, B., MacDonald, M., Logan, S.W. (2018). Feasibility of a modified ride-on car intervention on play behaviors during an inclusive playgroup. *Physical & occupational therapy in pediatrics*, *38*(5), 493-509.
- 5. Son, K., **Twardzik, E.**, Nabozny, M.L., Strasburg, D., Alexander, N. (2017) Contribution of obesity and performance factors to 6 minute walk test in older adults with diabetes. *Innovation in Aging. Innovation in Aging*, *I*(Suppl 1), 1234.
- 4. Welch, W.A., Alexander, N., Swartz, A.M., Miller, N.E., **Twardzik, E.**, Strath, S.J. (2017) Individualized estimation of physical activity in older adults with type 2 diabetes. *Medicine and science in sports and exercise*, 49(11), 2185.
- 3. **Twardzik, E.**, MacDonald, M., & Dixon-Ibarra, A. (2017). The relationship between state lead agency and enrollment into early intervention services. *Journal of Early Intervention*, 39(3), 253-263.
- 2. **Twardzik, E.**, Cotto-Negron, C., & MacDonald M. (2017). Factors related to early intervention Part C enrollment: A systematic review. *Disability and Health Journal*, 10(4), 467-474.

1. MacDonald, M., Hatfield, B. & **Twardzik, E.** (2017). Child behaviors of young children with autism spectrum disorder across play settings. *Adapted Physical Activity Quarterly*, *34*(1), 19-32.

#### **Peer-Reviewed Publications Under Review (n=2)**

- Delhey, L., **Twardzik, E.**, Mehdipanah, R., & Lisabeth, L. (*Under Review*). The potential effect of neighborhood resources on stroke recovery: A topical review.
- Martinez-Amezcua, P., Gupta, H., Zhang, W., Assi, S., **Twardzik, E.**, Huang, A.R., Reed, N.S., Deal, J.A., Arnold, M.L., Burgard, S., Chisolm, T., Couper, D., Glynn, N.W., Gmelin, T., Goman, A.M., Gravens-Mueller, L., Hayden, K.M., Mitchell, C., Pankow, J.S., Pike, J.R., Schrack, J.A., Sanchez, V.A., K.J., Sullivan, Lin. F.R., Coresh J; ACHIEVE Collaborative Research Group. (*Under Review*). Association of a hearing intervention with levels of leisure-time physical activity in older adults: results from a secondary analysis of the ACHIEVE trial.

#### **Book Chapters (n=4)**

- Reber, L., **Twardzik, E.**, Moltan, I., Krause, J., Clarke, P.J., & Meade, M.A. Aging and Disability. In: M. Meade, K. Bechtold, & S. Wegener (Eds.). (*In Press*) *The Oxford Handbook of Rehabilitation Psychology*, 2<sup>nd</sup> Edition.
- Buta, B., **Twardzik, E.**, Samuel, L., Cudjoe, T., Teano, A.L., Langdon, J., Thorpe, R., Walston, J., Xue, Q. Social Determinants of Physical Frailty. In: J. Ruiz & O. Theou (Eds.). (2024) *Frailty: A Multidisciplinary Approach to Assessment, Management, and Prevention*. New York: Springer.
- Clarke, P. J. & **Twardzik**, **E.** The Role of the Built Environment for Healthy Aging: Barriers and Enablers. In: K Ferraro & D Carr (Eds.). (2021). *Handbook of Aging and the Social Sciences*, 9<sup>th</sup> Edition. London: Elsevier.
- Clarke, P. J., **Twardzik, E.**, D'Souza, C., & Meade, M. Aging with a Disability. In: Lollar, D. J., Horner-Johnson, W. & Grobe, K. (Eds.). (2020). *Public health perspectives on disability: epidemiology to ethics and beyond*, 2<sup>nd</sup> Edition. Springer Science & Business Media.

### Other publications, reports, and data (n=4)

Eisenberg, Y., Kwon, J., Hofstra, A., **Twardzik, E.**, Myers, A., & Caspi, A. (2023). *Paving the Way for Inclusion: Addressing Gaps in Measuring Disability and Transportation Data Systems*. Transit Cooperative Research Program Problem Statement submitted to the Transportation Research Board.

- The Johns Hopkins Disability Health Research Center Public Transit Disability Dashboard. (2023). <a href="https://disabilityhealth.jhu.edu/transitdashboard/">https://disabilityhealth.jhu.edu/transitdashboard/</a>
- **Twardzik, E.** & MacDonald, M. (2016). Transitions from early intervention/early childhood special education to school-based education for children diagnosed with developmental delay: Oregon department of education (ODE) report. Report submitted to the Oregon Department of Education Special Education Department.
- **Twardzik, E.**, MacDonald, M., & the Oregon School Readiness Consortium (2016). *Ensuring enrollment into Part C programs*. Report submitted to the Oregon School Readiness Consortium. http://health.oregonstate.edu/osrrc/policy-briefs

#### **Funded Research**

Current	

2023 – pres. Investigating the role of public transit on health behaviors among older

adults with disabilities
Role: Principal Investigator

Source: NIH National Institute on Aging – Career Development Award

(PI: Twardzik)

Identifier: K99AG081563 Total Direct costs: \$113,650

Completed:

2021 – 2023 Epidemiology and Biostatistics of Aging Training Program

Role: Postdoctoral Scholar

Source: NIH National Institute on Aging (PI: Bandeen-Roche)

Identifier: T32AG000247

Effort: 100%

2020 – 2021 Stroke Survivors Subjective Experience with the Neighborhood

Environment.

Role: Student Investigator

Source: Rackham Graduate Student Research Grant

Total Direct costs: \$3,000

2019 – 2021 Outdoor Environmental Facilitators and Barriers of Stroke Survivors'

Mobility and Functional Status Role: Principal Investigator

Source: NIH Eunice Kennedy Shriver National Institute of Child Health

and Human Development (PI: Twardzik)

Identifier: F31HD098870 Total Direct costs: \$84,321

2018 – 2019 *Understanding the Role of the Built Environment for Mobility among* 

Stroke Survivors.

Role: Student Investigator

Source: Rackham Graduate Student Research Grant

Total Direct costs: \$1,500

# **Honors and Awards**

2022	ProQuest Distinguished Dissertation Award, ProQuest Information
	Services, Ann Arbor, MI
2021	Honorable Mention, AKA National Doctoral Scholar Award, American
	Kinesiology Association, Mahomet, IL
2020	Annual Meeting Student Scholarship, Student Assembly, American
	Public Health Association, Washington, D.C.
2020	Rackham Travel Grant, Rackham Graduate School, University of
	Michigan, Ann Arbor, MI
2019	Kinesiology Travel Award, Kinesiology Graduate Committee,
	University of Michigan, Ann Arbor, MI
2019	Paul A. Hunsicker Memorial Award, Kinesiology Awards Committee,
	University of Michigan, Ann Arbor, MI
2018	Disability Section Student Member Award, Disability Section,
	American Public Health Association, Washington, D.C.
2018	Epidemiology Student Travel Award, Epidemiology Graduate
	Committee, University of Michigan, Ann Arbor, MI
2018	Stan Kemp Scholarship, Kinesiology Awards Committee, University of
	Michigan, Ann Arbor, MI
2017	Kinesiology Travel Award, Kinesiology Graduate Committee,
	University of Michigan, Ann Arbor, MI
2017	Student Incentive Award, Disability Section, American Public Health
	Association, Washington, D.C.
2017	Rackham Travel Grant, Rackham Graduate School, University of
	Michigan, Ann Arbor, MI
2017	Rackham Award: Summer Session in Epidemiology, Rackham
	Graduate School, University of Michigan, Ann Arbor, MI
2016	Rackham Travel Grant, Rackham Graduate School, University of
	Michigan, Ann Arbor, MI
2015	Emerging Scholar Symposium Recipient, National Consortium for
	Physical Education for Individuals with Disabilities, Cortland, NY
2014	James B. Angell Scholar, University of Michigan, Ann Arbor, MI
2012, 2013	University Honors, University of Michigan, Ann Arbor, MI
2009	Curt Twardzik Memorial Scholarship, Calumet High School, MI
2008	Grant Recipient, Michigan Interscholastic Volleyball Coaches Association,
	Flint, MI

# **Invited Presentations (n=6)**

2023	<b>Twardzik, E.</b> (October 17, 2023). <i>Navigating the Nexus of Aging, Built Environments, and Mobility</i> . Epidemiology and Public Health Grand Rounds, University of Maryland School of Medicine.
2023	<b>Twardzik, E.</b> (September 20, 2023). <i>The Built Environment's Role in Post-Stroke Functioning</i> . Geographic Special Interest Group for the Traumatic brain injury (TBI) Model Systems National Database Study. Joint Session Icahn School of Medicine at Mount Sinai and The Ohio State University. Virtual event.
2022	<b>Twardzik, E.</b> (December 2, 2022). <i>Neighborhoods to Support Mobility and Aging</i> . Department of Kinesiology and Integrated Physiology Physical Function, Aging, and Disease Virtual Symposium. Michigan Technological University. Virtual event.
2021	<b>Twardzik, E.</b> (April 16, 2021). <i>Inclusiveness of the Built Environment</i> . Department of Civil and Environmental Engineering Diversity, Equity, and Inclusion Seminar. University of Michigan. Virtual event.
2020	<b>Twardzik, E.</b> (September 29, 2020). <i>Place Based Effects on Functioning and Health</i> . Brandeis University Disability Seminar. Virtual event.
2017	<b>Twardzik, E.</b> & MacDonald, M. (October 25, 2017). <i>Limited Access to Special Education Services</i> . Child Care and Early Education Researchers Roundtable. Troutdale, OR.

# **Conference Presentations (n=32)**

2023	<b>Twardzik, E.</b> , Freedman, V.A., Martinez-Amezcua, P., & Schrack, J.A. (November 9, 2023). <i>Features of the Social and Physical Environment and Accelerometry-Based Physical Activity Among Older Adults</i> . Gerontological Society of America, Building Bridges > Catalyzing Research > Empowering All Ages. Tampa, GL. <b>Role: Presenter</b>
2023	<b>Twardzik, E.</b> , Schrack, J.A., & Martinez-Amezcua, P. (April 6, 2023). <i>An Incomplete Model of Disability: What Performance Based Measures Miss When Assessing Disability</i> . Johns Hopkins University Gerontology Interest Group Research on Aging Showcase. Baltimore, MD. <b>Role: Presenter</b>
2023	Eisenberg, Y., Hofstra, A., & <b>Twardzik, E.</b> (January 10, 2023). Characterizing Active Travel Behavior Among People with Disabilities in the United States. Transportation Research Board 102nd Annual Meeting. Washington, DC. <b>Role: Co-author</b>
2022	<b>Twardzik, E.</b> , Schrack, J., Pollack Porter, KM, Coleman, T., Washington, K., & Swenor BK. (November 9, 2022). <i>Developing a Novel Scoring System</i>

	for Public Transportation System Accessibility. American Public Health Association, Engage, Collaborate, Grow. Boston, MA. Role: Presenter
2022	<b>Twardzik, E.</b> , Falvey, J., & Schrack, J. (November 9, 2022). <i>Public Transit Environment, Public Transit Use, and Walking for Exercise Among a National Sample of Older Adults</i> . American Public Health Association, Engage, Collaborate, Grow. Boston, MA. <b>Role: Presenter</b>
2022	Eisenberg, Y., <b>Twardzik, E.</b> , & Hofstra, A. (November 8, 2022). <i>Active Transportation and Physical Activity Accumulation Among a National Sample of People with Disabilities</i> . American Public Health Association, Engage, Collaborate, Grow. Boston, MA. <b>Role: Co-author</b>
2021	<b>Twardzik, E.</b> (October 26, 2021). <i>Disability and Intersectionality</i> . American Public Health Association, Creating the Healthiest Nation: Strengthening Social Connectedness. Virtual Conference. <b>Role: Moderator</b>
2021	<b>Twardzik, E.</b> , Colabianchi, N., Duncan, L., Lisabeth, L.D., Brown, S., and Clarke, P.J. (October 25, 2021). <i>Stroke Survivors Lived Experience Navigating the Outdoor Built Environment</i> . American Public Health Association, Creating the Healthiest Nation: Strengthening Social Connectedness. Virtual Conference. <b>Role: Presenter</b>
2021	<b>Twardzik, E.</b> , Clarke, P.J., Lisabeth, L.D., Brown, S., Roth, D.L., and Colabianchi, N. (October 22, 2021). <i>Pedestrian-Friendly Features at Neighborhood Crossings are Associated with Higher Physical Quality of Life Post Stroke</i> . American Public Health Association, Creating the Healthiest Nation: Strengthening Social Connectedness. Virtual Conference. <b>Role: Presenter</b>
2020	Clarke, P.J., <b>Twardzik, E.</b> , D'Souza, C., & Meade, M. (December 3, 2020). <i>Meet the Authors: Public Health Perspectives on Disability: Science, Social Justice, Ethics, and Beyond.</i> Association of University Centers on Disabilities, Achieving Equity: Leading the Way in the Next Decade. Virtual Conference. <b>Role: Co-Presenter</b>
2020	<b>Twardzik, E.</b> , Clarke, P.J., Lisabeth, L.D., Brown, S., & Colabianchi, N. (October 26, 2020). <i>Rushing to Cross the Street: The Role of Crossings on Outdoor Mobility Among Stroke Survivors</i> . American Public Health Association, Creating the Healthiest Nation: Preventing Violence. Virtual Conference. <b>Role: Presenter</b>
2020	<b>Twardzik, E.</b> (October 26, 2020). <i>Integrating Disability Inclusive Programming in Policies, Programs, and Services</i> . American Public Health Association, Creating the Healthiest Nation: Preventing Violence. Virtual Conference. <b>Role: Moderator</b>
2020	<b>Twardzik, E.,</b> Verma, M., Kim, Y., Judd, S., Howard, V., Cunningham, S., Kleindorfer, D., & Colabianchi, N. (March 4, 2020). <i>Relative Versus Absolute Neighborhood Economic Conditions And Risk Of Stroke In A United States National Cohort</i> . American Heart Association: Epidemiology,

	Presenter
2020	Stulberg, E., <b>Twardzik, E.</b> , Hsu, C., Kim, S., Clarke, P., Morgenstern, L.B., & Lisabeth, L. (February 20, 2020). <i>Examining the Role of Context:</i> Neighborhood Socioeconomic Status Shaping Post-Stroke Outcomes, The Brain Attack Surveillance in Corpus Christi (BASIC) Project. International Stroke Conference. Los Angeles, CA. <b>Role: Co-author</b>
2019	<b>Twardzik, E.</b> , Clarke, P. J., Judd, S., & Colabianchi, N. (November 3, 2019). <i>Individual and Joint Effects of Mobility Aid Use and Sidewalk Problems on the Frequency of Neighborhood Engagement</i> . American Public Health Association, For science. For action. For health. Philadelphia, PA. <b>Role: Presenter</b>
2019	<b>Twardzik, E.</b> , Lisabeth, L., Brown, S., Clarke, P., & Colabianchi, N. (April 10, 2019). <i>Outdoor Environmental Facilitators and Barriers of Stroke Survivors' Mobility and Functional Status</i> . Center for Social Epidemiology and Population Health Seminar. University of Michigan, School of Public Health. Ann Arbor, MI. <b>Role: Presenter</b>
2019	<b>Twardzik, E.</b> , Clarke, P., Elliott, M. R., Haley, W. E., Judd, S., & Colabianchi, N. (April 9, 2019). <i>Neighborhood Socioeconomic Status and Trajectories of Physical Health Related Quality of Life among Stroke Survivors</i> . Graduate Student Research Showcase. University of Michigan, School of Kinesiology. Ann Arbor, MI. <b>Role: Presenter</b>
2018	<b>Twardzik, E.,</b> Duchowny, K., Gallagher, A., Alexander, N., Colabianchi, N., & Clarke, P. (November 12, 2018). Which Features of the Built Environment Matter Most for Mobility? Using Wearable Sensors to Capture Real-Time Outdoor Environment Demand for Mobility. American Public Health Association, Health Equity Now. San Diego, CA. <b>Role: Presenter</b>
2018	Ross, S., <b>Twardzik, E.</b> , McManus, B.M., Logan, S.W., Smit, E. (November 13, 2018). What healthcare delivery components matter for receipt of an individualized education program? American Public Health Association, Health Equity Now. San Diego, CA. <b>Role: Co-author</b>
2018	<b>Twardzik, E.,</b> Antonakos, C., Baiers, R., Dubowitz, T., Clarke, P., & Colabianchi, N. (April 13, 2018). <i>Validity of GigaPan Technology to Observe Environmental Features and Attributes</i> . Society of Behavioral Medicine Annual Meeting. New Orleans, LA. <b>Role: Presenter</b>
2017	<b>Twardzik, E.</b> , Clarke, P., Judd, S., Haley, W., & Colabianchi, N. (November 6, 2017). <i>Effects of Neighborhood Socioeconomic Status on Changes in Quality of Life Among Stroke Survivors</i> . American Public Health Association, Climate Changes Health. Atlanta, GA. <b>Role: Presenter</b>
2017	<b>Twardzik, E.</b> , Clarke, P., Judd, S., Haley, W., & Colabianchi, N. (October 27, 2017). Association Between Stroke and Changes in Quality of Life: Is

Prevention, Lifestyle, & Cardiometabolic Health. Phoenix, AZ. Role:

	There Effect Modification by Neighborhood SES. Health Sciences Bicentennial Luncheon Presentation. Ann Arbor, MI. Role: Presenter
2017	Ross, S., <b>Twardzik, E.</b> , McManus, B.M., Logan, S.W., Smit, E. (June 20, 2017). <i>Medical home access and receipt of educational and family services in children with special healthcare needs (CSHCN)</i> . Society for Epidemiologic Research Annual Meeting, Seattle, WA. <b>Role: Co-author</b>
2017	<b>Twardzik</b> , <b>E.</b> (April 11, 2017). Association Between Stroke and Changes in Quality of Life: Is There Effect Modification by Neighborhood SES? Graduate Student Research Showcase. University of Michigan, School of Kinesiology. Ann Arbor, MI. <b>Role: Presenter</b>
2016	<b>Twardzik, E.,</b> Odden, M., Smit, E. & MacDonald, M. (October 30, 2016). <i>Young children and infants diagnosed with developmental delay transitioning into school based service programs: A secondary data analysis</i> . American Public Health Association, Emerging Issues in Disability and Public Health. Denver, CO. <b>Role: Presenter</b>
2016	<b>Twardzik, E.</b> , MacDonald, M. & Dixon-Ibarra, A. (August 4, 2016). <i>Children with developmental delay missing out on adapted physical education services when transitioning into school</i> . National Consortium for Physical Education for Individuals with Disabilities 2016 annual meeting, Washington, DC. <b>Role: Presenter</b>
2016	Heinonen, G., Ku, B., <b>Twardzik, E.</b> , MacDonald, M. (May 13, 2016). Examining The Quality of Parent Interaction With Children With Autism Spectrum Disorder in Distinctly Different Play Environments. Oregon State University 2016 Celebration of Undergraduate Excellence, Corvallis, OR. <b>Role: Co-author</b>
2016	Inskeep, K., Ross, S.M., <b>Twardzik, E.</b> , Catena, M., Ayyagari, A., Cook, E., Winden, H., Fine, J., Magnani, J., MacDonald, M., & Logan, S.W. (May 13, 2016). <i>The effects of inclusive playgroup on social interactions between children with and without disabilities</i> . Oregon State University 2016 Celebration of Undergraduate Excellence, Corvallis, OR. <b>Role: Co-author</b>
2016	Fitzgerald, J., Ross, S.M., Catena, M., <b>Twardzik, E.</b> , Winden, H., Fine, J.; Magnani, J., MacDonald, M., & Logan, S.W. (May 13, 2016). <i>Physical activity of children with and without disabilities during an inclusive playgroup</i> . Oregon State University 2016 Celebration of Undergraduate Excellence, Corvallis, OR. <b>Role: Co-author</b>
2015	<b>Twardzik, E.,</b> Cotto, C., & MacDonald, M. (October 13, 2015). The Relationship Between State Lead Agency And Odds of Enrollment For Children Aged Birth Through Three in Early Intervention Services. Oregon Public Health Association Annual Meeting and Conference, Corvallis OR. <b>Role: Presenter</b>
2015	<b>Twardzik, E.</b> , Cotto, C., & MacDonald, M. (July 18, 2015). <i>How the State System Administration Impacts Enrollment in Early Intervention Services</i> .

National Consortium for Physical Education for Individuals with Disabilities (NCPEID) Conference, Washington, D.C. **Role: Presenter** 

**Twardzik, E.,** Strasburg, D., & Alexander, N. (April 24, 2010). *Confidence level and Performance in Balance-Impaired Older Adults*. Undergraduate Research Opportunity Program (UROP) Symposium, Ann Arbor MI. **Role:** 

**Presenter** 

#### **TEACHING**

### **Teaching Experience**

2010

2023	<b>Lab Instructor</b> Johns Hopkins University, Baltimore, MD EPID 340.721.81, Epidemiologic Inference in Public Health 1 EPID 340.753.01, Epidemiologic Methods 3
2022	Master of Public Health Practicum Site Supervisor Johns Hopkins University, Baltimore, MD Disability and Health Research Center
2014 – 2016	Graduate Teaching Assistant Oregon State University, Corvallis OR KIN 344, Introduction to Adapted Physical Activity KIN 311, Motor Behavior HHS 231, Lifetime Fitness for Health
2014 – 2015	Adapted Physical Activity Program Supervisor Oregon State University, Corvallis OR Individualized Movement and Physical Activity for Children Today (IMPACT)
2014 – 2015	Graduate Student Lecture Oregon State University, Corvallis OR Undergraduate Courses PAC 117, Competitive Basketball PAC 273, Volleyball I
2012 – 2014	<b>Adapted Physical Activity Program Supervisor</b> Sunfield Center, Ann Arbor MI
2013 – 2014	Tutor University of Michigan Athletics, Ann Arbor MI
2011	<b>Undergraduate Teaching Assistant</b> University of Michigan, Ann Arbor MI Undergraduate Courses MATH 115, Calculus I

#### **Invited Guest Lectures**

**Disability and the Built Environment**, Applied Exercise Science 416: *Environmental Policy*, University of Michigan.

Erica Twardzik Last Revised 05.30.2024 Page 12

2020	Examining the Role of Context: Neighborhoods and Functioning, Movement Science 615: Research Methods, University of Michigan.
2020	<b>Healthy Aging: The Socioenvironmental Context</b> , Kinesiology 424: <i>Aging and Motor Performance</i> , University of Michigan.
2019	<b>Aging, Ability, and Inequity</b> , Public Health 382: <i>Population Health Determinants &amp; Disparities</i> , University of Michigan.
2019	<b>Identifying Built Environment Barriers and Facilitators</b> , Applied Exercise Science 416: <i>Environmental Policy</i> , University of Michigan.
2019	<b>Theory of Disability and the Built Environment</b> , Applied Exercise Science 416: <i>Environmental Policy</i> , University of Michigan.
2019	<b>Place Based Effects on Functioning and Health</b> , Movement Science 615: <i>Philosophy and Science of Research in Kinesiology</i> , University of Michigan.
2017-20	Disability and Health, Movement Science 421: Disorders of Voluntary Movement, University of Michigan.
2017-20 2016	· · · · · · · · · · · · · · · · · · ·
	Movement, University of Michigan.  Disability Epidemiology, Kinesiology 444: Advanced Adapted Physical
2016	<ul> <li>Movement, University of Michigan.</li> <li>Disability Epidemiology, Kinesiology 444: Advanced Adapted Physical Activity, Oregon State University.</li> <li>Functional Constraints: Thinking, Knowing and Processing,</li> </ul>
2016 2016	<ul> <li>Movement, University of Michigan.</li> <li>Disability Epidemiology, Kinesiology 444: Advanced Adapted Physical Activity, Oregon State University.</li> <li>Functional Constraints: Thinking, Knowing and Processing, Kinesiology 311: Motor Behavior, Oregon State University.</li> <li>Structural Constraints, Kinesiology 311: Motor Behavior, Oregon State</li> </ul>
<ul><li>2016</li><li>2016</li><li>2016</li></ul>	<ul> <li>Movement, University of Michigan.</li> <li>Disability Epidemiology, Kinesiology 444: Advanced Adapted Physical Activity, Oregon State University.</li> <li>Functional Constraints: Thinking, Knowing and Processing, Kinesiology 311: Motor Behavior, Oregon State University.</li> <li>Structural Constraints, Kinesiology 311: Motor Behavior, Oregon State University.</li> <li>Perspectives in Motor Behavior, Kinesiology 311: Motor Behavior,</li> </ul>

#### **SERVICE**

# **Community Presentations**

2021	Campfire Session: Conversation with Provost Collins, University of Michigan School of Kinesiology
2020	Writing: A Method for Citizen Engagement, Calumet High School
2019	Movement Science PhD Track Career Panel, University of Michigan School of Kinesiology
2018	The ICF and You: Public Health Applications, American Public Health Association Pre-conference workshop

# 2012 Movers and Shakers' Program, Eastern Michigan University

# Media

2024	Everything is Public Health. "Transportation is Public Health - Transit Apartheid" Interview with MJ Wu, March 21, 2024.
	https://everythingispublichealth.buzzsprout.com/1801367/14734282-
	transportation-is-public-health-transit-apartheid
2024	Research at Bloomberg School of Public Health. "Research Findings" News
	brief by Junie Burke, January 23, 2024.

# **Academic and Professional Service**

Ongoing	Ad-hoc Manuscript Reviewer for:  American Journal of Epidemiology  Disability and Health Journal  Journal of the American Heart Association  Journal of Aging and Physical Activity  Journal of Urban Health  Disability and Rehabilitation  Journal of Urban Technology  Landscape and Urban Planning  Neuropsychology  Research Quarterly for Exercise and Sport  Transportation Research Part D  Cities & Health  American Journal of Audiology
2017 – pres. 2020 – pres.	Abstract Reviewer, Annual Meeting of the American Public Health Association Secretary, Disability Section of the American Public Health Association
2020 – 2021	Policy Committee Student Co-chair, Disability Section of the American Public Health Association
2016 – 2019	<b>Student Liaison</b> , Disability Section of the American Public Health Association
2017 – 2019	<b>Member</b> , Kinesiology Diversity and Inclusion Network, School of Kinesiology, University of Michigan
2018 2017 – 2018	Member, Society of Behavioral Medicine, Academy of Behavioral Medicine Research Kinesiology Representative, Interprofessional Health Student Organization, University of Michigan

2017	<b>Member,</b> Disability Section Chair's Forum Planning Committee, American Public Health Association
2017	Member, Disability Employment Awareness Meeting Planning
	Committee, Interprofessional Health Student Organization
2017 –	Coordinator, American Public Health Association Disability Section
2019	Student Webinars
2016	<b>Member</b> , Health Care Disparities Faced by Individuals with Disabilities Meeting Planning Committee, Interprofessional Health Student Organization
2015 –	MS Kinesiology Representative, Graduate Student Council, Oregon
2016	State University
2015	<b>Student Evaluation Committee for Faculty Tenure</b> , Oregon State University

#### **Professional Membership**

2016 –	Member American Public Health Association
pres. 2024 –	Member Gerontological Society of America
pres. 2023	Member Transportation Research Board
2020 –	Member American Heart Association
2021 2018 – 2019	Member Society of Behavioral Medicine
2015 – 2016	<b>Member</b> National Consortium for Physical Education and Recreation for Individuals with Disabilities
2015 - 2016	Member Oregon Public Health Association

#### News Articles (n = 1)

 Hartman, M. 5 Fixes for Aging in America: Shifts in Attitude and Policies Can Pave the Way to Thriving in Later Life. Hopkins Bloomberg Public Health Magazine. May 16, 2024. <a href="https://magazine.publichealth.jhu.edu/2024/5-fixes-aging-america">https://magazine.publichealth.jhu.edu/2024/5-fixes-aging-america</a>

#### Podcasts (n = 1)

1. **Twardzik, E.** Transit Apartheid. *Everything is Public Health Podcast.* <u>https://everythingispublichealth.buzzsprout.com/1801367/14734282-transportation-is-public-health-transit-apartheid</u> May 21, 2024.