

Diego F. Cuadros

Professor of Epidemiology

Digital Epidemiology Laboratory, Digital Futures · Department of Biological Sciences · University of Cincinnati

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PROFILE

Professor specializing in digital and spatial epidemiology, mathematical modeling of infectious diseases, disease ecology, and the application of artificial intelligence to public health. Internationally recognized for geospatial research on the HIV epidemic in sub-Saharan Africa and the epidemiology of emerging health threats, with more than 100 peer-reviewed publications and sustained NIH-funded research.

EDUCATION

2011	Ph.D. in Biology University of Kentucky, Lexington, KY, USA
2004	B.S. in Biology Universidad Nacional de Colombia, Bogotá, Colombia

RESEARCH INTERESTS

Digital epidemiology	Mathematical modeling of diseases	Disease ecology	GIS applications in epidemiology	HIV epidemiology
AI in public health				

WORK EXPERIENCE

2025 – present	Professor Department of Biological Sciences, University of Cincinnati
2022 – 2025	Associate Professor Department of Geography and Geographic Information Science, University of Cincinnati
2016 – 2022	Assistant Professor Department of Geography and Geographic Information Science, University of Cincinnati
2016	Research Fellow Africa Health Research Institute
2012 – 2015	Postdoctoral Research Associate Weill Cornell Medicine – Qatar
2014 – 2015	Research Consultant The World Bank
2011	Research Consultant Weill Cornell Medicine – Qatar
2007 – 2011	Research Assistant University of Kentucky
2004 – 2007	Research Assistant Colombian Corporation of Agricultural Research

GRANTS

ACTIVE

2023 – 2027	The Changing Face of the HIV Epidemic in Hyperendemic Rural KwaZulu Natal, South Africa National Institute of Health · \$388,000 · Role: co-Investigator
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- 2023 – 2027** Rapid test for recent infection (RTRI) for precision public health in Sub-Saharan Africa: Next generation strategies amid changing HIV epidemiology
National Institute of Health · \$269,923 · Role: co-Investigator
- 2021 – 2026** Can mental health services break the cycle perpetuating HIV hotspots in sub-Saharan Africa
National Institute of Health · \$200,000 · Role: co-Investigator

APPROVED

- 2025 – 2027** Évaluation d'un transport par drone pour améliorer la cascade de prise en charge des nouveau-nés et enfants exposés au VIH en Guinée
ANRS – Emerging Infectious Diseases · Role: Co-Investigator

SUBMITTED

- 2026-2030** Climate-Adaptive Malaria Response: From Ecological Disruption to Anticipatory Action in East Africa
Wellcoem Trust on Climate Change · Role: Co-Investigator

COMPLETED

- 2020 – 2023** Multilevel and Spatial Determinants of Multimorbidity and Optimal Co-Care Delivery Model in South Africa
National Institute of Health · \$68,000 · Role: co-Investigator
- 2020 – 2021** Genomics and geospatial analyses of childhood asthma racial disparities
Cincinnati Children's Hospital · \$16,500 · Role: co-Principal Investigator
- 2013 – 2016** Critical assessment of the drivers of the hepatitis C virus epidemic in Egypt: A quantitative approach
Junior Scientist Research Experience Program, Qatar National Research Fund · \$298,820 · Role: Principal Investigator
- 2018** Naloxone access and impact evaluation
Ohio Department of Health · \$74,957 · Role: co-Investigator

PUBLICATIONS

PUBLISHED MANUSCRIPTS

107. Niño L, Kiragga A, Miller FD, Mwalili SM, Musuka G, Cuadros DF. (2026) Spatial Inequities in COVID-19 Vaccination Coverage Across Kenya: A Geospatial Analysis of Structural Determinants and Development Index Patterns. *International Journal of Epidemiology*
106. Escobar S, Machinon N, Ambade P, Hoffman Z, Cuadros DF. (2025) The Evolving Landscape of Substance Use Disorder Mortality in the United States: A Spatiotemporal Analysis of Emerging Hotspots and Vulnerable Populations (2005-2020). *The Lancet Regional Health Americas*
105. Mathenjwa T, Okango E, Tram KH, Inghels M, Cuadros DF, Kim HY, Walsh F, Barnighausen T, Dobra A, Tanser F. Leveraging smartphone mobility data to understand HIV risk among rural South African youth: opportunities and challenges from the Sesikhona study. *JMIR mHealth and uHealth*
104. Chowdhury MT, Bershteyn A, Milali M, Citron DT, Nyimbili S, Musuka G, Cuadros DF. (2025) Progress Towards UNAIDS 95-95-95 Targets in Zimbabwe: Sociodemographic Constraints and Geospatial Heterogeneity. *Communications Medicine*
103. Yamamoto N, Citron DT, Mwalili SM, Gathungu DK, Cuadros DF, Bershteyn A. (2025) Uncovering the Impact of Randomness in HIV Hotspot Formation: A Mathematical Modeling Study. *PLOS Computational Biology*
102. Awad SF, Cuadros DF. (2025) Generic Patterns in HIV Transmission Dynamics: Insights from a Phenomenological Risk-Stratified Modelling Approach. *BioMedInformatics*
101. Musuka G, Cuadros DF, Mukandavire Z, Miller FD, Dzinamarira T. (2025) Immunization Equity for Children with Disabilities in Low- and Middle-Income Countries: A Scoping Review of Barriers, Strategies, and Lessons Learned. *Vaccines*
100. Cuadros DF, Kiragga A, Tu L, Awad S, Bwanika J, Musuka G. Digital Transformation and Health Equity in Africa: Unpacking Social and Digital Determinants. *mHealth*
99. Cuadros DF, Huang Q, Musuka G, Dzinamarira T, Moyo BK, Mpofu A, Makoni T, Miller FD, Bershteyn A. (2024) Moving Beyond HIV Prevalence Hotspots: Shifting the Focus Towards Geospatial Hotspots of UNAIDS 95-95-95 Targets in Sub-Saharan Africa. *The Lancet HIV*
98. Cuadros DF, Devi C, Singh U, Olivier S, Castle A, Moosa Y, Edwards JA, Kim HY, Siedner M, Wong EB, Tanser F. (2024) Convergence of HIV and non-communicable disease epidemics: Geospatial mapping of the unmet health needs in a HIV Hyperendemic South African community. *BMJ Global Health*

97. Cuadros DF, Huang Q, Mathenjwa T, Gareta D, Devi C, Musuka G. (2024) Unlocking the Potential of Telehealth in Africa for HIV: Opportunities, Challenges, and Pathways to Equitable Healthcare Delivery. *Frontiers in Digital Health*
96. Cuadros DF, Chen X, Li J, Omori R, Musuka G. (2024) Advancing Public Health Surveillance: Integrating Modeling and GIS in the Wastewater-Based Epidemiology of Viruses, a Narrative Review. *Pathogens*
95. Kemp S, Kamelian K, Cuadros DF, Cheng M, Okango E, Hanekom W, Ndung'u T, Pillay D, Bonsall D, Wong E, Gupta R. (2024) HIV transmission dynamics and population-wide drug resistance in rural South Africa. *Nature Communications*
94. Utpatel C, Zavaleta M, Rojas-Bolivar D, Mulhbach A, Picoy J, Portugal W, Esteve-Solé A, Alsina L, Miotto P, Bartholomeu D, Sanchez J, Cuadros DF, Alarcon J, Niemann S, Huaman M. (2024) Prison as a Driver of Recent Transmissions of Multidrug-Resistant Tuberculosis in Callao, Peru. *The Lancet Regional Health Americas*
93. Mapingure M, Chingombe I, Dzinamarira T, Cuadros DF, Murewanhema G, Moyo B, Samba C, Mpofu A, Mugurungi O, Herrera H, Musuka G. (2024) Condomless anal intercourse among HIV-positive and HIV-negative men who have sex with men in Zimbabwe. *Southern African Journal of HIV Medicine*
92. Dzinamarira T, Moyo E, Murewanhema G, Cuadros DF, Kouamou V, Mpofu A, Musuka G. (2024) Strengthening and Enhancing National Antiretroviral Drug Resistance Surveillance in Zimbabwe – A Country That Has Reached UNAIDS 95-95-95 amongst adults. *Frontiers in Public Health*
91. Dzinamarira T, Mapingure M, Chingombe I, Cuadros DF, Eghtessadi R, Mutenherwa F, Herrera H, Madziva R, Mukwenha S, Murewanhema G, Musuka G. (2024) Using machine learning models to plan HIV services: emerging opportunities in design, implementation, and evaluation. *South African Medical Journal*
90. Musuka G, Dzinamarira T, Chingombe I, Herrera H, Cuadros DF, Mbunge E, Murewanhema G, Moyo E, Makota R, Mapingure M. (2024) HIV status and contraceptive use in Zimbabwe among sexually active adolescent girls and women: Secondary analysis of Zimbabwe Demographic Health survey data. *South African Medical Journal*
89. Musuka G, Dzinamarira T, Chingombe I, Mbunge M, Herrera H, Cuadros DF, Mbunge E, Murewanhema G, Moyo E, Makota R, Mapingure M. (2024) Rural-urban disparities and socioeconomic determinants of caesarian delivery rates in Zimbabwe: Evidence from 2019 National Multiple Indicator Cluster Survey. *South African Medical Journal*
88. Dzinamarira T, Moyo E, Cuadros DF, Herrera H, Mano O, Munyonyho M, Mhango M, Musuka G. (2024) Occupational Health Risks and HIV Prevention Programming for Informal Extractive Miners in Sub-Saharan Africa: A Narrative Review of Interventions, Challenges, and Lessons Learned. *Merits*
87. Cuadros DF, Moreno CM, Miller FD, Omori R, MacKinnon NJ. (2023) Assessing access to digital services in healthcare-under-served communities in the United States: A cross-sectional study. *Mayo Clinic Proceedings: Digital Health*
86. Cuadros DF, Gutierrez JD, Moreno CM, Escobar S, Miller FD, Musuka G, Omori R, Coule P, MacKinnon NJ. (2023) Impact of healthcare capacity disparities on the COVID-19 vaccination coverage in the United States: A cross-sectional study. *The Lancet Regional Health Americas*
85. Cuadros DF, Moreno M, Tomita A, Singh U, Olivier S, Castle A, Moosa Y, Edwards JA, Kim HY, Siedner M, Wong EB, Tanser F. (2023) Geospatial assessment of the convergence of communicable and non-communicable diseases in South Africa. *Journal of Multimorbidity and Comorbidity*
84. Cuadros DF, Chowdhury T, Milali M, Citron D, Nyimbili S, Vlahakis N, Savory T, Mulenga LB, Sivile S, Zyambo K, Bershteyn A. (2023) Geospatial Patterns of Progress towards UNAIDS 95-95-95 Targets and Community Vulnerability in Zambia. *BMJ Global Health*
83. Cuadros DF, Branscum A, Moreno CM, MacKinnon N. (2023) Narrative minireview of the spatial epidemiology of substance use disorder in the United States: Who is at risk and where? *World Journal of Clinical Cases*
82. Singh U, Olivier S, Cuadros DF, Castle A, Moosa Y, Edwards JA, Kim HY, Siedner M, Tanser F, Wong EB. (2023) Quantifying met and unmet health needs for HIV, hypertension and diabetes in rural KwaZulu-Natal, South Africa. *The Lancet Global Health*
81. Li J, Changjoo K, Cuadros DF, Tao Z, Jia P. (2023) Changes of Grocery Shopping Frequencies and Associations with Food Deserts during the COVID-19 Pandemic in the United States. *Journal of Urban Health*
80. Mngadi L, Cuadros DF, Tanser T, Burns JK, Slotow R, Tomita A. (2023) Water, sanitation and depression in rural communities: evidence from nationally representative study data in South Africa. *Psychology, Health & Medicine*
79. Mapingure M, Dzinamarira T, Mukandavire Z, Chingombe I, Cuadros DF, Eghtessadi R, Mutenherwa F, Herrera H, Madziva R, Mukwenha S, Murewanhema G, Musuka G. (2023) Understanding the role of intimate partner violence on HIV transmission in Zimbabwe: Secondary data analysis of data from the Zimbabwe demographic survey 2015-2016. *Health Promotion Perspectives*
78. Musuka G, Moyo E, Cuadros DF, Herrera H, Dzinamarira T. (2023) Redefining HIV Care: A Path Towards Sustainability Post-UNAIDS 95-95-95 Targets. *Frontiers in Public Health*

77. Roberts A, Cuadros DF, Vandormael A, Gareta D, Barnabas R, Herbst K, Frank T, Akullian A. (2022) Predicting the risk of HIV-1 acquisition in rural South Africa using geospatial data. *Clinical Infectious Diseases*
76. Asare K, Tomita A, Garrett N, Slotow R, Burns JK, Tanser F, Cuadros DF. (2022) Depression onset and its association with community HIV prevalence: a geospatial and panel analyses of nationally representative South African data, 2015-2017. *Journal of Affective Disorders Reports*
75. Princess N, Cuadros DF, Tanser T, Slotow R, Burns JK, Tomita A. (2022) Spatial clustering of codeine misuse and its association with depression: a geospatial analysis of nationally representative South African data. *Journal of Affective Disorders Reports*
74. Kim H-Y, Cuadros DF, Wilkinson E, Junqueira DM, Oliveira T, Tanser F. (2022) Spatial network configuration emerging from the sexual partnership formation in a HIV hyper-endemic rural community in South Africa. *PLOS Global Public Health*
73. Tomita A, Cuadros DF, Slotow R. (2022) Syndemics and a renewed path for addressing intimate partner violence among women in South Africa's aging HIV endemic era: geospatial analysis of nationally representative data, 2017. *Scientific Reports*
72. Dzinamarira T, Murewanhema G, Cuadros DF, Iradukunda PG, Madziva R, Herrera H, Tungwarara N, Chitungo I, Musuka G. (2022) Predicting HIV status among men who have sex with men using recurrent neural networks and machine learning techniques. *Tropical Medicine and Infectious Disease*
71. Dzinamarira T, Murewanhema G, Iradukunda PG, Madziva R, Herrera H, Cuadros DF, Tungwarara N, Chitungo I, Musuka G. (2022) Utilization of SARS-CoV-2 Wastewater Surveillance in Africa — A Rapid Review. *International Journal of Environmental Research and Public Health*
70. Musuka G, Mukandavire Z, Chingombe I, Cuadros DF, Murewanhema G, Mutenherwa F, Dzinamarira T, Eghtessadi R, Mapingure M. (2022) HIV status, knowledge and prevention of cervical cancer amongst adolescent girls and women: Secondary analysis of Zimbabwe Demographic Health survey. *Pan African Medical Journal*
69. Murewanhema G, Chitungo I, Ngara N, Nkambule JN, Madziva R, Herrera H, Mukwenha M, Cuadros DF, Iradukunda GP, Mashora M, Tungwarara T, Rwibasira NR, Musuka G. (2022) Risk of mortality in HIV-infected COVID-19 patients: A systematic review and meta-analysis. *Journal of Infection and Public Health*
68. Cuadros DF, Moreno CM, Musuka G, Miller FD, Coule P, MacKinnon NJ. (2022) Association between vaccination coverage disparity and the dynamics of the COVID-19 Delta and Omicron waves in the US. *Frontiers in Medicine*
67. Cuadros DF, de Oliveira T, Gräf T, Junqueira DM, Wilkinson E, Lemey P, Bärnighausen T, Tanser F. (2022) Role of high-risk communities in the spread of the HIV epidemic in rural South Africa. *PLOS Global Public Health*
66. Cuadros DF, Miller FD, Awad S, Coule P, MacKinnon NJ. (2022) Analysis of Vaccination Rates and New COVID-19 Infections by US County, July-August 2021. *JAMA Network Open*
65. Cuadros DF, Li J, Musuka G, Awad S. (2021) Spatial epidemiology of diabetes: Methods and insights. *World Journal of Diabetes*
64. Cuadros DF, Branscum AJ, Mukandavire Z, Miller FD, MacKinnon NJ. (2021) Spatiotemporal dynamics of the COVID-19 epidemic in rural and urban areas in the United States. *Annals of Epidemiology*
63. Kim H, Musuka GN, Mukandavire Z, Branscum AJ, Cuadros DF. (2021) When distance matters: Mapping HIV health care underserved communities in sub-Saharan Africa. *PLOS Global Public Health*
62. Awad S, Musuka G, Mukandavire Z, Froass D, MacKinnon NJ, Cuadros DF. (2021) Implementation of a vaccination program based on epidemic geospatial attributes: COVID-19 pandemic in Ohio as a case study and proof of concept. *Vaccines*
61. Wilkinson E, Giovanetti M, Tegally H, San JE, Lessels R, Cuadros DF, Mulder N, et al. (2021) A year of genomic surveillance reveals how the SARS-CoV-2 pandemic unfolded in Africa. *Science*
60. Musuka G, Dzinamarira T, Cuadros DF, Chingombe I, Murewanhema G, Mapingure M. (2021) Diarrhoea in children under 5 years: Insights from the Zimbabwe Demographic Health survey (2015-16). *Food Science & Nutrition*
59. Dzinamarira T, Mukwenha S, Mukandavire M, Cuadros DF, Murewanhema G, Madziva R, Musuka G. (2021) Insights from Zimbabwe's SARS-CoV-2 genomic epidemiology surveillance. *The Lancet Global Health*
58. Murewanhema G, Mukwenha S, Dzinamarira T, Mukandavire Z, Cuadros DF, Madziva R, Chingombe I, Mapingure M, Herrera H, Musuka G. (2021) Optimising COVID-19 Vaccination Policy to Mitigate SARS-CoV-2 Transmission within Schools in Zimbabwe. *Vaccines*
57. Dzinamarira T, Mukwenha S, Mukandavire M, Cuadros DF, Murewanhema G, Madziva R, Musuka G. (2021) Coronavirus Disease 2019 (COVID-19) Response in Zimbabwe: A Call for Urgent Scale-up of Testing to meet National Capacity. *Clinical Infectious Diseases*

56. Tomita A, Layna GH, Rohr JK, Kim H-J, Moodley Y, Mpolya E, Mogeni P, Cuadros DF, Killewo J, Bärnighausen T, Tanser F. (2021) Patterns of multimorbidity and hospitalization among older adults in Dar es Salaam, Tanzania: a population-based analysis. *Age and Ageing*
55. Musuka G, Dzinamarira T, Cuadros DF, Chingombe I, Murewanhema G, Mapingure M. (2021) Mothers' HIV status and the nutritional status of their children: insights from secondary analysis of the Zimbabwe Demographic Health survey data (2015-2016). *Food Science & Nutrition*
54. Wong E, Koole O, Olivier S, Gunda R, Cuadros DF, Pillay D. (2021) Convergence of infectious and non-communicable diseases in South Africa. *The Lancet Global Health*
53. Correa-Agudelo E, Kim HY, Musuka G, Mukandavire Z, Miller FDW, Tanser F, Cuadros DF. (2021) The epidemiological landscape of anemia in women in sub-Saharan Africa. *Scientific Reports*
52. Hernandez A, Lan M, MacKinnon N, Branscum AJ, Cuadros DF. (2021) "Know your epidemic, know your response": Epidemiological assessment of the substance abuse disorder crisis in the United States. *PLOS ONE*
51. Kim H, Tanser F, Tomita A, Vandormael A, Cuadros DF. (2021) Beyond HIV prevalence: Identifying people living with HIV within underserved areas in South Africa. *BMJ Global Health*
50. Correa-Agudelo E, Mersha TB, Hernández A, Branscum AJ, MacKinnon NJ, Cuadros DF. (2021) Identification of Vulnerable Populations and Areas at Higher Risk of COVID-19 Related Mortality During the Early Stage of the Epidemic in the U.S. *International Journal of Environmental Research and Public Health*
49. Correa-Agudelo E, Kim HY, Musuka GN, Mukandavire Z, Akullian A, Cuadros DF. (2021) Associated health and social determinants of mobile populations across HIV epidemic gradients in Southern Africa. *Journal of Migration and Health*
48. Mapingure M, Mukandavire Z, Chingombe I, Cuadros DF, Mutenherwa F, Mugurungi OM, Musuka GN. (2021) Understanding HIV and associated risk factors among religious groups in Zimbabwe. *BMC Public Health*
47. Akullian A, Vandormael A, Miller J, Bershteyn A, Wenger E, Cuadros DF, Tanser F. (2021) Large age-shifts in HIV-1 incidence patterns in KwaZulu-Natal, South Africa reveal an urgent need to expand demographic targets for HIV prevention programs. *PNAS*
46. Cuadros DF, Xiao Y, Mukandavire Z, Correa-Agudelo E, Hernández A, Kim H, MacKinnon NJ. (2020) Spatiotemporal transmission dynamics of the COVID-19 pandemic and its impact on critical healthcare capacity. *Health & Place*
45. Dzinamarira T, Mukwenha S, Eghtessadi R, Cuadros DF, Mhlanga G, Musuka G. (2020) COVID-19 response in Zimbabwe: A Call for Urgent Scale-up of Testing to meet National Testing Capacity. *Clinical Infectious Diseases*
44. Vandormael A, Cuadros DF, Dobra A, Bärnighausen T, Tanser F. (2020) HIV incidence declines in a rural South African population: a G-imputation approach for inference. *BMC Public Health*
43. Eghtessadi R, Mukandavire Z, Mutenherwa F, Cuadros DF, Musuka G. (2020) Safeguarding gains in the Sexual and Reproductive Health and HIV Response: The role of African Civil Society amidst COVID-19. *International Journal of Infectious Diseases*
42. Tomita A, Cuadros DF, Mabhaudhi T, Sartorius B, Ncama B, Tanser F, Modi A, Slotow R, Burns JK. (2020) Spatial clustering of food insecurity and its impact on depression: A panel and geospatial analysis of nationally representative South African data, 2008-2015. *Scientific Reports*
41. Mukandavire Z, Malunguza NJ, Cuadros DF, Shiri T, Musuka G, Nyabadza F. (2020) Quantifying early COVID-19 outbreak transmission in South Africa and exploring vaccine efficacy scenarios. *PLOS ONE*
40. Tomita A, Cuadros DF, Burns JK, Tanser F, Slotow R. (2020) Distance to waste site and its impact on health: A panel and geospatial analysis of nationally representative South African data, 2008-2015. *The Lancet Planetary Health*
39. Kim H, Miller FD, Tanser F, Mogeni P, Ouyang Q, Cuadros DF. (2020) Space-time analysis of insecticide-treated net use in relation to socio-economic gradients in sub-Saharan Africa. *Malaria Journal*
38. Hernandez AM, Jia P, Kim HY, Cuadros DF. (2020) Geographic Variation and Risk Factors of the Diabetes Epidemic in India: Findings from a National Representative Survey in 2015-6. *JAMA Network Open*
37. Mukandavire Z, Manangazira P, Nyabadza F, Cuadros DF, Musuka G, Morris JG Jr. (2020) Stemming Cholera tides in Zimbabwe through mass vaccination. *International Journal of Infectious Diseases*
36. Mogeni P, Vandormael A, Cuadros DF, Appleton C, Tanser F. (2020) Effects of community piped water coverage on re-infection with urogenital schistosomiasis among primary school children in rural KwaZulu-Natal, South Africa. *eLife* 9, e54012
35. Vandormael A, Cuadros DF, Kim HY, Bärnighausen T, Tanser F. (2020) The state of the HIV epidemic in rural KwaZulu-Natal, South Africa: novel application of epidemic metrics to assess trajectories and highlight areas requiring intervention. *International Journal of Epidemiology*

34. Kim HY, Harling G, Vandormael A, Tomita A, Cuadros DF, Bärnighausen T, Tanser F. (2020) HIV serosorting among heterosexual couples in rural KwaZulu-Natal, South Africa: a population-based analysis. *Journal of the International AIDS Society*
33. Hernandez AM, Li J, Mackinnon N, Hincapie A, Cuadros DF. (2020) Epidemiological and geospatial profile of the prescription opioid crisis in Ohio, United States. *Scientific Reports*
32. Vandormael A, Tanser F, Cuadros DF, Dobra A. (2019) Estimating trends in the incidence rate with interval censored data and time-dependent covariates. *Statistical Methods in Medical Research*
31. Kim H, Branscum AJ, Miller FD, Cuadros DF. (2019) Geospatial assessment of the voluntary medical male circumcision programme implemented in Tanzania from 2011 to 2016. *BMJ Global Health*
30. Hernandez AM, Gutierrez JD, Xiao Y, Branscum AJ, Cuadros DF. (2019) Spatial epidemiology of cutaneous leishmaniasis in Colombia: Socio-economic and demographic factors associated with a growing epidemic. *Transactions of The Royal Society of Tropical Medicine and Hygiene* trz043
29. Cuadros DF, Li J, Mukandavire Z, Musuka GN, Branscum AJ, Sartorius B, Tanser F. (2019) Towards UNAIDS Fast-Track goals: Targeting priority geographic areas for HIV prevention and care in Zimbabwe. *AIDS* 33(2):305-3014
28. Cuadros DF, Tomita A, Vandormael A, Slotow R, Burns JK, Tanser F. (2019) Spatial structure of depression in South Africa: A longitudinal panel survey of a nationally representative sample of households. *Scientific Reports* 9:979
27. Cuadros DF, Branscum AJ, Mukandavire Z. (2018) Temporal stability of HIV prevalence in high burden areas regardless of declines in national HIV prevalence in Malawi and Zimbabwe. *AIDS* 32(10): 1381-1383
26. Cuadros DF, Sartorius B, Hall C, Akullian A, Bärnighausen T, Tanser F. (2018) Capturing the spatial variability of HIV epidemics in South Africa and Tanzania using routine healthcare facility data. *International Journal of Health Geographics*, 17(1), 27
25. Meyer-Rath G*, McGillen JB*, Cuadros DF*, Hallett TB, Bhatt S, Wabiri N, Tanser F, Rehle T. (2018) Targeting the right interventions to the right people and places: the role of geospatial analysis in HIV programme planning (*equal authorship). *AIDS* 32(8): 957-963
24. Tanser F, Vandormael AM, Cuadros DF, Phillips A, de Oliveira T, Tomita A, Bärnighausen T, Pillay D. (2017) Effect of population viral load on prospective HIV incidence in a hyper-endemic rural African community. *Science Translational Medicine* 9(420), eaam8012
23. Wang J, Jia P, Cuadros DF, Xu M, Wang X, Guo W, Portnov A, Bao Y, Chang Y, Song G, Chen N, Stein A. (2017) A remote sensing data based artificial neural network approach for predicting climate-sensitive infectious disease outbreaks: a case study of human brucellosis. *Remote Sensing* 9(10), 1018
22. Tomita A, Vandormael AM, Cuadros DF, Minin E, Heikinheimo V, Tanser F, Slotow R, Burns JK. (2017) Green environment and incident depression in South Africa: Geospatial evidence and sustainable development implications for mental health in resource-limited settings. *The Lancet Planetary Health* 1(4), e152-e162
21. Ismail SA*, Cuadros DF*, Benova L. (2017) Hepatitis B infection in Egypt: a cross-sectional analysis of prevalence and risk factors for active infection from a nationwide survey (*equal authorship). *Liver International* DOI: 10.1111/liv.13469
20. Tomita A, Vandormael AM, Cuadros DF, Slotow R, Tanser F, Burns JK. (2017) Proximity to health care clinic and depression risk in South Africa: Geospatial evidence from a population-based longitudinal study. *Social Psychiatry and Psychiatric Epidemiology* 52(8):1023-1030
19. Cuadros DF, Li J, Branscum A, Akullian A, Peng J, Mziray E, Tanser F. (2017) Mapping the spatial variability of HIV infection in Sub-Saharan Africa: Effective information for localized HIV prevention and control. *Scientific Reports* 7: 9093
18. Cuadros DF, Hernandez A, Torres MF, Torres MF, Branscum AJ, Rincon DF. (2017) Vector transmission alone fails to explain the potato yellow vein virus epidemic among potato crops in Colombia. *Frontiers in Plant Science* DOI: 10.3389/fpls.2017.01654
17. Cuadros DF, Abu-Raddad LJ. (2016) Geographical Patterns of HIV Sero-discordancy in High HIV Prevalence Countries in Sub-Saharan Africa. *International Journal of Environmental Research and Public Health* 13(9): 865
16. Hallett T, Anderson S, Asante C, Adobea B, Noah V, Bhatt S, Clara C, Cuadros DF, Dzagare J, Fecht D, Gething PW, Ghys P, Guwani J, Heard N, Kalipeni E, Kandala NB, Kim A, Kwao ID, Larmarange J, Manda S, Moise I, Montana L, Mwai D, Mwalili S, Shortridge A, Tanser F, Wanyeki I, Zulu L. (2016) Evaluation of geospatial methods to generate subnational HIV prevalence estimates for local level planning. *AIDS* 30(9):1467-1474
15. Miller D, Hassani S, Elzabany M, Cuadros DF. (2015) The epidemiology of hepatitis C virus exposure in Egypt: Opportunities for prevention and evaluation. *World Journal of Hepatology* 7(28): 2849-2858
14. Cuadros DF, Miller D, Nagelkerke N, Abu-Raddad LJ. (2015) Association between HCV infection and diabetes type 2 in Egypt: Is it time to split up? *Annals of Epidemiology* 25(12): 918-923

13. Cuadros DF, Branscum A, Miller D, Awad SF, Abu-Raddad LJ. (2015) Are geographical “cold spots” of male circumcision driving differential HIV dynamics in Tanzania? *Frontiers in Public Health* 3: 218
12. Cuadros DF, Branscum A, Miller D, Abu-Raddad LJ. (2014) Spatial epidemiology of hepatitis C virus infection in Egypt: Analyses and implications. *Hepatology* 60: 1150-1159
11. Cuadros DF, Abu-Raddad LJ. (2014) Spatial variability in HIV prevalence declines in several countries in sub-Saharan Africa. *Health & Place* 28: 45-49
10. Cuadros DF, Abu-Raddad LJ, Awad SF, García-Ramos G. (2014) Use of agent-based simulations to design and interpret HIV clinical trials. *Computers in Biology and Medicine* 50: 1-8
9. Torres MF, Cuadros DF, Vaillancourt LJ. (2014) Evidence for a diffusible factor that induces susceptibility in the Colletotrichum-maize disease interaction. *Molecular Plant Pathology* 15(1): 80-93
8. Mohamoud Y, Cuadros DF, Abu-Raddad LJ. (2013) Characterizing the Copts in Egypt: Demographic, socioeconomic and health indicators. *QScience Connect* 89 (11): 87
7. Cuadros DF, Awad SF, Abu-Raddad LJ. (2013) Mapping HIV clustering: A strategy for identifying populations at high risk of HIV infection in sub-Saharan Africa. *International Journal of Health Geographics* 12:28
6. Cuadros DF, Abu-Raddad LJ. (2012) From individuals to populations: Immunological and epidemiological significance of co-infection in the dynamics of HIV. *Journal of Clinical & Cellular Immunology* S7: 002
5. Cuadros DF, Garcia-Ramos G. (2012) Variable effect of co-infection on the HIV infectivity: Within-host dynamics and epidemiological significance. *Theoretical Biology and Medical Modelling* 9: 9
4. Cuadros DF, Branscum AJ, Crowley PH. (2012) Authors' response: HIV-malaria co-infection: effects of malaria on the prevalence of HIV in East sub-Saharan Africa. *International Journal of Epidemiology* 41(3):891-892
3. Cuadros DF, Branscum AJ, Crowley PH. (2011) HIV-malaria co-infection: effects of malaria on the prevalence of HIV in East sub-Saharan Africa. *International Journal of Epidemiology* 40(4): 931-939
2. Cuadros DF, Crowley PH, Augustine B, Stewart SL, Garcia-Ramos G. (2011) Effect of variable transmission rate on the dynamics of HIV in sub-Saharan Africa. *BMC Infectious Diseases* 11(1): 216
1. Cuadros DF, Branscum AJ, Garcia-Ramos G. (2011) No evidence of association between HIV-1 and malaria in populations with low HIV-1 prevalence. *PLOS ONE* 6(8): e23458

SUBMITTED MANUSCRIPTS

14. Cuadros DF, Chen X, Tang M. Toward sub-sewershed spatio-temporal wastewater surveillance. A critical review and a candidate multimodal foundation-model framework.
13. Osoro BO, Li J, Tang M, Chen X, Merrill K, Forbes L, Simms B, Wheeler P, Adeyemi C, Cuadros DF. Family Specific Spatial Borrowing in Multimodal Urban Reconstruction: A Leave One Neighborhood Out Study of Cincinnati.
12. Escobar S, Cao Y, Le J, Ambade PN, MacKinnon N, Chakilam R, Miller FD, Cuadros DF. Concentration, Redistribution, and Recurrence in the Transmission of COVID-19 Across Five Pandemic Periods in the Contiguous United States, 2020–2022.
11. Cuadros DF, Maiga AA, Thatham S, Ortiz A, Powers-Fletcher M, Tang M. Differentiated memory and scientific cognition in AI research agents.
10. Cuadros DF, Maiga AA, Meskhidze H, Curtis-Trudel A. Governed Collaborative Memory as Artificial Selection in LLM-Based Multi-Agent Systems.
9. Milali MP, Assefa F, Gathungu DK, Mwalili S, Sivile S, Mulenga L, Braithwaite RS, Cuadros DF, Bershteyn A. Machine Learning Approaches to Identify Communities with High HIV Prevalence in Resource-Limited Settings using Social, Economic and Behavioral Data.
8. Kim H, Escobar S, Okebugwu J, Bershteyn A, Cuadros DF. Spatial-cohort analysis of male circumcision in Zambia, 2013–2021: evidence for converging coverage, persistent gaps, and opportunities for micro-planning.
7. Wu Z, Wu H, Mathenjwa T, Okango E, Tram KH, Otto M, Inghels M, Mee P, Cuadros DF, Kim HY, Bärnighausen T, Tanser F, Dobra A. Estimating Population Viral Load Contextual Exposure Using GPS-Derived Activity Spaces in Rural South Africa.
6. Okango E, Otto M, Tram KH, Dobra A, Kim HY, Mee P, Inghels M, Cuadros DF, Bershteyn A, Gareta D, Bärnighausen T, Tomita A, Mwambi H, Herbst K, Frank T. Evaluating the path towards HIV epidemic control in South Africa: Evidence from a population-based longitudinal cohort study.
5. Chowdhury MT, Bershteyn A, Cuadros DF. National Progress, Persistent Inequity: Age-Sex and Geographic Disparities in Zimbabwe's HIV Care Cascade.

4. Cuadros DF, Maiga AA. Ambient Persuasion: Non-Adversarial Behavioral Manipulation in a Deployed AI Agent System.
3. Cuadros DF, Maiga AA. Toward an Ecology of AI Agent Ecosystems.
2. Osoro O, Fusheini Z, Mokori A, Mubiri P, Namukose S, Mateeba T, Murungi A, Nabukeera-Barungi N, Rujumba R, Kamugisha JJ, Cuadros DF. Facility bypassing and service utilization in central Uganda's acute malnutrition programme: a geospatial analysis.
1. Gutiérrez JD, Quintero-García WL, Xiao Y, Miller FD, Cuadros DF. Anthropogenic Landscapes and Vector-Borne Disease Dynamics: Unveiling the Complex Interplay between Human Footprint and Disease Transmission in Colombia.

PUBLISHED BOOK CHAPTERS

4. Cuadros DF, Devi C, MacKinnon N. (2023) Using Spatial Epidemiology to Better Understand COVID in Ohio. In "Ohio Under COVID".
3. Huang Q, Cuadros DF, Sun Z. (2023) Actionable Science in Environmental Health. In "Actionable Science of Global Environment Change: From Big Data to Practical Research".
2. Dzinamarira T, Murewanhema G, Cuadros DF, Iradukunda PG, Madziva R, Herrera H, Tungwarara N, Chitungo I, Musuka G. (2022) Predicting HIV status among men who have sex with men using recurrent neural networks and machine learning techniques. In "Artificial Intelligence Trends in Systems".
1. Grigoryan S, Kelly SL, Papoyan A, Hovhannisyan R, Grigoryan T, Wilson DP, Cuadros DF, Heard W. (2020) Armenia: Mobilizing an HIV Response When a Key Population Is Mobile. In "Tackling the World's Fastest-Growing HIV Epidemic: More Efficient HIV Responses in Eastern Europe and Central Asia".

CONFERENCE PROCEEDINGS

7. Cuadros DF, Singh U, Olivier S, Moosa Y, Edwards A, Kim H-Y, Siedner M, Wong E, Tanser F. (2022) Collision of HIV and non-communicable disease epidemics: Mapping health needs among a HIV hyperendemic community in rural South Africa. *Journal of the International AIDS Society* 25(S3) e25935
6. Cuadros DF, Mziray E, Abu-Raddad LJ. (2015) Incorporating spatial variability to generate sub-national estimates of HIV prevalence. *Sexually Transmitted Infections* 91(A50)
5. Cuadros DF, Miller D, Nagelkerke N, Abu-Raddad LJ. (2015) Are diabetics less likely to have a cleared hepatitis C virus infection? *Journal of Viral Hepatitis* 22 (Suppl S2): 59
4. Cuadros DF, Abu-Raddad LJ. (2013) Spatial variability in the decline of HIV prevalence in three countries in sub-Saharan Africa. *Sexually Transmitted Infections* 89 (Suppl 1): A213
3. Cuadros DF, Abu-Raddad LJ. (2013) Investigating the drivers of the hepatitis C virus epidemic in Egypt. *Qatar Foundation Annual Research Forum Proceedings 2013 (BIOP 083)*
2. Cuadros DF, Abu-Raddad LJ, Garcia-Ramos G. (2012) HIV prevention randomized clinical trials: Quantitative and analytical insights on the failure to measure efficacy. *International Journal of Infectious Diseases* 16: e181
1. Awad SF, Cuadros DF, Abu-Raddad LJ. (2012) Characterizing HIV prevalence distribution across sub-populations at variable levels of sexual behavior. *International Journal of Infectious Diseases* 16: e180-e181
1. New grant: NIH R01 on AI-driven HIV surveillance, 2026-2031, PI, \$2.5M

PRESENTATIONS

INVITED TALKS

23. Uncovering the hidden geography of HIV: From prevalence hotspots to gaps in care. (2025) Research Forum, Infectious Disease Institute, Uganda.
22. Assessing the role of geographical HIV hotspots in the spread of the epidemic. (2024) Mathematical and Physical Sciences Conference 2024, Jomo Kenyatta University of Agriculture and Technology, Kenya.
21. Evolution of HIV transmission networks in rural South Africa. (2024) PANGAEA meeting 2024.
20. Geospatial analyses to model the interplay between pandemics and chronic illnesses. (2024) Interplay between global infectious diseases and chronic illnesses Seminar, Pontificia Universidad Javeriana.
19. Epidemiology of COVID-19 in the U.S.: A geospatial modelling approach. (2023) 6th Strathmore International Mathematics Conference (SIMC 2023).
18. Epidemiology of COVID-19 in the US. (2022) Division of Infectious Diseases, University of Cincinnati College of Medicine.

17. Spatial epidemiology of COVID-19 in the US: Two years into the pandemic. (2022) Department of Population Health Sciences, Augusta University.
16. Spatial ecology of vector borne diseases and its application in precision epidemiology. (2022) 49th Congress of the Colombian Entomological Society.
15. Spatial epidemiology of COVID-19 in the U.S. (2021) Emirates Aviation University.
14. Spatial epidemiology of the substance use disorder in the US. (2020) College of Public Health & Human Sciences, Oregon State University, US.
13. Mapping HIV in Sub-Saharan Africa. (2020) Department of Epidemiology and Biostatistics, University of Cape Town, South Africa.
12. COVID-19 and Public Health Policy in the USA: The Good, the Bad, and the Ugly. (2020) Department of Community Health and Epidemiology, Dalhousie University, Canada.
11. Assessing the role of priority geographic areas in the spread of the HIV epidemic. (2019) Infectious Disease Institute, Kampala, Uganda.
10. The ecology of HIV infection in sub-Saharan Africa. (2019) Department of Biology, University of Cincinnati.
9. The role of HIV hotspots in the spread of the epidemic in South Africa. (2019) PANGAEA meeting, Durban, South Africa.
8. Atlas of vector-borne diseases in Colombia: A community ecology approach for the study and management of infectious diseases. (2019) 46th Congress of the Entomological Society of Colombia, Medellin, Colombia.
7. The HIV epidemic in sub-Saharan Africa: From social networks to maps. (2017) Emergent Properties of Individual Behavior Workshop, University of Kentucky, Lexington, US.
6. The HIV epidemic in sub-Saharan Africa: Why do we need maps, and why aren't we good at it? (2017) James L. Winkle College of Pharmacy, University of Cincinnati, Cincinnati, US.
5. Surviving the next plague: Disease prediction. (2016) GIS Day, University of Cincinnati, Cincinnati, US.
4. Spatial epidemiology of HIV: A methodology for identifying populations at high risk of HIV infection in sub-Saharan Africa. (2016) Africa Centre for Population Health, Mtubatuba, South Africa.
3. The geography of HIV infection in Tanzania. (2015) Centers for Disease Control and Prevention – Tanzania, Dar Es Salaam, Tanzania.
2. HIV Allocative Efficiency Tools in Action: Examples from Three Countries. (2015) HIV Modelling Consortium, Vancouver, Canada.
1. Incorporating spatial variability to generate sub-national estimates of HIV prevalence. (2014) HIV Modelling Consortium, Nairobi, Kenya.

ORAL PRESENTATIONS

14. Cuadros DF, Escobar S, Machinon N, Ambade P, Hoffman Z. (2024) The Evolving Landscape of Substance Use Disorder Mortality in the United States. American Association of Geographers 2024 meeting.
13. Cuadros DF, Moreno CM, Miller FD, Omori R, MacKinnon NJ. (2023) Assessing access to digital services in healthcare-under-served communities in the United States. American Association of Geographers 2023 meeting.
12. Cuadros DF, Singh U, Olivier S, Moosa Y, Edwards A, Kim H-Y, Siedner M, Wong E, Tanser F. (2022) Collision of HIV and non-communicable disease epidemics: Mapping health needs among a HIV hyperendemic community in rural South Africa. 24th International AIDS Conference.
11. Cuadros DF, Graf T, Oliveira T, Barnighausen T, Tanser F. (2018) Assessing the role of geographical HIV hot-spots in the spread of the HIV epidemic. Conference on Retroviruses and Opportunistic Infections (CROI) 2018.
10. Cuadros DF. (2017) The HIV epidemic in sub-Saharan Africa: From social networks to maps. 5th Annual Disease Modeling Symposium.
9. Cuadros DF, Tomita A, Vandormael A, Slotow R, Burns J, Tanser F. (2017) Spatial clustering of depression in Africa. American Association of Geographers 2017 meeting.
8. Cuadros DF, Abu-Raddad LJ. (2015) Spatial epidemiology of HIV Infection in Sub-Saharan Africa: A methodology for identifying populations at high risk of HIV. World STI & HIV Congress 2015.
7. Cuadros DF, Abu-Raddad LJ. (2015) The geography of HIV infection in sub-Saharan Africa: Valleys, dams and islands. American Association of Geographers 2015 meeting.

6. Cuadros DF, Awad SF, Abu-Raddad LJ. (2014) Drivers of the HIV infection in sub-Saharan Africa: A geographical approach. Joint Annual Meeting of the Japanese Society for Mathematical Biology and the Society for Mathematical Biology.
5. Cuadros DF, Branscum A, Awad SF, Abu-Raddad LJ. (2014) Are “cold-spots” of male circumcision driving the spatial distribution of HIV infection in Tanzania? 20th International AIDS Conference.
4. Cuadros DF, Branscum A, Miller D, Abu-Raddad LJ. (2014) Spatial epidemiology of hepatitis C virus epidemic in Egypt. Endemic and Emerging Viral Diseases of Priority in the Middle East and North Africa (MENA): A Scientific Workshop to Promote Research Collaboration.
3. Cuadros DF, Branscum A, Abu-Raddad LJ. (2014) Spatial distribution of the hepatitis C virus epidemic in Egypt. Association of American Geographers 2014 meeting.
2. Cuadros DF, Awad SF, Abu-Raddad LJ. (2013) Generic patterns of HIV infection distribution in human populations. VII Latin-American Congress of Biomathematics.
1. Cuadros DF. (2009) Malaria and HIV coinfection in sub-Saharan Africa: a spatial statistical approach. CEEB Symposium, University of Kentucky.

POSTER PRESENTATIONS

16. Chowdhury MD, Bershteyn A, Milali M, Citron D, Nyimbili S, Musuka G, Cuadros DF. (2025) Spatiotemporal progress toward UNAIDS 95-95-95 in Zimbabwe: insights from ZIMPHIA 2015 & 2020. The 13th IAS Conference on HIV Science.
15. Cuadros DF, Awad S, Mee P, Tram K, Inghels M, Tomita A, Kim HY, Tanser F. (2024) Dynamic shifts in the HIV epidemic: Analyzing the evolution of risk groups in Sub-Saharan Africa. 25th International AIDS Conference.
14. Cuadros DF, Kemp S, Mee P, Tram K, Dobra A, Inghels M, Tomita A, Kim HY, Mathenjwa T, Gupta RK, Tanser F. (2024) Evolution of HIV transmission networks in rural South Africa. 25th International AIDS Conference.
13. Cuadros DF. (2023) Progress Towards UNAIDS 95-95-95 Targets in Zimbabwe. International Conference on AIDS and STIs in Africa (ICASA) 2023.
12. Kim H, Hernandez AM, Kim C, Cuadros DF. (2019) Factors Affecting the Use of Insecticide-treated Bed Nets (ITNs) Against Malaria in Sub-Saharan Africa. Association of American Geographers 2019 meeting.
11. Hernandez AM, Hincapie A, Heaton P, Mackinnon N, Li J, Cuadros DF. (2019) The opioid overdose crisis in the US: A spatially clustered growing epidemic. Association of American Geographers 2019 meeting.
10. Tomita A, Vandormael AM, Cuadros DF, Minin E, Heikinheimo V, Tanser F, Slotow R, Burns JK. (2018) A nationwide panel study on green environment and incident depression in South Africa: Sustainable development implications for mental health in resource-limited settings. 22nd Annual Conference of the Society for Social Work and Research (SSWR).
9. Cuadros DF, Li L, Mukandavire Z, Musuka G, Branscum A, Sartorius B, Tanser F. (2018) Towards UNAIDS 95-95-95 goal: targeting priority geographic areas for HIV prevention and care in Zimbabwe. 22nd International AIDS Conference.
8. Almarhoon Z, Cuadros DF, Guo J. (2018) Using geographic information system (GIS) to study the utilization trends of incretin-based and peptides therapies for type 2 diabetes in the US medicaid program. ISPOR 23rd Annual International Meeting.
7. Bershteyn A, Akullian A, Klein D, Jewell B, Vandormael A, Cuadros DF, Tanser F, Eckhoff P. (2018) Hotspots by random chance: small community size and isolation can explain “patchiness” in HIV epidemics. 22nd International AIDS Conference.
6. Akullian A, Bershteyn A, Klein D, Vandormael A, Cuadros DF, Tanser F. (2018) Spatial variation in HIV incidence in KwaZulu-Natal South Africa. Conference on HIV Dynamics and Evolution.
5. Cuadros DF, Sartorius B, Akullian A, Tanser F. (2017) Could clinic-based antenatal HIV prevalence data be used for geographical targeting of resource allocation? Insights from an HIV hyper-endemic rural community in South Africa. 9th IAS Conference on HIV Science.
4. Cuadros DF, Awad SF, Abu-Raddad LJ. (2013) Use of routine HIV testing data for early detection of HIV epidemics in hidden subpopulations. Fourth International Conference on Infectious Disease Dynamics.
3. Cuadros DF, Awad SF, Abu-Raddad LJ. (2013) Mapping HIV clustering: A strategy for identifying populations at high risk of HIV infection in sub-Saharan Africa. 7th IAS Conference on HIV Pathogenesis, Treatment and Prevention.
2. Cuadros DF, Abu-Raddad LJ, Garcia-Ramos G. (2012) HIV prevention randomized clinical trials: Quantitative and analytical insights on the failure to measure efficacy. Qatar Foundation Annual Research Forum.
1. Cuadros DF, Branscum AJ, Crowley PH. (2011) HIV-malaria co-infection: effects of malaria on the prevalence of HIV in East sub-Saharan Africa. Eastern North America Region (ENAR) International Biometric Society Spring meeting.

COURSES TAUGHT

- GIS and Public Health
GEOG5131/6031
- Medical Geography & Epidemiology
GEOG4000C
- Conservation Biogeography
GEOG2043C
- Introduction to Landscape Ecology and GIS
GEOG5015C/6015C
- Places, Plagues & People
GEOG1007

GRADUATE ADVISOR OR COMMITTEE MEMBER

ADVISOR

2017 – 2020	Andres Hernandez, PhD Department of Geography, University of Cincinnati
2017 – 2020	Hana Kim, PhD Department of Geography, University of Cincinnati
2018 – 2021	Esteban Correa, PhD Department of Geography, University of Cincinnati
2021 – 2023	Tuhin Chowdhury, MA Department of Geography, University of Cincinnati
2022 – 2024	Santiago Escobar, MA Department of Geography, University of Cincinnati
2022 – 2024	Chayanika Devi, MA Department of Geography, University of Cincinnati
2023 – present	Tuhin Chowdhury, PhD Department of Geography, University of Cincinnati
2023 – present	Joseph Katenkamp, PhD Department of Geography, University of Cincinnati
2024 – present	Tolulope Adedoyin, PhD Department of Geography, University of Cincinnati
2025 – present	Tahmina Younos, PhD Department of Geography, University of Cincinnati
2025 – present	Weiye Li, PhD Department of Geography, University of Cincinnati
2025 – present	Vivian Nakate, MA Department of Geography, University of Cincinnati

COMMITTEE MEMBER

2017 – 2020	Jingjing Li, PhD Department of Geography, University of Cincinnati
2017 – 2020	Minxuan Lan, PhD Department of Geography, University of Cincinnati
2017 – 2018	Yang Liu, MA Department of Geography, University of Cincinnati
2018 – 2020	Zahra Almarhoon James L. Winkle College of Pharmacy, University of Cincinnati
2020 – 2022	Mohammed Alsultan James L. Winkle College of Pharmacy, University of Cincinnati

FELLOWSHIPS AND AWARDS

2022	IAS/MSD Prize for Research in HIV Prevention The International AIDS Society Conference 2022
2017	Rising Star Award McMicken College of Arts & Sciences, University of Cincinnati
2011	Gertrude Flora Ribble Graduate Fellowship in Biology Department of Biology, University of Kentucky
2011	Dean's Scholarship College of Arts & Sciences, University of Kentucky

EDITORIAL SERVICES

- Editorial board member, BMC Infectious Diseases
- Guest editor, International Journal of Environmental Research and Public Health — Special Issue “Advances in spatial and temporal analysis of respiratory tract infection epidemics”

REVIEWER FOR SCIENTIFIC JOURNALS

Theoretical Biology and Medical Modelling	Advances in Virus Research	Journal of AIDS & Clinical Research			
Clinical Infectious Diseases	Reproductive Systems & Sexual Disorders	Theory in Bioscience	PLOS ONE	Health & Place	
International Journal of Environmental Research and Public Health	Infectious Diseases	International Journal of Health Geographics			
The Lancet HIV	F1000Research	Science Advances	BMC Infectious Diseases	Nature Communications	Heliyon
Journal of the American Pharmacists Association	AIDS	BMJ Global Health	JAMA Network Open		
International Journal of Infectious Diseases	Nature	PLOS Computational Biology	The Lancet Regional Health Americas		
The Lancet Global Health					

CONTINUING EDUCATION

- “A Practical Short Course on Infectious Disease Modeling”, Mahidol University, Bangkok, Thailand. June 17–19, 2012.
- “Introduction to Mathematical Models of the Epidemiology & Control of Infectious Diseases”, Imperial College, London, UK. September 10–21, 2012.
- “Principles of STD/HIV Research”, University of Washington Center for AIDS and STD, Seattle, Washington. July 18–28, 2013.
- “World Bank Skills Building Program on Artificial Intelligence, Big Data, and Decision Science in Health and Nutrition”, The World Bank, Bucharest, Romania. September 10–14, 2018.

COMPUTER COMPETENCIES

MATLAB	Mathematica	SAS	R	Python	ArcGIS	SaTScan	DIVA-GIS	GeoDa
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MEDIA COVERAGE

- Putting Mental Health on the Map
<https://ucdigitalfutures.com/putting-mental-health-on-the-map/>
- Narrowing the digital divide for health care
<https://www.uc.edu/news/articles/2023/03/us-technology-gap-means-more-americans-will-have-less-access-to-health-care.html>
- UC research helps identify vulnerable populations
<https://www.uc.edu/news/articles/2023/02/uc-research-helps-identify-vulnerable-populations.html>
- UC study says vaccination gap is about more than politics. It's also about access to care
<https://www.wvuxu.org/health/2022-12-21/university-cincinnati-study-vaccination-gap-rural-politics>

- COVID vaccinations lag in rural, underserved communities
<https://www.uc.edu/news/articles/2022/12/covid-vaccinations-lag-in-rural-underserved-communities.html>
- Visiting scholars bring international experience to Augusta University
<https://jagwire.augusta.edu/visiting-scholars-bring-international-experience-to-augusta-university/>
- Omicron led to higher rates of death in rural America than urban areas
<https://www.news-medical.net/news/20220614/Omicron-led-to-higher-rates-of-death-in-rural-America-than-urban-areas.aspx>
- Omicron hit rural America harder than cities
<https://www.uc.edu/news/articles/2022/06/omicron-hit-rural-america-harder-than-cities.html>
- Third COVID-19 wave hit rural America especially hard
<https://www.uc.edu/news/articles/2022/02/delta-variant-of-covid-19-hit-rural-america-especially-hard.html>
- Counties With Low Vaccination Rates Endured 'More Intense Surge' Of Covid Cases During Delta Wave, Study Finds
<https://www.forbes.com/sites/roberthart/2022/02/10/counties-with-low-vaccination-rates-endured-more-intense-surge-of-covid-cases-during-delta-wave-study-finds/>
- Championing science amid adversity
<https://www.uc.edu/news/1020/championing-science.html>
- Do You Live in a U.S. Opioid OD Hotspot?
<https://www.usnews.com/news/health-news/articles/2021-06-01/do-you-live-in-a-us-opioid-od-hotspot>
- New study finds Black men may soon be most affected group from opioid crisis
<https://komonews.com/news/addicted-america/study-finds-black-men-will-soon-be-most-affected-group-in-opioid-crisis>
- Opiate overdoses linked to poor mental health
<https://medicalxpress.com/news/2021-05-opiate-overdoses-linked-poor-mental.html>
- UC opioid study identifies at-risk populations in America
<https://www.miragenews.com/uc-opioid-study-identifies-at-risk-populations-566885/>
- Rural America faces unique COVID-19 risk
<https://www.uc.edu/news/articles/2020/10/rural-america-faces-unique-covid-19-risk.html>
- COVID-19 Dispatch: University of Cincinnati Team Projects Impact of Social Distancing Measures on Healthcare Resources in Ohio
<https://www.ashp.org/news/2020/05/08/uc-projects-impact-of-social-distancing-measures-on-healthcare-resources-in-ohio>
- UC lab projects increase in COVID-19 cases in urban Ohio
<http://lovelandbeacon.com/uc-lab-projects-increase-in-covid-19-cases-in-urban-ohio/>
- UC projections: Additional closures possible after 6 weeks of reopening state
<https://www.wlwt.com/article/uc-projections-additional-closures-possible-after-6-weeks-of-reopening-state/32342268>
- Residents in some Ohio counties face greater risk from COVID-19
<https://medicalxpress.com/news/2020-05-residents-ohio-counties-greater-covid-.html>
- Ohio must relax COVID-19 rules slowly or see renewed disease, UC report warns
<https://www.cincinnati.com/story/news/2020/05/01/ohio-must-relax-covid-19-rules-slowly-see-renewed-disease-university-cincinnati-report-warns/3063178001/>
- Cincinnati media talk to UC researchers about COVID-19 projections
<https://www.newsbreak.com/ohio/cincinnati/news/1559295020456/cincinnati-media-talk-to-uc-researchers-about-covid-19-projections>
- Ohio's COVID-19 experience offers lessons
<https://www.uc.edu/news/articles/n20938012/spread-of-coronavirus-across-ohio-offers-lessons-uc-study-says.html>
- Psych Central: Ohio study IDs those highest at risk for opioid addiction
<https://www.uc.edu/news/articles/2020/03/n20899512.html>
- UC identifies Ohioans most at risk of opiate overdose
<https://www.uc.edu/news/articles/2020/03/n20898548.html>
- Washington Post: Cities seeing more overdose deaths (2019)
<https://www.uc.edu/news/articles/2019/08/n20846804.html>
- UC students take on malaria prevention (2019)
<https://www.uc.edu/news/articles/2019/04/n2078824.html>
- UC map identifies Ohio's opiate hot zones (2019)
<https://www.uc.edu/news/articles/2019/04/n2079681.html>

- TB and depression are linking up to devastate SA (2019)
<https://www.timeslive.co.za/news/south-africa/2019-03-08-tb-and-depression-are-linking-up-to-devastate-sa/>
- Poor infection control to blame for hepatitis C epidemic in Egypt (2014)
<http://www.natureasia.com/en/nmiddleeast/article/10.1038/nmiddleeast.2014.246>
- Study shows variation in distribution of hepatitis C inside Egypt (2014)
<http://www.gulf-times.com/mobile//qatar/178/details/405350/>
- Relocating: Middle East promise (2013)
<https://www.nature.com/naturejobs/science/articles/10.1038/nj7460-111a>