**Amanda Norton, MPH**

1-121 Parkside Drive, Toronto, ON, M6R 2Y8 | 437-233-9303 | [amanda.norton@mail.utoronto.ca](mailto:amanda.norton@mail.utoronto.ca) | amandanortongeo.com

**Academic Training**

**University of Toronto, Department of Geography and Planning Toronto, ON**

Doctorate of Geography, *Candidacy Achieved*  **In Progress**

Focus Area: Modelling air pollution exposures and their relationship with SES and health

**Boston University School of Public Health Boston, MA**

Master of Public Health: Epidemiology & Biostatistics **May 2019**

**University of South Florida Tampa, FL**

Bachelor of Arts: Statistics **May 2017**

**Employment**

**Brigham and Women’s Hospital Boston, MA**

Senior Data Analyst **March 2021-August 2021**

* Collaborate with PI to continue to develop patient reported outcome measures.
* Utilize SAS, R, & SQL to tabulate and compile data for reporting to CMS
* Assist in manuscript development utilizing derived healthcare measures.

**Massachusetts Department of Public Health Boston, MA**

Laboratory Data Analyst / Research Analyst III, Division of Microbiology, BIDLS **July 2020-March 2021**

* Collaborate with Division of Microbiology and subsequent labs of Foodborne Illness, Clinical Microbiology, and TB to derive metrics to improve efficiency and accuracy.
* Utilize SAS, R, Tableau and GIS to create reports to aid in understanding of compliance, and hotspots.
* Assist division with development of quality metrics.

**Boston University Boston, MA**

Statistical Data Analyst, BEDAC, SPH **March 2019 – July 2020**

* Collaborate with BEDAC team and BU School of Public Health PIs on projects including: ARCH and Sharecare among others
* Use SAS and R to manipulate, align, clean, and analyze data
* Analyze and visualize spatial data in ArcMap, ArcGIS, and ArcGIS Online

Practicum: Research Assistant  **June 2018 - December 2018**

* Collaborated with BEDAC team to manage international and domestic data for the UrbanARCH consortium, a project focusing on alcohol use and HIV exposure
* Use SAS to import and merge data, create new variables, and calculate summary statistics
* Collected data for the NARCAN access project using Teleform verification software

**Massachusetts General Hospital Boston, MA**

Data Processing Specialist, Department of Cardiac Surgery **August 2017 - March 2019**

* Entered accurate HIPAA-compliant patient information into STS database as foundation for outcomes research
* Performed data cleaning, and data validation, using Microsoft Excel
* Assist quality director in the presentation of quality metrics, creating data visuals, observing outcome measures

**Publications**

**Norton, A.,** Fuller-Thomson, E., & Adams, M. (2024). *Environmental Injustice in The Peel Region:*

*A Cross-Sectional Analysis of Air Pollution and Social Vulnerability.* Published - Journal of City Climate Policy and Economy. https://doi.org/10.3138/jccpe-2023-0017

**Norton, A.**, Russel, A., Radford, A., Burgess, M., Bauer, J., Christiansen, C., Knight, S., Whitacre, S., Basta, N. Ceballos, D. (2023). *Addressing Air Traffic Concerns: Assessing Aircraft Pollutants in Milton Soil.* Published -Journal of Water, Air and Soil Pollution. 10.1007/s11270-023-06790-y

**Norton, A.,** Rakowska, S., Galloway, T., Rosella, L., Wilson, K., Adams, M. (2023) *Are at-risk sociodemographic attributes stable across COVID transmission waves?* Published - Journal of Spatiotemporal Engineering. 10.1016/j.sste.2023.100586

Norton, J., DiRisio G.F., Carp, J.S., **Norton, A**., Wolpaw, J.R. (2021). *Brain-Computer Interface Based Assessment of Color Vision.* Published – Journal of Neural Engineering. 10.1088/1741-2552/ac3264

**Publications In Review**

Rishworth, A., **Norton, A.,** Galloway, T., Adams, M., Wilson, K. (2023). *Reframing the Healthy Immigrant Effect in the Context of the COVID-19 Pandemic.* Submitted. Social Science and Medicine: Population Health

**Norton, A.,** Adams, M., Deacon, L. (2023). *COVID-19 in Rural Ontario Communities: Exploring the Relationship Between Gender Identity and Mental Health During a Pandemic.* Submitted. Journal of Community Psychology.

**In Progress Publications**

**Norton, A.,** Fuller-Thomson, E., Saha, Supriya., Ead, Lauren., Patel, P., Rooney, J., Adams, M. (2023). *Exploring the Intersection of Population Mobility Patterns and Exposure Risk: Air Pollution and Environmental Justice in the Peel Region Over Time.* In Progress. Target Journal: Environmental Science and Technology. Target Submission: September 2024.

**Norton, A.,** Conte Keivabu, R., Alexander, M., (2024). *Assessing Temperature Measurement at An Aggregate Spatial Scale: An Evaluation of Population Weighted Extreme Climate Exposure Estimation Methods.* In Progress. Target Journal: Spatial Demography. Target Submission: September 2024.

**Norton, A.,** Adams, M. (2023). *Evaluating Air Pollution Concern in an Air Pollution Crisis: Quebec Wildfire’s Impact on Ontario Air Pollution Internet Traffic.* In Progress. Target Journal: Canadian Journal of Public Health.

**Norton, A.,** Kangur, M., Riaz, M., Galloway, T., Wilson, K., Rosella, L., Adams, M., (2024). *Spatial Infectious Disease Cluster Identification Within a Timeseries: A Scoping Review.* Target Journal: BMJ Open

**Norton, A.,** Riaz, M., Galloway, T., Wilson, K., Rosella, L., Adams, M., (2024). *Examining the Relationship Between Social Vulnerability, COVID-19, and Air Pollution Exposure: A Mediation and Moderation Analysis of Ecological Data.* Target Journal: Canadian Journal of Public Health

**Course Instructor (Past, Ongoing, & Future Appointments):**

University of Toronto St. George

GGR 273 – Geographic Information and Mapping II Winter 2024

University of Toronto Mississauga

GGR 376 - Spatial Data Science II Winter 2025 (Upcoming)

**Conferences**

**Norton, A.,** Kangur, M., Adams, M., (2024). *Spatiotemporal Disease Clustering: A Scoping Review of Spatiotemporal Statistical Methods Utilized to Measure Spatial Infection Diffusion.* Paper. Accepted. American Association of Geographers Annual Conference. Honolulu, Hawaii, USA.

**Norton, A.,** Kangur, M., Adams, M., (2023). *Spatial Cluster Identification Within a Timeseries: A Scoping Review.* Paper. Presented. CAG-Ont 2023. Toronto, ON, CA.

**Norton, A.,** Fuller-Thomson, E., Adams, M. (2023).*The Intersection of Migration Patterns and Exposure Risk: Air Pollution and Environmental Justice in the Peel Region Over Time*. Paper. Presented. Sustainability: Transdisciplinary Theory, Practice, and Action. Mississauga, ON, CA.

**Norton, A.,** & Adams, M. (2023). *Spatial Quantile Regression: Assessing the Need for a Conditional Spatial Quantile Regression Package.* Poster. Presented. GIScience 2023. Leeds, UK.

**Norton, A.,** Fuller-Thomson, E., Saha, S., Adams, M. (2023). *Informing Housing Decision Making in The Peel Region: Preliminary Findings of 2016 Annual NO2 Concentration and 2016 ON-Marg Distributions.* Poster. Accepted. Will Poverty End with Us? A Call to Collective Action. Mississauga, ON.

**Norton, A.,** Adams, M.(2023). *Air Pollution and Environmental Justice in The Peel Region.* Paper. Presented. American Association of Geographers Annual Conference.

Rishworth, A., **Norton, A.,** Adams, M., Wilson, K. (2023). *Differential COVID-19 Experiences Among Recent and Established Immigrants in Peel, Ontario.* Paper. Presented (virtual). American Association of Geographers Annual Conference.

**Norton, A.** &Adams, M. (2023). *The Spatiotemporal* *Relationships Between Air Pollution and Census Data: Identifying Vulnerable Groups.* Paper. Presented. ESRI Education Conference.

Deacon, L. & **Norton, A.** (2022). *The Importance of Local Data: Mental Health in Rural Communities*. 3rd Collingwood World Summit – Habitat in Towns – Urban Economy Forum. Presented.

Deacon, L., Sarapura, S., Caldwell, W., Epp, S., and **Norton, A.** (2022). *Disruption & Mental Health*. Durham Council. Presented.

Kilius, E., Rishworth, A., Suh, J., Ali, F., Abu, T., **Norton, A.,** Adams, M., Wilson, K., Galloway, T. (2022). *Barriers to social support experienced by young adults from racialized and immigrant populations in Peel Region during the COVID-19 pandemic.* Abstract. Presented. Canadian Association for Biological Anthropology Annual Conference.

Kilius, E., Rishworth, A., Suh, J., Ali, F., Abu, T., **Norton, A.,** Adams, M., Wilson, K., Galloway, T. (2022). *Economic and occupational challenges experienced by adults from racialized and immigrant populations in Peel Region during the COVID-19 pandemic.* Abstract. Presented. Human Biology Association Annual Conference.

Russel, A., **Norton, A.**, Radford, A., Burgess, M., Bauer, J., Christiansen, C., Knight, S., Whitacre, S., Basta, N. Ceballos, D. (2020). *Understanding Lead in Soil Using ArcMap Tools to Respond to Community Concerns.* Poster. Presented*.* Fall NEARC 2020 Conference.

**Invited Talks**

DeSouza, P., **Norton, A.,** Pagalan, L., Smith, K., Moderator: Chapple, K. (2023). *Panel: Environmental Impacts on Vulnerable Communities.* School of Cities Symposium on Climate Justice & Cities. Toronto, ON.

**Journal Reviewer**

International Journal of Photogrammetry and Remote Sensing

Journal of City Climate Policy and Economy

**Professional Skills**

**Programming Proficient:** R, SAS

**Programming Familiar:** Python, SQL, Bash

**Software Packages:** ARCGIS Pro, ARCMap, QGIS, Adobe Photoshop, Adobe Lightroom, Microsoft Office

**Mentorship:** Statistics Tutor, BUSPH Peer Coach, Capstone Project Supervisor (UTM),

Math Help Desk Tutor (UTSG)

**Technical Skills:** Data Science, Web Scraping, Data Visualization, Data Analysis, Statistical Analysis, Spatial Analysis, Spatial Statistics, Social Network Analysis

**Languages:** Japanese (four consecutive semesters)

**TA Courses:** GGR 321 (Geographic Information Processing), GGR 353 (Geography of Death and Disease), GGR 278 (Geographical Information Systems), GGR 276 (Spatial Data Science I), GGR 376 (Spatial Data Science II), GGR263 (Geographic and Information Mapping II), GGR270 (Introductory Analytical Methods),

**Awards and Honors**

*Awarded:* Oscar J. Marshall Graduate Scholarship 2023

*Awarded:* Doctoral Award: University of Toronto, Emerging and Pandemic Infection Consortium 2023

*Awarded:* International Student Award: University of Toronto, Dept of Geography and Planning 2022

*Awarded:* Geography and Planning Entrance Award: University of Toronto, Dept of Geography and Planning 2021

*Awarded:* Arts and Sciences Doctoral Recruitment Award: University of Toronto2021

*Awarded:* Activist Bucks, Activist Lab, Boston University, micro-grant for community research 2019

*Awarded:* Travel Award, Women in Statistics and Data Science (ASA), for travel to 2019 conference 2019

*Nominated*: Nathaniel Bowditch Award, MGH, for contributing to the improvement of quality care 2018

*Awarded:* Activist Achievement Award: Boston University Scholarship, for Achievement in Community Work 2017

*Awarded:* Provost Scholar: University of South Florida Scholarship, for Academic Achievement 2014

**Grants and Fellowships**

*Funding Body:* Canadian Institute for Health Research: Project Grant *Submission Fall 2024*

*Title:* A Hidden Epidemic: Mental Health and Opioid Use in Rural Communities

*Lead PIs:* Dr. Leith Deacon, Dr. Lars Hallstrom, Dr. Brae McArthur, Dr. Abigail Sprakes

*Role on Project:* Co-Investigator

*Funding Body:* Canadian Institute for Health Research: Project Grant *Resubmission Fall 2024*

*Title:* Air Pollution and Environmental Justice (*Paraphrased*)

*Lead PIs:* Dr. Matthew Adams, Dr. Jaime Hart, Dr. Jeff Brook, Dr. Kathi Wilson, Dr. Laura Rosella, & Dr. Justin Slater   
*Role on Project:* Research Trainee & PDF

***Awarded Applications***

*Funding Body:* Institute for Pandemics: Catalyst and Research Development Grants 2023

*Title:* Retrospective Emerging Hot-Spot Analysis of COVID-19 Cases in Ontario: Applying a Geospatial Approach for Pandemic Readiness

*Lead PIs:* Dr. Matthew Adams, Dr. Tracey Galloway, Dr. Kathleen Wilson, & Dr. Laura Rosella   
*Amount Awarded*: $25,000  
*Role on Project:* Research Trainee

*Funding Body:* Canadian Institute for Health Research: Emerging COVID-19 Research Gaps & Priorities (#179444) 2022

*Title:* Understanding COVID-19 Journeys and Vaccine Experiences of Racialized and Immigrant Communities in the Greater Toronto Area

*Lead PIs:* Dr. Matthew Adams, Dr. Tracey Galloway & Dr. Kathleen Wilson   
*Amount Awarded:* $199,000  
*Role on Project:* Research Trainee

*Funding Body:* Urban Challenge Grants, School of Cities, University of Toronto 2022

*Title:* Air Quality and Environmental Justice: The Growing Impact of Climate Change on Disproportionate Air Quality Exposure

*Lead PI:* Dr. Matthew Adams   
*Amount Awarded:* $24,856  
*Role on Project:* Research Trainee

**Professional Associations**

Member: Population Association of America 2023-Present

Associate: ESRI Student Associate, University of Toronto Mississauga, ESRI Canada 2021-2022

Member: American Association of Geographers 2021-Present

Member: Canadian Association of Geographers 2021-Present

Member: American Public Health Association 2020

Member: R-Ladies 2019

Member: UseR Group 2019

Member: NEARC (Northeastern Arc Users Group) 2019

Organizer: BUSUG (BEDAC BU SAS Users Group) 2019-2020

Founder: BUDSS (BEDAC BU Data Science Seminars) 2019-2020

Member: American Statistical Association 2018-Present

**Committee/Volunteer Positions**

Center for Urban Environment, Postdoctoral Fellow Review Committee 2024

Student Representative, Canadian Association of Geographers Ontario 2023

**Service**

Thunder Bay Field Work: Address Community Concerns by Air Pollution Sampling 2023

BU Activist Lab: Celebrate Urban Birds 2017

USF Honors College Student Council 2015 - 2016

Enroll America, Assist Floridians with Healthcare Coverage Under New Affordable Care Act 2014