BINOD ACHARYA

Urban Health Collaborative Phone: (225)456-6324 Contact Drexel University Email: ba525@drexel.edu Information

3600 Market St, Philadelphia, PA 19104 USA https://binod-acharya.github.io

Research Interests

Health disparities; Social Epidemiology; Spatial statistics; Statistical Modeling

EDUCATION M.S.. Biostatistics 2019

Drexel University Philadelphia, PA

M.S., Entomology (Minor: Applied Statistics) 2017

Louisiana State University Baton Rouge, LA

B.Sc., Agriculture 2011 Tribhuvan University Kritipur, Nepal

Professional EXPERIENCE

Data Analyst, Drexel University

Apr 2019 - Present

Worked as a biostatistician for **SALURBAL** project in small-area estimation of life expectancies in Latin American cities. I conducted research to understand health, economic, and behavioral disruptions brought about by the COVID-19 pandemic such as in the utilization of telehealth services or the consumer spending on food and alcohol. I also conducted research to study the effectiveness of vaccine lottery programs in the uptake of vaccination rate. I also worked in social epidemiological research related to eviction, informal settlements, homelessness, and residential segregation. Besides, I worked as analyst for the project Reducing cancer and improving health outcomes in Philadelphia neighborhoods, where I was responsible for data analysis, creating visualizations, and writing methods.

Research Assistant, Drexel University

Oct 2017 - Mar 2019

I worked on programming, cleaning, and management of data from various sources, including surveys, censuses, vital statistics registries, and GIS data. Provided statistical support for manuscripts involving multi-level designs and spatial analysis.

Research Assistant, Louisiana State University

Jan 2015 - May 2017

Designed and conducted a laboratory research to identify the genetic basis of Bt protein resistance in fall armyworm and provided assistance in field research.

Program Associate, World Wildlife Fund Inc, Nepal

Jun 2014 - Dec 2014

Provided technical support to community leaders to protect ecologically fragile hills of Nepal by improved agricultural and livestock management practices.

Technical Officer, National Tea Coffee Development Board, Nepal Apr 2012 - Jun 2014

Provided technical and policy support to stakeholders for improved coffee farming practices and commercialization.

Publications

Guimarães, J.M.N., *Acharya, B.*, Moore, K., López-Olmedo, N., de Menezes, M.C., Stern, D., Friche, A.A.d.L., Wang, X., Delclòs-Alió, X., Rodriguez, D.A., Sarmiento, O.L., de Oliveira Cardoso, L. (2022). City-level travel time and individual dietary consumption in Latin American cities: results from the SALURBAL Study. *International Journal of Environmental Research and Public Health*, 19(20), 13443. [Link]

López, S.R., Tumas, N., Bilal, U., Moore, K., *Acharya, B.*, Quick, H., Quistberg, A.D., Acevedo, G.E. and Diez Roux, A.V. (2022). Intraurban socioeconomic inequalities in life expectancy: a population based cross-sectional analysis in the city of Córdoba, Argentina (2015-2018). *BMJ Open*, 12(9), e061277. [Link]

Acharya, B., Bhatta, D., and Dhakal, C. (2022). The risk of eviction and the mental health outcomes among the US adults. Preventive Medicine Reports, 29, 101981. [Link]

Dhakal, C., *Acharya*, *B.*, and Wang, S. (2022). Food spending in the United States during the first year of the COVID-19 pandemic. *Frontiers in Public Health*, 10, 912922. [Link]

Sizer, M.A., Bhatta, D., *Acharya, B.* and Paudel, K.P. (2022). **Determinants** of telehealth service use among mental health patients: a case of rural **Louisiana.** *International Journal of Environmental Research and Public Health*, 19(11), 6930. [Link]

Acharya, B. and Dhakal, C. (2022). Risky health behaviors during the COVID-19 pandemic: evidence from the expenditures on alcohol, non-alcoholic beverages, and tobacco products. PLoS ONE, 17(5), e0268068. [Link].

Subedi, K., *Acharya*, *B.*, and Ghimire, S. (2022). Factors associated with hospital readmission among patients experiencing homelessness. *American Journal of Preventive Medicine*, 63(3), 362-370. [Link]

Acharya, B., Subedi, K., Acharya, P., and Ghimire, S. (2022). Association between COVID-19 pandemic and the suicide rates in Nepal. *PloS ONE*, 17(1), e0262958. [Link]

Acharya, B. and Dhakal, C. (2021). Implementation of state vaccine incentive lottery programs and uptake of COVID-19 vaccinations in the United States. JAMA Network Open, 4(12), e2138238-e2138238. [Link]

Acharya, B. and Tabb, L. (2021). Spatiotemporal analysis of overall health in the United States between 2010 and 2018. Cureus, 13(9). [Link]

Kaimal, G., Jones, J. P., Dieterich-Hartwell, R., *Acharya, B.*, and Wang, X. (2019). Evaluation of long-and short-term art therapy interventions in an integrative care setting for military service members with post-traumatic stress and traumatic brain injury. *The Arts in Psychotherapy*, 62, 28-36. [Link]

Acharya, B., Head, G. P., Price, P. A., and Huang, F. (2017). Fitness costs and inheritance of Cry2Ab2 resistance in Spodoptera frugiperda (JE Smith). Journal of Invertebrate Pathology, 149, 8-14. [Link]

Work in Progress

Trotta, A., Bilal, U., Acharya, B., Quick, H., Moore, K., Perner, M., Alazraqui, M. and Diez Roux, A.V. Spatial inequities in life expectancy in small areas of Buenos Aires, Argentina 2015-2017. (Under review)

Perner, M.S., Trotta, A., Bilal, U., Acharya, B., Quick, H., Natalia, P., Berazategui, R., Alazraqui, M. and Diez Roux, A.V. Social inequalities and COVID-19 mortality between neighborhoods of Bariloche city, Argentina. (In preparation)

Reports Posters

[Poster] Acharya, B., Moore, K., Bilal, U., Quick, H., Diez Roux, A.V. Small area estimation of life expectancy in cities in Argentina and Brazil: methodological approach. In 2022 UHC Day poster session, Drexel University.

[Poster] Subedi, K., Acharya, B., Ghimire, S. Factors Associated with Hospital Readmission Among Patients Experiencing Homelessness. In 2022 annual meeting of Association for Clinical and Translational Statisticians.

[Academic Report] The State of Cancer in Philadelphia, 2020.

[Web Report] Cancer in Philadelphia Neighborhoods, 2020.

[Community Brief] Livengood, K., Diez Roux. A., Mullin, G., Acharya, B., Bettigole. C., Moore, K., Rollins, H., Washington, R. Community Brief: Cancer in Philadelphia. Drexel University Urban Health Collaborative, Mar 2020.

[Poster] Acharya, B. Spatiotemporal analysis of overall health in the United States between 2010-2018 using Bayesian methods. In 2019 APHA Annual Meeting and Expo.

[Poster] Acharya, B., Head, G. P., Price, P. A., and Huang, F. (2016, September). Lack of fitness costs associated with Bacillus thuringiensis Cry2Ab2 resistance in the fall armyworm, Spodoptera frugiperda (JE Smith). In 2016 International Congress of Entomology.

AWARDS

2019 Delta Omega student poster award 2017-2019 Dean's scholarship

Dornsife School of Public Health, Drexel University

SERVICES AND **Membership**

Academic Editor, PLoS ONE 2023 - present

2021 - present Ad-hoc journal referee for: American Journal of Epidemiology (1), JAMA Pediatrics (3), Journal of Clinical Oncology (1), JAMA Network Open (8),

Frontiers in Public Health (2), Frontiers of Medicine (1), PLoS ONE (8), PLoS Global Public Health (5), Applied Clinical Informatics (1), Digital

Health (1) etc

2020 - present Member, American Public Health Association

Member, Statistics without Border 2020 - present

GRADUATE Coursework

Statistics

☐ Statistical Inference I	☐ Generalized Linear Models
☐ Statistical Inference II	☐ Longitudinal Data Analysis
☐ Statistical Computing I	☐ Machine Learning
☐ Advanced Statistical Computing	☐ Survival Data Analysis
☐ Linear Statistical Models	☐ Regression Analysis
☐ Applied Bayesian Analysis	☐ Categorical Data Analysis
$\hfill \Box$ Design and Analysis of Clinical Trials	☐ Statistical Techniques I
GIS for Public Health	Statistical Techniques II

Relevant Skills $Computer\ Languages/Software: \quad R,\ SAS,\ ArcGIS,\ WinBUGS,\ RMarkdown,\ Quarto,$

Python, Stata, SQL, JAGS, SQL, LATEX, Stan, Github

Human Languages: English, Nepali, Hindi

Certification: Data Scientist with R, Datacamp

SAS Certified Clinical Trials Programmer SAS Certified Base Programmer for SAS $9\,$

References Available upon request