

BINOD ACHARYA

CONTACT INFORMATION	Urban Health Collaborative Drexel University 3600 Market St, Philadelphia, PA 19104 USA	Phone: (225)456-6324 Email: ba525@drexel.edu https://binod-acharya.github.io
RESEARCH INTERESTS	Health disparities; Social Epidemiology; Spatial statistics; Statistical Modeling	
EDUCATION	M.S., Biostatistics Drexel University	2019 Philadelphia, PA
	M.S., Entomology (Minor: Applied Statistics) Louisiana State University	2017 Baton Rouge, LA
	B.Sc., Agriculture Tribhuvan University	2011 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., Rodríguez, D.A., Sarmiento, O.L., and 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. [\[Link\]](#)

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.S., 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	<p>[Poster] Acharya, B., Moore, K., Bilal, U., Quick, H., and 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.</p> <p>[Poster] Subedi, K., Acharya, B., and Ghimire, S. Factors Associated with Hospital Readmission Among Patients Experiencing Homelessness. In 2022 annual meeting of Association for Clinical and Translational Statisticians.</p> <p>[Academic Report] The State of Cancer in Philadelphia, 2020.</p> <p>[Web Report] Cancer in Philadelphia Neighborhoods, 2020.</p> <p>[Community Brief] Livengood, K., Diez Roux. A.V., Mullin, G., Acharya, B., Bettigole, C., Moore, K., Rollins, H., and Washington, R. Community Brief: Cancer in Philadelphia. Drexel University Urban Health Collaborative, Mar 2020.</p> <p>[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.</p> <p>[Poster] Acharya, B., Head, G.P., Price, P.A., and Huang, F. (Sep 2016). Lack of fitness costs associated with <i>Bacillus thuringiensis</i> Cry2Ab2 resistance in the fall armyworm, <i>Spodoptera frugiperda</i> (JE Smith). In 2016 International Congress of Entomology.</p>																	
AWARDS	2019 2017-2019	Delta Omega student poster award Dean’s scholarship Dornsife School of Public Health, Drexel University																
SERVICES AND MEMBERSHIP	2023 - present 2021 - present 2020 - present 2020 - present	Academic Editor, <i>PLoS ONE</i> Ad-hoc journal referee for: <i>American Journal of Epidemiology</i> (1), <i>JAMA Pediatrics</i> (3), <i>Journal of Clinical Oncology</i> (1), <i>JAMA Network Open</i> (8), <i>Frontiers in Public Health</i> (2), <i>Frontiers of Medicine</i> (1), <i>PLoS ONE</i> (8), <i>PLoS Global Public Health</i> (5), <i>Applied Clinical Informatics</i> (1), <i>Digital Health</i> (1) etc. Member, American Public Health Association Member, Statistics without Border																
GRADUATE COURSEWORK	Statistics <table><tr><td><input type="checkbox"/> Statistical Inference I</td><td><input type="checkbox"/> Generalized Linear Models</td></tr><tr><td><input type="checkbox"/> Statistical Inference II</td><td><input type="checkbox"/> Longitudinal Data Analysis</td></tr><tr><td><input type="checkbox"/> Statistical Computing I</td><td><input type="checkbox"/> Machine Learning</td></tr><tr><td><input type="checkbox"/> Advanced Statistical Computing</td><td><input type="checkbox"/> Survival Data Analysis</td></tr><tr><td><input type="checkbox"/> Linear Statistical Models</td><td><input type="checkbox"/> Regression Analysis</td></tr><tr><td><input type="checkbox"/> Applied Bayesian Analysis</td><td><input type="checkbox"/> Categorical Data Analysis</td></tr><tr><td><input type="checkbox"/> Design and Analysis of Clinical Trials</td><td><input type="checkbox"/> Statistical Techniques I</td></tr><tr><td><input type="checkbox"/> GIS for Public Health</td><td><input type="checkbox"/> Statistical Techniques II</td></tr></table>		<input type="checkbox"/> Statistical Inference I	<input type="checkbox"/> Generalized Linear Models	<input type="checkbox"/> Statistical Inference II	<input type="checkbox"/> Longitudinal Data Analysis	<input type="checkbox"/> Statistical Computing I	<input type="checkbox"/> Machine Learning	<input type="checkbox"/> Advanced Statistical Computing	<input type="checkbox"/> Survival Data Analysis	<input type="checkbox"/> Linear Statistical Models	<input type="checkbox"/> Regression Analysis	<input type="checkbox"/> Applied Bayesian Analysis	<input type="checkbox"/> Categorical Data Analysis	<input type="checkbox"/> Design and Analysis of Clinical Trials	<input type="checkbox"/> Statistical Techniques I	<input type="checkbox"/> GIS for Public Health	<input type="checkbox"/> Statistical Techniques II
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<input type="checkbox"/> GIS for Public Health	<input type="checkbox"/> Statistical Techniques II																	

RELEVANT SKILLS	Computer Languages/Software:	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	