George **Dewey**

POSTDOCTORAL RESEARCH ASSOCIATE

MIGHTE @ Network Science Institute, Northeastern University, Boston, MA, 02115

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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   *Chicago, IL*

BACHELOR OF ARTS, BIOLOGICAL SCIENCES   *2013*

Funding and Awards

UCLA Department of Epidemiology HEALRISE Scholarship   *2022*

TITLE: PREDICTING INFECTIOUS DISEASE OUTBREAKS USING EARLY WARNING SIGNALS TO MITIGATE RACIAL AND ETHNIC   *Primary Investigator: $20,000*
DISPARITIES

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*

Los Angeles County Department of Public Health SAS Users Individual Award   *2018*

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.

Research and Evaluation Intern

Los Angeles County Department of Public Health, Division of Chronic Disease and Injury Prevention

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

Publications

1. 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 [Journal Article]. *Scientific Reports*, *14*(1), 23024. `https://doi.org/10.1038/s41598-024-72939-2`

2. 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.

3. 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.

4. 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.

5. Dewey, G., Wickramasekaran, R. N., Kuo, T., & Robles, B. (2017). Peer reviewed: Does sodium knowledge affect 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