Natalie M. Linton

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Education

PhD (Doctor of Philosophy) in Medicine

Expected December 2021. Hokkaido University, Sapporo, Japan.

Advisor: Hiroshi Nishiura. Focus on infectious disease modeling.

MSc (Master of Science) in Public Health in Disasters

2018. Joint degree. University of Oviedo, Oviedo, Spain and Catholic University of Louvain, Brussels, Belgium.

MPH (Master of Public Health) in Epidemiology

2015. Oregon State University, Corvallis, Oregon, USA.

BA (Bachelor of Arts) in International Relations

2011. Ritsumeikan University, Kyoto, Japan.

BA in International Studies

2010. American University, Washington, DC, USA.

Employment

Washington State Department of Health, Office of Communicable Disease Epidemiology – Shoreline, WA, USA

Epidemiologist 2 – November 2016 – September 2017 (11 months)

- Subject matter expert for prion disease surveillance; investigated and reported on cases.
- Led data tracking and analysis efforts for a statewide mumps outbreak investigation.
- Collaborated on other vaccine-preventable disease surveillance projects, with a focus on measles.

CDC/CSTE Applied Epidemiology Fellow – July 2015 – October 2016 (1 year 4 months)

Fellowship administered by the Council of State and Territorial Epidemiologists (CSTE) and funded by the Centers for Disease Control and Prevention (CDC).

- Spearheaded the creation of a statewide epidemiologic profile on hepatitis C virus infections that included linkage of data from multiple data sources. Coordinated presentations throughout Washington to disseminate findings.
- Worked on infectious disease outbreak investigations (foodborne infections, acute flaccid myelitis).
- Researched causes of death for refugees and linked records to determine whether refugee women were referred for perinatal hepatitis B case management.

Centers for Disease Control and Prevention (CDC) - La Grande, OR, USA

Public Health Associate - July 2011 - July 2013 (2 years)

• Two-year fellowship as a field assignee at the Center for Human Development, Inc., working in chronic disease prevention, family planning, and communicable disease education and outreach. Engaged community partners and coordinated workshops and promoted regional sustainability of a chronic disease management program.

Funding and Awards

2018–2022. Research Scholarship, Japan Ministry of Education, Culture, Sports, Science, and Technology (MEXT).

2019. Best Poster Presentation, INFECTION 2019, The Chinese University of Hong Kong.

2017–2018. Erasmus Mundus Scholarship, Erasmus Mundus Master of Public Health in Disasters (EMMPHID).

2014–2015. Boren Fellowship, Boren Awards for International Study.

2014–2015. Warren & Frederica Schad Fellowship, Oregon State University.

2013–2014. Graduate Laurels Scholarship, Oregon State University.

2012. All There Is, Is Us and Us Award: For demonstrating a strong commitment to thinking about and doing what is good for the health department and the community, Center for Human Development, Inc.

2009–2010. Special Honors for Foreign Students, Ritsumeikan University.

2007–2008. Presidential Scholarship and Dean's List for Academic Excellence, American University.

Technical Assistance, Consulting, and Contract Work

Ministry of Health, Labour and Welfare - Tokyo, Japan

Member, COVID-19 Cluster Response Team – February 2020 – June 2020 (5 months)

• Performed ad hoc analyses to meet coronavirus disease 2019 (COVID-19) epidemic response needs, including: estimation of end of epidemic probabilities for case clusters, comparing risk of death and viral testing practices between countries, assessing prefectural differences, and more.

Veterans Education and Research Association of Northern New England, Inc. – White River Junction, VA, USA *Independent contractor, clinical epidemiology* – July 2015 – April 2016 (1 year)

• Worked remotely, analyzing data, summarizing results, and improving visualizations for research projects related to clinical outcomes among veterans.

International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) - Dhaka, Bangladesh

Boren Fellow – December 2014 – April 2015 (4 months)

• Funded by the Boren Awards for International Study to collaborate on chronic disease research and provide training for staff at icddr,b. Additionally supported for Bangla language study with the Bangla Language Institute.

Health Resources and Services Administration - Portland, Oregon, USA

Graduate Student Epidemiology Program Intern – June 2020 – September 2020 (4 months)

Deployed to the Oregon Center for Children and Youth with Special Health Needs (OCCYSHN). Assessed the
association between maternal health outcomes and having a child with special health needs using Pregnancy
Risk Assessment Monitoring System (PRAMS) data. Assisted in cleaning primary survey data to inform Oregon's
Title V Maternal and Child Health five-year needs assessment.

Oregon State University - Corvallis, Oregon, USA

Research Assistant - October 2013 - December 2014 (1 year, 2 months)

 Responsible for conducting and analyzing qualitative interviews as well as managing and analyzing quantitative project data for statewide implementation of the Arthritis Foundation Walk With Ease program.

Graduate Research Assistant – March – June 2014 (4 months)

• Performed miscellaneous research tasks, including: writing an IRB proposal, researching devices to measure occupational exposures, literature searches, and presentation preparation.

Skills and Professional Development

Technical expertise

- Programming languages: R, Stan, Julia; familiar with Python and Ruby.
- Statistical software/interfaces: Jupyter Lab (using Windows Subsystem for Linux); familiar with RStudio, SAS, SPSS, Stata, and EpiInfo.
- Other software: Microsoft Office, Atom, GitHub Desktop, Mendeley, Adobe Photoshop, InDesign.
- Markup languages: Markdown, LaTeX; familiar with HTML and XML.

Languages

- English (native).
- Spanish (advanced) Spanish Healthcare Interpreter Training Central Oregon Community College, 2014. 2013. Volunteer, Clinica Esperanza, Roatán, Honduras. Triaged patients, interpreted, and assisted pharmacy work.
- Japanese (advanced) Japanese Language Proficiency Test Level N1 Japan Foundation, September 2011. 2010–present. Japanese-English freelance translator and private English teacher.
- Elementary proficiency with French, German, and Bangla.

Scientific service

- 2020–present. Reviewer for various academic journals in epidemiology, public health, and medicine.
- 2014–2015. Curriculum committee, College of Public Health and Human Sciences, Oregon State University.

Publications

Peer-reviewed publications

- 2021 1. <u>Linton NM</u>, Akhmetzhanov AR, Nishiura H. Localized end-of-outbreak determination for coronavirus disease 2019 (COVID-19): examples from clusters in Japan. Int J Infect Dis. 2021;105,286-292.
 - 2. Akhmetzhanov AR, Mizumoto K, Jung S-m, <u>Linton NM</u>, Omori R, Nishiura H. Estimation of the actual incidence of coronavirus disease (COVID-19) in emergent hotspots: the example of Hokkaido, Japan during February-March 2020. J Clin Med. 2021;10(11), 2392.
- 2020 3. <u>Linton NM</u>, Kobayashi T, Yang Y, et al. Incubation period and other epidemiological characteristics of 2019 novel coronavirus infections with right truncation: A statistical analysis of publicly available case data. J Clin Med. 2020;9(538). doi:10.3390/jcm9020538
 - 4. <u>Linton NM</u>, Keita M, Moitinho de Almeida M, et al. Impact of mass vaccination campaigns on measles transmission during an outbreak in Guinea, 2017. J Infect. 2020;80(3):1-7.
 - 5. <u>Linton NM</u>, DeBolt C, Newman LP, Tasslimi A, Matheson J. Mortality rate and causes of death among refugees resettled in Washington State, 2006–2016. J Immigr Minor Heal. 2020;22:3-9.
 - 6. Nishiura H, <u>Linton NM</u>, Akhmetzhanov AR. Serial interval of novel coronavirus (COVID-19) infections. Int J Infect Dis. 2020:113332.
 - 7. Nishiura H, <u>Linton NM</u>, Akhmetzhanov AR. Initial cluster of novel coronavirus (2019-nCoV) infections in Wuhan, China is consistent with substantial human-to-human transmission. J Clin Med. 2020:2019-2021.
 - 8. Anzai A, Kobayashi T, <u>Linton NM</u>, Kinoshita R, Hayashi K, Suzuki A, Yang Y, Jung S-m, Miyama T, Akhmetzhanov AR, Nishiura H. Assessing the impact of reduced travel on exportation dynamics of novel coronavirus infection (COVID-19). J Clin Med. 2020;9(601).
 - 9. Nishiura H, Jung S, <u>Linton NM</u>, Kinoshita R, Yang Y, Hayashi K, Kobayashi T, Baoyin Y, Akhmetzhanov AR. The extent of transmission of novel coronavirus in Wuhan, China, 2020. J Clin Med. 2020;9(2).
 - 10. Nishiura H, Kobayashi T, Yang Y, Hayashi K, Miyama T, Kinoshita R, <u>Linton NM</u>, Jung S-m, Yuan B, Suzuki A, Akhmetzhanov AR. The rate of underascertainment of novel coronavirus (2019-nCoV) infection: Estimation using Japanese passengers data on evacuation flights. J Clin Med. 2020.
- 2017 11. Bonwitt J, Poel A, DeBolt C, Gonzales E, Lopez A, Routh J, Rietberg K, <u>Linton NM</u>, Reggin J, Sejvar JJ, Lindquist S, Otten C. Acute flaccid myelitis among children Washington, September–November 2016. MMWR. 2017;66(31):826-829. doi:10.15585/mmwr.mm6631a2
- 2016 12. Conte KP, Odden MC, <u>Linton NM</u>, Harvey MS. Effectiveness of a scaled-up arthritis self-management program in Oregon: Walk with ease. Am J Public Health. 2016;106(12).
 - 13. Biswas T, Islam MS, <u>Linton NM</u>, Rawal LB. Socio-economic inequality of chronic non-communicable diseases in Bangladesh. PLoS One. 2016;11(11).
 - 14. Kawakami VM, Bottichio L, Angelo K, <u>Linton NM</u>, Kissler B, Basler C, Lloyd J, Inouye W, Gonzales E, Rietberg K, Melius B, Wise ME, Sinatra J, Marsland P, Li Zhen, Meek R, Kay M, Duchin J, Lindquist S. Outbreak of multidrug-resistant Salmonella infections linked to pork—Washington, 2015. MMWR. 2016;65(14);379–381.

Other scientific publications

- **2021** <u>Linton NM</u>, Nishiura H. 2 次感染パターンからわかる新型コロナウイルスの急所 (Key characteristics of COVID-19 as revealed by patterns of secondary infection). Jikken Igaku. Vol 39. No 2.
- **2020** <u>Linton NM</u>, Nishiura H. 感染症流行の収束にまつわる数理 (Mathematics behind the end of epidemics). Suugaku Seminar. 2020-9.