

177 Huntington Ave, Room 1025, Boston, MA, 02115

Research Interests

- Infectious Disease Epidemiology
- Social Network Analysis
- Big Data Techniques for Public Health

Education

University of California, Los Angeles

Los Angeles, CA

DOCTOR OF PHILOSOPHY, EPIDEMIOLOGY

2024

• Dissertation - Harnessing Network Data to Address Scientific Challenges

University of California, Los Angeles

Los Angeles, CA

MASTER OF PUBLIC HEALTH, EPIDEMIOLOGY

2017

University of Chicago BACHELOR OF ARTS, BIOLOGICAL SCIENCES Chicago, IL

Funding and Awards

UCLA Department of Epidemiology HEALRISE Scholarship

TITLE: PREDICTING INFECTIOUS DISEASE OUTBREAKS USING EARLY WARNING SIGNALS TO MITIGATE RACIAL AND ETHNIC DISPARITIES

Primary Investigator: \$20,000

UCLA Fielding School of Public Health High Impact Data Initiative

2021

TITLE: SIMULATIONS, EXPERIMENTS, AND BIG DATA ANALYTICS TO MODEL HUMAN BEHAVIOR

Co-Investigator: \$14,000

UCLA Department of Epidemiology Graduate Fellowship

2019

Los Angeles County Department of Public Health SAS Users Group Award

2019

2018

Los Angeles County Department of Public Health SAS Users Individual Award

UCLA Department of Epidemiology Dean's Leadership Grant

2015

Experience

Postdoctoral Research Associate

Boston, MA

MACHINE INTELLIGENCE GROUP FOR THE BETTERMENT OF HEALTH AND THE ENVIRONMENT

June 2024 - Present

- Use computational techniques and novel data sources to explore problems in digital epidemiology.
 - Develop forecasting and early warning systems for respiratory diseases in the United States.
 - Evaluate trends in human behavior and mobility during infectious disease outbreaks.

Graduate Student Researcher

Los Angeles, CA

NISHI LAB, UCLA FIELDING SCHOOL OF PUBLIC HEALTH

September 2019 - May 2024

- · Apply techniques from network science, epidemiology, and behavioral science to address problems relevant to public health.
 - Online network experiments using decision times to explore the relationship between cooperative and punishment decisions.
 - Network simulations for preventive behaviors (COVID-19 non-pharmaceutical interventions, lung cancer screening).
 - Evaluating ChatGPTs role as a research assistant using citation networks.
 - 2+ peer-reviewed publications.

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH, DIVISION OF CHRONIC DISEASE AND INJURY PREVENTION

June 2016 - July 2017

- Evaluate benefits of nutritional programs throughout Los Angeles County using survey and sales data.
 - 2 peer-reviewed publications.

Publications

- 1. Nishi, A., **Dewey, G.,** Mengual, M., Ando, H., Cassol-Pawson, N., & Endo, A. (2025). Infectious disease control as network interventions. *Discover Social Science and Health*, *5*(1), 72.
- 2. Urmi, T., Pant, B., **Dewey, G.**, Quintana Mathe, A., Lang, I., Druckman, J. N., Ognyanova, K., Baum, M., Perlis, R. H., Riedl, C., et al. (2024). Characterizing population-level changes in human behavior during the COVID-19 pandemic in the united states. *medRxiv*.
- 3. **Dewey, G.**, Ando, H., Ikesu, R., Brewer, T. F., Goto, R., & Nishi, A. (2024). Punishment is slower than cooperation or defection in online network games. *Scientific Reports*, *14*(1), 23024.
- 4. Dai, J., Nishi, A., Tran, N., Yamamoto, Y., **Dewey, G.**, Ugai, T., & Ogino, S. (2021). Revisiting social MPE: An integration of molecular pathological epidemiology and social science in the new era of precision medicine. *Expert Review of Molecular Diagnostics*, *21*(9), 869–886.
- 5. Nishi, A., **Dewey, G.**, Endo, A., Neman, S., Iwamoto, S. K., Ni, M. Y., Tsugawa, Y., Iosifidis, G., Smith, J. D., & Young, S. D. (2020). Network interventions for managing the COVID-19 pandemic and sustaining economy. *Proceedings of the National Academy of Sciences*, *117*(48), 30285–30294.
- 6. Wickramasekaran, R. N., Robles, B., **Dewey, G.**, & Kuo, T. (2018). Evaluating the potential health and revenue outcomes of a 100% healthy vending machine nutrition policy at a large agency in los angeles county, 2013- 2015. *Journal of Public Health Management and Practice*, 24(3), 215–224.
- 7. **Dewey, G.**, Wickramasekaran, R. N., Kuo, T., & Robles, B. (2017). Peer reviewed: Does sodium knowledge af- fect dietary choices and health behaviors? Results from a survey of los angeles county residents. *Preventing Chronic Disease*, 14.

Technical Skills

Coding Languages	Software	Markup Languages
R, Python, SQL, Bash	Git, Linux (Ubuntu, Debian), Google Cloud Platform, Stata, SAS, MacOS/Windows	Markdown, Quarto