

KATE A. DUCHOWNY

University of Michigan, Ann Arbor
Survey Research Center, Institute for Social Research
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PROFESSIONAL POSITIONS

Research Assistant Professor | University of Michigan | Institute for Social Research 2023-current
Survey Research Center | Social Environment and Health
Ann Arbor, Michigan

Research Investigator | University of Michigan | Institute for Social Research 2022-2023
Survey Research Center | Social Environment and Health
Ann Arbor, Michigan

K99/R00 Scholar | National Institute on Aging 2020-current
Research: Social epidemiology; life course perspectives; neighborhoods; disability; muscle health; mitochondrial function

EDUCATION & TRAINING

University of California, San Francisco 2018-2020
T32 Postdoctoral Scholar, Department of Epidemiology & Biostatistics
Mentors: Drs. Maria Glymour & Peggy Cawthon

University of Michigan School of Public Health 2013-2018
PhD, Epidemiologic Science
Dissertation: "Muscle Weakness in Older Adults: Examining the Measurement, Health Outcomes and Life Course Determinants"
Committee Chair: Dr. Philippa Clarke

University of Miami Miller School of Medicine 2009-2010
MPH, Public Health
Capstone Advisor: Dr. Lisa Metsch

University of Miami College of Arts and Sciences 2004-2008
BA, Major: Psychology | Minor: Political Science & English

RESEARCH SUPPORT

Current
R21AG084764 Duchowny (PI) 7/2024- 7/2026
National Institute on Aging

Examining the relationship between blood-based mitochondrial bioenergetic capacity in frozen samples, socioeconomic position, and physical functioning.

The goal of this proposal is to establish the reliability and validity of using the respirometry in frozen samples (RIFS) method on HRS frozen blood samples to obtain measures of mitochondrial function, and then to examine whether these mitochondrial measures relate to socioeconomic position and physical function.

R00AG066846 **Duchowny (PI)** 1/2021-12/2026

National Institute on Aging: K99/R00 Pathway to Independence Award

Examining the Role of the Neighborhood Environment on Muscle Function in Older Adults

This study seeks to identify which features of the neighborhood environment are related to muscle function, physical activity and mitochondrial health in order to understand what social and biologic risk factors matter most for muscle function among older adults.

U01NR020556 **Clarke & Noppert (MPI)** 4/2022-1/2027

National Institute on Nursing Research

A National Neighborhood Data Resource to Understand Inequities in the Health and Socioeconomic Impacts of COVID-19 in the United States

The consequences of the COVID-19 pandemic have been unequally felt by individuals and communities across the United States. To understand these patterns, we will create, integrate, and share data on neighborhood characteristics, both before and since the pandemic, that can be readily linked to existing survey or cohort studies at various levels of geography.

Role: Co-Investigator

P30 AG012846 **Freedman (PI)** 7/2022-6/2023

National Institute on Aging

Michigan Center in the Demography of Aging – Faculty Fellowship

This MiCDA faculty fellowship will allow Duchowny to 1) leverage existing MiCDA datasets (i.e. NHATs) to examine how neighborhood characteristics are associated with trajectories of handgrip strength over time while also 2) facilitating networking and collaborations with MiCDA affiliates as she grows her research program in the area of musculoskeletal health, neighborhoods, and physical functioning

Role: Faculty Fellow

R24 AG054365 **Faul/Mitchell/Crimmins (MPI)** 4/2023-3/2024

National Institute on Aging

Cellular and Subcellular Biomarkers of Aging as Mechanisms to Understand Biological Expressions of the Social Environment: The Relation Between Viral Burden, T cell immunosenescence, and Mitochondrial Bioenergetics

This NIA Biomarker Network pilot leverages existing stored biospecimen to test novel biomarkers of aging including burden of latent herpesvirus infections, T cell immunosenescence, and mitochondrial bioenergetics with a particular focus on examining differences by key social determinants of health.

Role: Pilot MPI (with Grace Noppert)

P30 AG012846 **Freedman (PI)** 7/2023-6/2024

National Institute on Aging

The Relationship Between Neighborhoods, Muscle Strength, and Physical Disability in the National Health & Aging Trends Study (NHATS)

The aims of this Michigan Center on the Demography of Aging pilot project are to examine: 1) which built and social neighborhood environment characteristics are associated with trajectories of hand grip strength, a surrogate measure of overall muscle strength, and 2) whether handgrip strength mediates the relationship between the neighborhood environment and physical disability.

Role: Pilot PI

P30 AG024824

Yung (PI)

7/2023-6/2024

National Institute on Aging

Exploring the Relationship between the Social Determinants of Health and Systemic Markers of Mitochondrial Bioenergetics Among Older Adults

This pilot project leverages blood-based markers of mitochondrial bioenergetics via the respirometry in frozen samples (RIFS) method while also linking these measures to the overall participant social determinants of health.

Role: Pilot PI

Completed

T32AG049663

Glymour (PI)

9/2018-9/2020

NIH/National Institute on Aging

Translational Epidemiology- Training for Research on Aging and Chronic Disease

The goal of this training program is to train PhD students and postdoctoral researchers to conduct research on prevention and treatment of chronic diseases in older adults.

Role: Postdoctoral Trainee

P30AG012846

Duchowny (Co-I)

7/2016-6/2017

NIH/National Institute on Aging

Internal Pilot grant investigating the long-term health consequences associated with muscle weakness in the Health and Retirement Study.

T32AG027708

Mendes de Leon (PI)

5/2015-4/2017

NIH/National Institute on Aging

Interdisciplinary Research Training on Health and Aging

The goal of this training program is to provide training in the social and behavioral determinants and adverse health outcomes in older age.

Role: Predoctoral Trainee

Predoctoral Fellowship Award

Duchowny (PI)

6/2017-9/2018

University of Michigan Rackham Graduate School

Muscle Weakness in Older Americans: Measurement, Health Outcomes & Determinants

Doctoral research on the health consequences of muscle weakness on older adults.

PUBLICATIONS

1. He, Y., Faul, J., **Duchowny, K. A.**, Li, C., Stebbins, E., Noppert, & G. A. (2025). Health impact of a hypothetical intervention on immune burden of cytomegalovirus (CMV) among older adults in the US: a prospective analysis of the Health and Retirement Study Cohort. *The Lancet Regional Health Americas*, 47, 101122.

2. Chamberlin, E. M., **Duchowny, K. A.**, Probst, J., Richardson, E. T., Hegde, S. T., & Noppert, G. A. (2025). Towards Relationality in Infectious Disease Research. *Open Forum Infectious Diseases*.
3. **Duchowny, K. A.**, Zhang, Y., Clarke, P. J., Aiello, A. E., & Noppert, G. A. (2024). Examining the relationship between biomarkers of immune aging and prevalent physical disability in the health and retirement study. *Brain, Behavior, and Immunity*.
4. Noppert, G., Wragg, K., Li, C., **Duchowny, K. A.**, Mody, L., Aiello, A. E., Nyquist, L., O'Brien, M., Yung, R., & Goldstein, D. (2024). Herpesvirus antibodies are correlated with greater expression of p16 in the T cells of humans. *Open Forum Infectious Diseases*.
5. Wallace, J., Ndumele, C. D., Lollo, A., Agafiev Macambira, D., Lavalley, M., Green, B., **Duchowny, K. A.**, & McWilliams, J. M. (2024). Attributing racial differences in care to health plan performance or selection. *JAMA Internal Medicine*.
6. **Duchowny, K. A.**, Smith, A. K., Cenzer, I., et al. (2024). "The prevalence of lifetime trauma and association with physical and psychosocial health among adults at the end of life." *Journal of the American Geriatrics Society*.
7. **Duchowny, K. A.**, Diaz-Ramirez, L. G., Boscardin, W. J., Perera, R., Lin-Gomez, S., Cawthon, P. M., Noppert, G. A., & Philippa J Clarke (2024). The neighborhood environment and handgrip strength: longitudinal findings from the Health and Retirement Study. *The Journals of Gerontology, Series A*.
8. Khadka, A., Hebert, J. L., Glymour, M. M., Jiang, F., Irish, A., **Duchowny, K. A.**, & Vable, A. M. (2024). Quantile regressions as a tool to evaluate how an exposure shifts and reshapes the outcome distribution: A primer for epidemiologists. *American Journal of Epidemiology*.
9. Noppert, G. A., Clarke, P., Stebbins, R. C., **Duchowny, K. A.**, Melendez, R., Rollings, K., & Aiello, A. E. (2024). "The embodiment of the neighborhood socioeconomic environment in the architecture of the immune system." *PNAS Nexus*.
10. Kotwal, A., Cenzer, I., Smith, A., Brown, C., Perissinotto, C. A., **Duchowny, K. A.**, & Kotwal, A. (2024). "The prevalence of lifetime trauma and association with symptom burden among adults in the last years of life." *Journal of Pain and Symptom Management*.
11. Mau, T., Blackwell, T.L., Cawthorn, P.M., Molina, A.J.A., Coen, P.M., Distefano, G., Kramer, P.A., Ramos, S.V., Forman, D.E., Goodpaster, B.H., Toledo, F.G.S., **Duchowny, K.A.**, Sparks, L.M., Newman, A.B., Kritchevsky, S.B., & Cummings, S.R. (2024). "Muscle mitochondrial bioenergetic capacities are associated with multimorbidity burden in older adults: the Study of Muscle, Mobility and Aging (SOMMA)". *The Journals of Gerontology: Series A*.
12. Kramer, P.A., Coen, P.M., Cawthorn, P.M., Distefano, G., Cummings, S.R., Goodpaster, B.H., Hepple, R.T., Kritchevsky, S.B., Shankland, E.G., Marcinek, D.J., Toledo, F.G.S., **Duchowny, K.A.**, Ramos, S.V., Harrison, S., Newman, A.B., & Molina, A.J.A. (2024). "Skeletal muscle energetics explain the sex disparity in mobility impairment in the study of muscle, mobility, and aging". *The Journals of Gerontology: Series A*.

13. Cawthorn, P.M., Blackwell, T.L., Kritchevsky, S.B., Newman, A.B., Hepple, R.T., Coen, P.M., Goodpaster, B.H., **Duchowny, K.A.**, Hetherington-Rauth, M., Mau, T., Shankaran, M., Hellerstein, M., Evans, W.J., & Cummings, S.R. (2024). "Associations between D₃Cr muscle mass and magnetic resonance thigh muscle volume with strength, power, physical performance, fitness, and limitations in older adults in the SOMMA study". *The Journals of Gerontology: Series A*.
14. **Duchowny, K.A.**, Marcinek, D.J., Mau, T., Diaz-Ramirez, L.G., Lui, L.Y., Toledo, F.G.S., Cawthorn, P.M., Hepple, R.T., Kramer, P.A., Newman, A.B., Kritchevsky, S.B., Cummings, S.R., Coen, P.M., & Molina, A.J.A. (2024). "Childhood adverse life events and skeletal muscle mitochondrial function". *Science Advances*.
15. Noppert, G.A., Clarke, P., Hoover, A., Kubale, J., Melendez, R., **Duchowny, K.A.**, & Hegde, S.T. (2024). "State variation in neighborhood COVID-19 burden across the United States". *Communications Medicine*.
16. Yang, Y., Sims, K.D., Lane, N.E., **Duchowny, K.A.**, & Torres, J.M. (2024). "Perceived neighborhood characteristics and later-life pain outcomes: Evidence from the Health and Retirement Study". *Journal of Aging and Health*.
17. Noppert, G.N., **Duchowny, K.A.**, Stebbins, R., Aiello, A., Dowd, J., & Clarke, P.J. (2023). "Biological expressions of early life trauma in the immune system of older adults". *PLoS One*.
18. Ackley, S.F., Zimmerman, S.C., Flatt, J.D., Riley, A.R., Sevelius, J., & **Duchowny, K.A.** (2023). "Discordance in chromosomal and self-reported sex in the UK Biobank: Implications for transgender and intersex-inclusive data collection". *Proceedings of the National Academy of Sciences of the United States of America*.
19. Mau, T., Lui, L.Y., Distefano, G., Kramer, P.A., Ramos, S.V., Toledo, F.G. S., Santanasto, A.J., Shankland, E.G., Marcinek, D.J., Jurczak, M.J., Sipula, I., Bello, F.M., **Duchowny, K.A.**, Molina, A.J. A., Sparks, L.M., Goodpaster, B.H., Hepple, R.T., Kritchevsky, S.B., Newman, A.B., Cawthorn, P.M., ... & Coen, P. M. (2023). "Mitochondrial energetics in skeletal muscle are associated with leg power and cardiorespiratory fitness in the Study of Muscle, Mobility, and Aging (SOMMA)". *The Journals of Gerontology Series A*.
20. Noppert, G.A., **Duchowny, K.A.**, & Clarke, P.J. (2022). "Declining US life expectancy since covid-19—Structural inequities foreshadow future fallout". *BMJ*.
21. Chen, Y.H., Riley, A.R., **Duchowny, K.A.**, Aschmann, H.E., Chen, R., Kiang, M.V., Mooney, A.C., Stokes, A.C., Glymour, M.M., & Bibbins-Domingo, K. (2022). "COVID-19 mortality and excess mortality among working-age residents in California, USA, by occupational sector: A longitudinal cohort analysis of mortality surveillance data". *The Lancet Public Health*.
22. Chen, Y.H., Matthay, E.C., Chen, R., DeVost, M.A., **Duchowny, K.A.**, Riley, A.R., Bibbins-Domingo, K., & Glymour, M.M. (2022). "Excess mortality in California by education during the COVID-19 pandemic". *American Journal of Preventive Medicine*.

23. Yang, Y., Swinnerton, K., Portacolone, E., Allen, I.E., Torres, J.M., & **Duchowny, K.A.** (2022). “Difficulties with activities of daily living and receipt of care among older adults with cognitive impairment: Differences between those living alone and those living with others”. *Journal of Alzheimer’s Disease*.
24. **Duchowny, K.A.***, Ackley, S.F.*, Zimmerman, S.C., Brenowitz, W., Caunca, M.R., & Glymour, M.M. (2022). “Associations between handgrip strength and dementia risk, cognition, and neuroimaging outcomes in the UK Biobank Cohort Study”. *JAMA Network Open*.
25. Wallace, J., Lollo, A., **Duchowny, K.A.**, Lavalley, M., & Ndumele, C. (2022). “Disparities in health care spending and utilization among Black and White Medicaid enrollees”. *JAMA Health Forum*.
26. Matthay, E.C., **Duchowny, K.A.**, Riley, A.R., Thomas, M., Chen, Y.H., Bibbins-Domingo, K., & Glymour, M.M. (2022). “Occupation and educational attainment characteristics associated with COVID-19 mortality by race and ethnicity in California”. *JAMA Network Open*.
27. Zanker, J., Blackwell, T., Patel, S., **Duchowny, K.A.**, Brennan-Olsen, S., Cummings, S.R., Evans, W.J., Orwoll, E.S., Scott, D., Vogrin, S., Duque, G., & Cawthon, P.M. (2022). “Factor analysis to determine relative contributions of strength, physical performance, body composition and muscle mass to disability and mobility disability outcomes in older men”. *Experimental Gerontology*.
28. Thomas, M.D., Matthay, E.C., **Duchowny, K.A.**, Riley, A.R., Chen, Y-H, Glymour, M.M., & Bibbins-Domingo, K. (2022). “A descriptive analysis of 2020 California Occupational Safety and Health Administration COVID-19 related complaints”. *Social Science & Medicine—Population Health*.
29. Wrigley-Field, E., Kiang, M.V., Riley, A.R., Barbieri, M., Chen, Y-H, **Duchowny, K.A.**, Matthay, E.C., Van Riper, D., Jegathesan, K., Bibbins-Domingo, K., Leider, J.P. (2021). “Geographically targeted COVID-19 vaccination is more equitable and averts more deaths than age-based thresholds alone”. *Science Advances*.
30. Chen, Y.H., Glymour, M.M., Riley, A., Balmes, J., **Duchowny, K.A.**, Harrison, R., Matthay, E., Bibbins-Domingo, K. (2021). “Excess mortality associated with the COVID-19 pandemic among Californians 18–65 years of age, by occupational sector and occupation: March through November 2020”. *PloSOne*.
31. **Duchowny, K.A.** & Noppert, G. (2021). “The association between Cytomegalovirus & disability by race/ethnicity: Results from a the Health and Retirement Study”. *American Journal of Epidemiology*.
32. Cawthon, P.M., Patel, S.M., Harris, T., Kritchevsky, S., Newman, A., Santanasto, A., Kiel, D., Trivison, T., Lane, N., Cummings, S.R., Orwoll, E.S., **Duchowny, K.A.**, Kwok, T., Hirani, V., Schousboe, J., Karlsson, M., Mellström, D., Ohlsson, C., Ljunggren, O., Xue, Q., Shardell, M., Pencina, K., Fielding, R., Magaziner, J., Correa-de-Araujo, R., Bhasin, S., Manini, T.M. (2021). “What cut-point in gait speed best discriminates community-dwelling older adults with mobility complaints from those without? A pooled data analysis from the Sarcopenia Definitions and Outcomes Consortium”. *Journal of Gerontology: Medical Sciences*.

33. Matthay, E.C., **Duchowny, K.A.**, Riley, A.R., Galea, S. (2021). “Projected all-cause deaths attributable to COVID-19-related unemployment in the United States”. *American Journal of Public Health*.
34. **Duchowny, K.A.**, Hicken, M., Cawthon, P.M., Glymour, M.M., Clarke, P. (2020). “Life course trauma and muscle weakness in older adults by gender and race/ethnicity: Results from the U.S. Health and Retirement Study. *Social Science & Medicine—Population Health*.
35. Patel, S.M., **Duchowny, K.A.**, Kiel, D.P., Correa-de-Araujo, R., Fielding, R.A., Travison, T., Magaziner, J., Manini, T., Xue, Q.L., Pencina, K.M., Santanasto, A.J., Bhasin, S., Cawthon, P.M. (2020). “Prevalence, sensitivity and specificity for Sarcopenia Definition and Outcomes Consortium (SDOC) defined low grip strength in two nationally representative population-based cohorts”. *Journal of the American Geriatrics Society*.
36. Cawthon, P.M., Manini, T., Patel, S.M., Newman, A., Travison, T., Kiel, D.P., Santanasto, A.J., Ensrud, K.E., Xue, Q.L., Shardell, M., **Duchowny, K.A.**, Pencina, K.M., Fielding, R.A., Magaziner, J., Correa-de-Araujo, R., Bhasin, S. (2020). “Putative cut-points in sarcopenia components and their associations with incident adverse-health outcomes: A pooled data analysis from the Sarcopenia Definitions and Outcomes Consortium”. *Journal of the American Geriatrics Society*.
37. Zanker, J., Blackwell, T., Patel, S., **Duchowny, K.A.**, Brennan-Olsen, S. Cummings, S., Evans, W.J., Orwoll, E.S. Scott, D., Vogrin, S., Duque, G., Cawthon, P.M. (2020). “Walk speed and muscle mass estimated by the D3-Creatine dilution method are the strongest predictors of incident mobility disability in older men; a classification and regression tree analysis”. *Journal of the American Medical Directors*.
38. Cawthon, P.M., Blackwell, T. Cummings, S.R., Orwoll, E.S., **Duchowny, K.A.**, Kado, D.R., Stone, K.L., Ensrud, K.E., Cauley, J.A. Evans, W.J. for the Osteoporotic Fractures in Men (MrOS) Study Research Group. (2019). “Muscle mass assessed by D₃-Creatine dilution method and incident disability and mortality in community dwelling older men”. *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences*.
39. **Duchowny, K.A.**, Glymour, M.M., Cawthon, P.M. (2019). “Is perceived neighborhood physical disorder associated with muscle strength in middle aged and older men and women? Findings from the U.S. Health and Retirement Study”. *Journal of Epidemiology and Community Health*.
40. **Duchowny, K.A.**, Peters, K., Cummings, S.R., Orwoll, E.S., Hoffman, A., Ensrud, K.E., Cauley, J.A., Evans, W.J., & Cawthon, P.M. (2019). “D₃-creatine dilution is associated with changes in muscle mass, walking speed and grip strength”. *Journal of Cachexia, Sarcopenia and Muscle*.
<https://doi.org/10.1002/jcsm.12494>
41. Twardzik, E., **Duchowny, K.A.**, Gallagher, N., Alexander, N., Colabianchi, N. & Clarke, P. (2019). “Which features of the built environment matter most for nobility? Using wearable sensors to capture real-time outdoor environment demand for mobility”. *Gait and Posture*.
42. **Duchowny, K.A.** (2018). “Clinical muscle weakness is associated with mortality in a nationally representative sample of older adults: The Health and Retirement Study”. *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences*.

43. Karvonen-Gutierrez, C., Peng, M., Peterson, M.D., **Duchowny, K.A.**, Nan, B., & Harlow, S. (2018). "Low grip strength predicts incident diabetes among mid-life women: the Michigan Study of Women's Health Across the Nation". *Age and Ageing*.
44. **Duchowny, K.A.**, Clarke, P.J., Gallagher, N.A., Adams, R.A., Rosso, A.L. & Alexander, N.A. (2018). "Using mobile, wearable, technology to understand the role of built environment demand for outdoor mobility". *Environment & Behavior*.
45. **Duchowny, K.A.**, Clarke, P.J., Peterson, M.D. (2017). "Muscle weakness and physical disability in older Americans: Longitudinal findings from the U.S. Health and Retirement Study". *The Journal of Nutrition, Health & Aging*. <http://doi.org/10.1007/s12603-017-0951-y>
46. **Duchowny, K.A.**, Peterson, M.D., Alexander, N.A. & Clarke, P.J. (2017). "Cut points for clinical muscle weakness among older Americans". *American Journal of Preventive Medicine*, 53(1), 63-69.
47. Peterson, M.D., **Duchowny, K.A.**, Meng, Q., Wang, Y., Chen, X., Zhao, Y. (2017). "Low normalized grip strength is a biomarker for cardiometabolic disease and physical disabilities among U.S. and Chinese adults". *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences* (2017): glx031.
48. Peterson, M.D., Zhang, P., **Duchowny, K.A.**, Markides, K.S., Ottenbacher, K.J., & Al Snih, S. (2016). "Declines in Strength and Mortality Risk Among Older Mexican Americans: Joint Modeling of Survival and Longitudinal Data". *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences* 71.12 (2016): 1646-1652.
49. Bass, M.M., **Duchowny, K.A.**, & Llabre, M.M. (2009). "The effect of therapeutic horseback riding on social functioning in children with autism". *Journal of Autism and Developmental Disorders*, 39(9), 1261-1267.

Submitted / Under Review

Clarke, PJ, Rollings, K., Melendez, M., Sinkewicz, M., **Duchowny; KA.**, Gypin, L., Noppert, G. "Assessing the Evolution of Neighborhood Socioeconomic Status in the United States: Implications for Understanding Population Health", *Social Science & Medicine*, Under Review.

Duchowny, KA., Zhang, YS., Stebbins, RC., Ma, X., Chin, JJ., Chang, VW., Aiello, AE., Noppert, GA. "The Aging Immune System and All-cause Mortality in Older Americans: Differences Across Sex and Race/Ethnicity". *Immunity & Aging*, Under Review.

In Preparation

Noppert, GA., Kotwal, A., Aiello, AE., **Duchowny, KA.** "Examining the relationship between Lifecourse Trauma and Immune Function: Findings from the Health and Retirement Study".

Duchowny, KA., Marcinek, D.J., Mau, T., Diaz-Ramirez, L.G., Lui, L.Y., Toledo, F.G.S., Cawthon, P.M., Hepple, R.T., Kramer, P.A., Newman, A.B., Kritchevsky, S.B., Cummings, S.R., Coen, P.M., & Molina, A.J.A."Is Mitochondrial Function Associated with Neighborhood Physical Disorder? Results from SOMMA".

Duchowny KA, Wang V, Melendez R, Clarke, P & Noppert GA. “The Spatial Distribution of Essential Workers in the U.S. in 2020: Evidence from the National Neighborhood Data Archive.”

Moored K, **Duchowny KA**, Rosso A, Cawthon P, Carlson M, Glynn N. Physical Fitness, Fatigability, And Life-Space Mobility: Differences By Neighborhood Context.”

CONFERENCE PRESENTATIONS

Oral Presentations

Duchowny KA, Wang V, Melendez R, Clarke, P & Noppert GA. “The Spatial Distribution of Essential Workers in the U.S. in 2020: Evidence from the National Neighborhood Data Archive.” 7 May 2025. Presentation at the annual meeting of the Social and Behavior Covid Coordinating Center Annual Meeting.

Duchowny KA & Noppert GA. “Novel Measures of Immune and Mitochondrial Function: Preliminary findings and potential implications for population health survey research.” Presentation for the NIA-funded Biomarker Network meeting. April 17 2025

Kotwal, A., Cenzer, I., Smith, A., Brown, C., Perissinotto, C. A., **Duchowny, K. A.**, & Kotwal, A. (2024). “The prevalence of lifetime trauma and association with symptom burden among adults in the last years of life.” *Journal of Pain and Symptom Management*.

Duchowny KA. UMAging Symposium, “Aging Initiative Symposium: Aging and Social Determinants of Health 2025”. Discussant. 14 March 2025.

Fike, K., Sun, H., Esposito, M., Sylvers, D., **Duchowny, KA.**, Lee, H., & Hicken, M. “A Life Course Approach To Neighborhood Segregation And Health Among Black And White Americans.” *Innovation in Aging*. 2024;8(Supplement_1):887-887. doi:10.1093/geroni/igae098.2866

Hoover A, **Duchowny KA**, Li C, et al. “Associations between high-risk business types for respiratory pathogen transmission and COVID cases in Wisconsin neighborhoods”. Published online May 10, 2024. doi:10.7302/22763

Moored K, **Duchowny KA**, Rosso A, Cawthon P, Carlson M, Glynn N. “Physical Fitness, Fatigability, And Life-Space Mobility: Differences By Neighborhood Context.” *Innovation in Aging*. 2024;8(Supplement_1):75-76. doi:10.1093/geroni/igae098.0237

Duchowny, K.A. “Community, Place, and Social Connectedness in Later Life”, Discussant, Population Association of America, April 2023.

Duchowny, K.A., Diaz-Ramirez, L.G., Boscardin, W.J., Cawthon, P., Glymour, M., Gomez, S.L. “Which neighborhood features matter most for muscle strength? Findings from the Health and Retirement Study”. Gerontological Society of America Annual Meeting, November 2022.

Noppert, G.A. & **Duchowny, K.A.** “The Power of Surveillance: Who Decides, Who is Counted, and Who is Left Behind”. The Interdisciplinary Association of Population Health Science (IAPHS), October 2021.

Duchowny, K.A., Noppert, G.A., Clarke, P.J., “Does cytomegalovirus seropositivity mediate the relationship between neighborhood disorder and disability?” Gerontological Society of America, November 2021.

Duchowny, K.A. & Noppert, G.A “Cytomegalovirus and Disability in Older Adults: Results from the Health and Retirement Study”. Gerontological Society of America, October 2020.

Cawthon, P.M., Blackwell, T., Cummings, S.R., Orwoll, E.S., **Duchowny, K.A.**, Ensrud, K.E., Cauley, J.A., Evans, W.J. “The association between muscle mass assessed by D3Cr dilution with incident disability in community dwelling older men”. *International Conference on Frailty and Sarcopenia Research*, Miami, FL, March 2019.

Twardzik, E., **Duchowny, K.A.**, Gallagher, A., Alexander, N., Colabianchi, N., Clarke, P. “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*, San Diego, CA, November 2018.

Duchowny, K.A., Peterson, M.D., Clarke, P. “Clinical Muscle Weakness is Associated with Mortality in a Nationally Representative Sample of Older Adults: The Health and Retirement Study”. *International Conference on Frailty and Sarcopenia Research*, Miami, Florida, March 2018.

Duchowny, K.A., Peterson, M.D., Clarke, P. “Risk of Physical Disability in Older Americans with Muscle Weakness: Longitudinal Findings from the Health and Retirement Study”. *International Association of Gerontology and Geriatrics World Congress Meeting*, San Francisco, CA, July 2017.

Duchowny, K.A., Peterson, M.D., Clarke, P. “Muscle Weakness and Physical Disability in Older Americans: Longitudinal Results from the Health and Retirement Study”. *International Conference on Frailty and Sarcopenia Research*, Barcelona, Spain, April 2017.

Karvonen- Gutierrez, C., Peterson, M.D., **Duchowny, K.A.**, Peng, M. & Harlow, S. “Association of Grip Strength With Incident Diabetes Among Mid-life Women”. *Gerontological Society of America Annual Meeting*, New Orleans, LA, November 2016.

Onwuka, A.R., **Duchowny, K.A.**, Brown, K. “Killed and Unaccounted For: Examining the Racial and Geographic Breakdown of Individuals Killed by Police in 2015”. *American Public Health Association Annual Meeting*, Denver, CO, November 2016.

Brown, K., **Duchowny, K.A.**, Onwuka, A. “Police Discrimination and Depressive Symptoms in the Chicago Community Adult Health Study”. *Epidemiology Congress of the Americas*, Miami, FL, June 2016.

Duchowny, K.A., Peterson, M.D, Clarke, P. “Grip Strength as an Indicator of Clinically Relevant Muscle Weakness in Older Americans: Identifying Cutpoints and National Prevalence Estimates by Race in the U.S. Health and Retirement Study”. *International Conference on Frailty and Sarcopenia Research*, Philadelphia, PA, April 2016.

Duchowny, K.A. “Weakness in Older Americans: Sex/Race-Specific Cutpoints and Prevalence Estimates from the Health and Retirement Study”, Research Presentation, *Health and Retirement Study Research in Progress*, Institute for Social Research, Ann Arbor, Michigan, April 2016.

Duchowny, K.A. “Muscle Weakness in Older Americans: A Silent Epidemic”, Research Presentation, *Center for Social Epidemiology and Population Health Seminar*, University of Michigan School of Public Health, Department of Epidemiology, Ann Arbor, Michigan, April 2016.

Duchowny, K.A., Toner, C., Cobb, L.K., Johnson, C.C. “Formative Research on Independent Restaurants in New York City: Opportunities for Sodium Reduction”. *The American Public Health Association Annual Meeting*, San Francisco, CA, October 2012.

Poster Presentations

Duchowny, K.A.*, Ackley, S.F.*, Zimmerman, S.C., Brenowitz, W., Caunca, M.R., Glymour, M.M. “The Association Between Handgrip Strength and Dementia Risk: Evidence from the UK Biobank”. *Society for Epidemiologic Research (SER)*, June 2021.

Duchowny, K.A., Glymour, M.M., Cawthon, PM. "Is Perceived Neighborhood Disorder Associated with Muscle Strength? Findings from the Health and Retirement Study". *Society for Epidemiologic Research*, Minneapolis, MN, June 2019.

Duchowny, K.A., Hicken, M. & Clarke, P. "Life Course Stress and Trauma in Shaping Muscle Strength in Older Adults". *Population Association of America*, Austin, TX, April 2019.

Duchowny, K.A., Hicken, M. & Clarke, P. "Life Course Determinants of Muscle Weakness: The Role of Stress and Trauma". *Gerontological Society of America*, Boston, MA, November 2018.

McGrath, R., Vincent, B., Dieter, B., **Duchowny, K.A.**, Markides, K., Al Snih, S., Peterson, M. “Muscle Weakness and Diabetes Jointly Exacerbate the Rate of Functional Disability among Older Mexican Americans”. *American College of Sports Medicine*, Denver, CO, June 2017.

Duchowny, K.A., Brown, K., Onwuka, A. “The Counted: Enumerating the Number of Lives Lost Due to Police Killings in 2015”. *Epidemiology Congress of the Americas*, Miami, FL, June 2016.

Duchowny, K.A., Peterson, M.D., Clarke, P. “Weakness in Older Americans: Sex/Race-specific Cutpoints and Prevalence Estimates from the Health and Retirement Study”. *Gerontological Society of America Annual Meeting*, Orlando, FL, November 2015.

Brown, K., **Duchowny, K.A.**, Onwuka, A. “Police Satisfaction and Health Behavior in Chicago Adults”. *Reimagining Health in Cities: New Directions in Urban Health Research and Action*, Drexel University School of Public Health, Philadelphia, PA, September 2015.

Duchowny, K.A., Clarke, P., Gallagher, N., Adams, R., Kuo, A., Rosso, A., Alexander, N. A. “A Multisystem Approach to Understanding Real-World Mobility Difficulty using Mobile Technology in the Community Setting”. *Gerontological Society of America Annual Meeting*, Washington, DC, November 2014.

Duchowny, K.A., Dong, C., Guzman, J., Rundek, T., Elkind, M., DeCarli, C., Sacco, R.L., & Wright, C.B. “The Northern Manhattan global vascular risk score is associated with brain morphology”. *The Evelyn F. McKnight Center for Age Related Memory Loss*, Inter-institutional Annual Meeting, University of Florida, May 2010.

INVITED TALKS

“Biosocial Determinants of Aging: from the social to the cellular.” Invited lecture for the Center for Social Epidemiology and Population Health at the University of Michigan, Joint Talk with Grace Noppert, 4 December 2024.

“Under the Skin and Into the Muscle: Examining how our social world influences muscle health”. Epidemiology of Aging, University of Michigan School of Public Health, 24 September 2024,

“Biomarkers of Aging: A Mechanism for Understanding Embodiment and Disrupting Health Inequities”, Invited Talk, Center for Midlife Science, University of Michigan School of Public Health, March 2023.

“Examining the measurement and social determinants of muscle health in older adults”, *New York University*, Department of Population Health, February 2020.

“Muscle Weakness in Older Americans”, *Trinity College-University of Michigan Research Exchange*, The Irish Longitudinal Study of Aging, Trinity College, Dublin, Ireland, November 2016.

“Application of Generalized Linear Models in SAS”, Course Lecture, Applied Epidemiologic Data Analysis in SAS (*EPID 602*), *University of Michigan School of Public Health*, Ann Arbor, Michigan, April 2015.

MENTORING

Dominique Sylvers, University of Michigan School of Public Health 2023-
Dissertation Committee Member

Rohini Perera, University of Michigan School of Public Health 2023-2024
Integrative Learning Experience (ILE) Advisor

RESEARCH EXPERIENCE

Predocctoral Fellow 2017-2018
Center for Social Epidemiology and Population Health
University of Michigan Rackham Graduate School

T32 Predocctoral Trainee
Center for Social Epidemiology and Population Health 2015-2017
University of Michigan School of Public Health

Graduate Research Assistant 2013-2015
Social Environment & Health Program
University of Michigan Institute for Social Research

Project Coordinator & Evaluator 2010-2013
Bureau of Chronic Disease Prevention and Tobacco Control
New York City Department of Health and Mental Hygiene

Research Assistant 2009-2010
Sociomedical Sciences Research Group
University of Miami Miller School of Medicine

HONORS & AWARDS

University of Michigan Rackham Predoctoral Fellowship Award 2017-2018
For outstanding doctoral students working on dissertations that are unusually creative, ambitious and impactful.

A. Regula Herzog Young Investigator Award 2017
For outstanding emerging scholar conducting research on older populations.

Rackham Summer Award 2017

Harburg Student Award for Excellence in Social Epidemiology 2016
Awarded for best paper that understands the links between social determinants, psychological processes, behaviors in health research.

Rackham Graduate School Travel Award 2016

Department of Epidemiology Travel Award 2015

Gerontological Society of America Travel Award for Junior Investigators 2014

MaryFran R. Sowers Doctoral Summer Fellowship 2014

PROFESSIONAL ACTIVITIES

RacismLab 2016-2018
Member

University of Michigan School of Public Health Student Diversity Network 2013-2018
Doctoral Student Representative

University of Michigan Epidemiology Methods Journal Club 2015-2016
Lead Facilitator

University of Michigan Epidemiology Women's Group 2016

Founder

PEER REVIEW

Social Science & Medicine
Journal of Bone and Mineral Research
Journal of Urban Health
Journal of the American Geriatrics Society (JAGS)
Social Science & Medicine—Population Health
Research on Aging
American Journal of Preventive Medicine
Journal of Gerontology: Medical Sciences
Journal of Gerontology: Psychological Sciences
Journal of Gerontology: Social Sciences
Osteoporosis International

MEMBERSHIPS

Gerontological Society of America (GSA)
International Association for Population Health Science (IAPHS)
Population Association of America (PAA)
Society for Epidemiologic Research (SER)

SELECTED MEDIA COVERAGE

Norton, A. (2021) “Pandemic Unemployment Has Taken Its Own Deadly Toll

Healthday News <https://consumer.healthday.com/2-26-pandemic-unemployment-has-take-its-own-deadly-toll-2650724205.html>

Beech, K. (2021) “Researchers rank deadliest jobs during pandemic, with line cooks topping the list: People of color also suffer some of the biggest risks”

<https://www.thedenverchannel.com/news/national/researchers-rank-deadliest-jobs-during-pandemic-with-line-cooks-topping-the-list>

Williams, B. (2018) People with Weak Muscles Are More Likely to Die Early, Says Study. **Men’s Health** <https://www.menshealth.com/health/a22851634/university-of-michigan-strength-mortality-study/>

Yenisey, Z. (2018) People with Strong Muscles Live Longer, According to New Study. **Maxim** <https://www.maxim.com/news/people-with-strong-muscles-live-longer-2018-9>

Rahhal, N. (2018) Want to live longer? Lift weights: People with weaker muscles are 50 percent more likely to die early, study suggests. **Daily Mail** <https://www.dailymail.co.uk/health/article-6103591/People-weaker-muscles-50-percent-likely-die-early-study-suggests.html>

Hosie., R. (2018) High Muscle Strength Could Help You Live Longer, Study Finds. **The Independent**
<https://www.independent.co.uk/life-style/health-and-families/strength-training-muscle-stronger-live-longer-life-expectancy-increase-a8511491.html>