

# PAUL L DELAMATER

Curriculum Vitae: March, 2019

---

217 Carolina Hall (Geography office location)  
123 W Franklin, Rm 2152 (CPC office location)  
CB #3220 (mailing address)  
Chapel Hill NC, 27599-3220

919-962-3922  
pld@email.unc.edu

---

## CURRENT POSITION

---

**Assistant Professor** 7/2017 –  
*University of North Carolina Chapel Hill* *Department of Geography*

**Faculty Fellow** 7/2017 –  
*University of North Carolina Chapel Hill* *Carolina Population Center*

**Faculty Fellow** 9/2018 –  
*University of North Carolina Chapel Hill* *Cecil G. Sheps Center for Health Services Research*

## EDUCATION

---

**Ph.D., Geography** 2012  
*Michigan State University* *East Lansing, MI*  
**Dissertation title:** Access to Hospitals in a Regulated Health Care System: Implications for Utilization  
**Advisor:** Dr. Joseph Messina

**M.A., Geography** 2004  
*Michigan State University* *East Lansing, MI*  
**Thesis title:** Mapping and Modeling Tropical Defoliation: A Case Study of the Effects of Plan Colombia

**B.S., Geography** 2001  
*Central Michigan University* *Mount Pleasant, MI*  
**Emphasis:** Geographic Information Systems, **Minors:** Earth Science, Mathematics

## RESEARCH INTERESTS

---

### Health and Medical Geography

Health care service access and utilization; Vaccination behavior and non-medical exemptions; Herd Immunity and vaccine-preventable disease; Integrating spatial methods/models in health-related research; Health care policy and regulation

### Geographic Information Science (GIS) and Spatial Analysis

Spatial accessibility metrics; Scale dependence in statistical relationships

## PAST POSITIONS

---

**Assistant Professor** 8/2014 – 6/2017  
*George Mason University* *Department of Geography and Geoinformation Science*

**Postdoctoral Research Associate** 9/2012 – 8/2014  
*Michigan State University* *Department of Geography*

**Course Instructor** Fall 2013  
*Program in Public Health, Michigan State University*

**Course Instructor** Fall 2013  
*School of Natural Resources & Environment, University of Michigan*

## RESEARCH

---

### REFEREED PUBLICATIONS (Google Scholar profile)

(+) student coauthor under my supervision

- [37] **Delamater, P.L.**, Pingali, C., Bутtenheim, A.M., Salmon, D.A., Klein, N.P., and S.B. Omer. 2019. Elimination of Nonmedical Immunization Exemptions in California and School-Entry Vaccine Status. *Pediatrics*. Accepted for Publication.
- [36] **Delamater, P.L.**, Shortridge, A.M., and R.C. Kilcoyne+. 2019. Using Floating Catchment Area (FCA) metrics to predict health care utilization patterns. *BMC Health Services Research*. 19(144).
- [35] **Delamater, P.L.**, Street E.J.+, Leslie, T.F., Yang, Y.T., and K.H. Jacobsen. 2019. Complexity of the Basic Reproduction Number ( $R_0$ ). *Emerging Infectious Diseases*. 25(1):1–4.  
*Press coverage:* Live Science
- [34] Leslie, T.F., **Delamater, P.L.**, and Y.T. Yang. 2019. Author’s Reply: “It could have been much worse: The Minnesota measles outbreak of 2017”. *Vaccine*. 37(5):685.
- [33] Marsh, D.M., Dony, C.C., **Delamater, P.L.**, and E.M. Delmelle. 2018. Travel Impedance Agreement among Online Road Network Data Providers. *International Journal of Geographical Information Science*. In Press (Available Online).
- [32] **Delamater, P.L.**, Leslie, T.F., and Y.T. Yang. 2018. Examining the spatiotemporal evolution of vaccine refusal: Nonmedical exemptions from vaccination in California, 2000–2013. *BMC Public Health*. 18(458).
- [31] Leslie, T.F., **Delamater, P.L.**, and Y.T. Yang. 2018. It could have been much worse: The Minnesota measles outbreak of 2017. *Vaccine*. 36(14):1808–1810.
- [30] Rossiter, K.M, Wong, D.W., and **P.L. Delamater**. 2018. Congressional Redistricting: Keeping Communities Together?. *The Professional Geographer*. 70(4):609–623.
- [29] **Delamater, P.L.** 2018. Comment on “A conceptual framework for quality healthcare accessibility: a scalable approach for big data technologies”. *Information Systems Frontiers*. 20(2):303–309.
- [28] Vraga, E., Stefanidis, A., Lamprianidis, G., Croitoru, A., Crooks, A.T., **Delamater, P.L.**, Pfoser, D., Radzikowski, J., and K.H. Jacobsen. 2018. Cancer and social media: A comparison of traffic about breast cancer, prostate cancer, and other reproductive cancers on Twitter and Instagram. *Journal of Health Communication*. 23(2):181–189.
- [27] Vraga, E.K., Radzikowski, J. R., Stefanidis, A., Croitoru, A., Crooks, A.T., **Delamater, P.L.**, Pfoser, D., and K.H. Jacobsen. 2017. Social Media Engagement With Cancer Awareness Campaigns Declined During the 2016 U.S. Presidential Election. *World Medical & Health Policy*. 9(4):456–465.
- [26] **Delamater, P.L.**, Leslie, T.F., Y.T. Yang. 2017. Change in medical exemptions from immunization in California after elimination of personal belief exemptions. *JAMA*. 318(9):863–864.  
*Press coverage:* Associated Press, Los Angeles Times, Mother Jones, Modern Healthcare, Kaiser Health News, CBS (San Francisco Bay Area) [Article][TV spot], 89.3 KPCC (Southern California Public Radio), The Verge, Medscape, Pharmacy Today Daily Edition, New England Journal of Medicine Journal Watch, NeuroLogica Blog, ARS Technica
- [25] Stefanidis, A., Vraga, E., Lamprianidis, G., Radzikowski, J., **Delamater, P.L.**, Jacobsen, K.H., Pfoser, D., Croitoru, A. and A.T. Crooks. 2017. Zika in Twitter: Temporal Variations of Locations, Actors, and Concepts. *JMIR Public Health and Surveillance*. 3(2):e22.
- [24] Mousam, A., Maggioni, V., **Delamater, P.L.**, and A.M. Quispe. 2017. Using remote sensing and modeling techniques to investigate the annual parasite incidence of malaria in Loreto, Peru. *Advances in Water Resources*. 108:423–438.
- [23] Leslie, T.F., Street E.J.+, **Delamater, P.L.**, Yang, Y.T., and K.H. Jacobsen. 2016. Variation in Vaccination Data Available at School Entry Across the United States. *American Journal of Public Health*. 106(12):2180–2182.
- [22] **Delamater, P.L.**, Yang, Y.T., and T.F. Leslie. 2016. A spatiotemporal analysis of nonmedical exemptions from vaccination: California schools before and after SB277. *Social Science & Medicine, Special Issue Section: 16th International Medical Geography Symposium*. 168:230–238.

- [21] **Delamater, P.L.**, Leslie, T.F., Yang, Y.T., and K.H. Jacobsen. 2016. An approach for estimating vaccination coverage for communities using school-level data and population mobility information. *Journal of Applied Geography*. 71:123–132.
- [20] Nicholas, D.E., **Delamater, P.L.**, Waters, N.M., and K.H. Jacobsen. 2016. Geographically weighted discriminant analysis of environmental conditions associated with Rift Valley fever outbreaks in South Africa. *Spatial and Spatio-temporal Epidemiology*. 17:75–83.
- [19] **Delamater, P.L.**, Leslie, T.F., and Y.T. Yang. 2016. California Senate Bill 277’s Grandfather Clause and Nonmedical Vaccine Exemptions in California, 2015–2022. *JAMA Pediatrics*. 170(6):619–620.  
*Press coverage:* MedPageToday
- [18] Jacobsen, K.J., Aguirre, A.A., Bailey, C.L., Baranova, A.V., Crooks, A.T., Croitoru, A., **Delamater, P.L.**, Gupta, J., Kehn-Hall, K., Narayanan, A., Perobon, M., Rowan, K.E., Schwebach, J.R., Seshaiyer, P., Sklarew, D.M., Stefanidis, A., and P. Agouris. 2016. Lessons from the Ebola outbreak: 10 action items for emerging infectious disease preparedness and response. *EcoHealth*. 13(1):200–212.
- [17] Yang, Y.T., **Delamater, P.L.**, Leslie, T.F., and M.M. Mello. 2016. Sociodemographic Predictors of Vaccination Exemptions on the Basis of Personal Belief in California. *American Journal of Public Health*. 102(1):172–177.  
*Press coverage:* CNN, Discovery News, Well (New York Times Blog), ARS Technica, Health Day, California Healthline, AJPB Talks, Scope (Stanford University School of Medicine), GMU College of Health and Human Services
- [16] **Delamater, P.L.** and J.P. Uberti. 2016. Geographic Access to Hematopoietic Cell Transplantation Services in the United States. *Bone Marrow Transplantation*. 51:241–248.
- [15] Radzikowski, J., Stefanidis, A., Jacobsen, K.H., Croituru, A., Crooks, A.T., and **P.L. Delamater**. 2016. The Measles Vaccination Narrative in Twitter: A Quantitative Analysis. *JMIR Public Health and Surveillance*. 2(1):1–15.
- [14] Akerlof, K.L., **Delamater, P.L.**, Boules, C.R., Upperman, C.R., and C.S. Mitchell. 2015. Vulnerable Populations Perceive Themselves at Risk from the Health Effects of Climate Change. *International Journal of Environmental Research and Public Health*. 12(12):15419–15433.
- [13] Pan, J., Liu, H., Wang, X., Xie, H., and **P.L. Delamater**. 2015. Assessing the spatial accessibility of hospital care in Sichuan, China. *Geospatial Health*. 10(2):261–270.
- [12] Pan, J., Qin, X., Li, Q., Messina, J.P., and **P.L. Delamater**. 2015. Does Hospital Competition Improve Health Care Delivery in China?. *China Economic Review*. 33:179–199.
- [11] **Delamater, P.L.** 2013. Spatial accessibility for suboptimally configured health care systems: A modified two-step floating catchment area metric. *Health & Place*. 24:30–43.
- [10] **Delamater, P.L.**, Shortridge, A.M., and J.P. Messina. 2013. Regional health care planning: a methodology to cluster hospitals using community utilization patterns. *BMC Health Services Research*. 13(333).
- [9] **Delamater, P.L.**, Messina, J.P., Grady, S.C., WinklerPrins, V., and A.M. Shortridge. 2013. Do more hospital beds lead to higher hospitalization rates? A spatial examination of Roemer’s Law. *PLOS ONE*. 8(2):e54900.  
*Press coverage:* MSU Today, Michigan Radio, Crain’s Detroit Business, Capital City Recap (1320 WILS), DOTmed News, FierceHealthcare, Association of American Geographers SmartBrief, MiBiz, Healthcare Facilities Today, Healthcare Design, Clarkston News, Medical News Today
- [8] **Delamater, P.L.**, Messina, J.P., Shortridge, A.M., and S.C. Grady. 2012. Measuring geographic access to health care: raster and network-based methods. *International Journal of Health Geographics*. 11(15). (Listed as “highly accessed”)
- [7] **Delamater, P.L.**, Finley, A.O., and S. Banerjee. 2012. An analysis of asthma hospitalizations, air pollution, and weather conditions in Los Angeles County, California. *Science of the Total Environment*. 425:110–118.
- [6] **Delamater, P.L.**, Messina, J.P., Qi, J., and M.A. Cochrane. 2012. A hybrid visual estimation method for the collection of ground truth fractional coverage data in a humid tropical environment. *International Journal of Applied Earth Observation and Geoinformation*. 18:504–514.
- [5] Salazar, E., Sanso, B., Finley, A.O., Hammerling, D., Steinsland, I., Wang, X., and **P.L. Delamater**. 2011. Comparing and blending regional climate model predictions for the American Southwest. *Journal of Agricultural, Biological, and Environmental Statistics*. 16(4):586–605.

- [4] Messina, J.P., **Delamater, P.L.**, Hupy C.M., and Y.K. Makido. 2007. Neutral Models and the Deviation from Neutral Pattern Metric. *Ecological Informatics*. 2(1):43–47.
- [3] Messina, J.P., and **P.L. Delamater**. 2006. Defoliation and the War on Drugs in Putumayo, Colombia. *International Journal of Remote Sensing*. 27(1):121–128.
- [2] Messina, J.P., Walsh, S.J., Mena, C.F., and **P.L. Delamater**. 2006. Land Tenure and Deforestation Patterns in the Ecuadorian Amazon: Conflicts in Land Conservation in Frontier Settings. *Journal of Applied Geography*. 26(2):113–128.
- [1] Hupy, C.M., Schaetzl, R.J., Messina, J.M., Hupy, J.P., **Delamater, P.L.**, Enander, H., Hughey, B.D., Boehm, R., Mitroka, M.J., and M.T. Fashoway. 2004. Modeling the Complexity of Different, Recently Deglaciated Soil Landscapes as a Function of Map Scale. *Geoderma* 123:115–130.

#### REFEREED CONFERENCE PROCEEDINGS

- [4] Zuffe, A., Trajcevski, G., Pfoser, D., Rice, M.T., Renz, M., Leslie, T.F., **Delamater, P.L.**, and T. Emrich. 2017. Handling Uncertainty in Geo-Spatial Data. IEEE International Conference on Data Engineering (Tutorial), 1467–1470. San Diego, CA. April 19–22, 2017.
- [3] Gazaz, H., Croitoru, A., **Delamater, P.L.**, and D. Pfoser. 2016. Geo-Fingerprinting of Social Media Content. In Proceedings of the Third International ACM SIGMOD Workshop on Managing and Mining Enriched Geo-Spatial Data, 1–6. San Francisco, CA. June 26 – July 1, 2016.
- [2] Messina, J.P. and **P.L. Delamater**. 2003. Land Use and Land Cover Characterization of Inaccessible Sites in the Colombian Amazon. Proceedings of the *American Society for Photogrammetric Engineering and Remote Sensing*.
- [1] Lobben, A.K., and **P.L. Delamater**. 2001. Design and Evaluation of a Virtual Cartography Lab. In World Conference on Educational Multimedia, Hypermedia and Telecommunications 2001, ed. C.g Montgomerie and J. Viteli, 1151–1154. Norfolk, VA.

#### MANUSCRIPTS IN REVISION

Gartner, D.R., **Delamater, P.L.**, Hummer, R.A., Lund, J.L., Pence, B.W., and W.R. Robinson. Integrating surveillance data to estimate contemporary and accurate race/ethnicity- specific hysterectomy inequalities among reproductive aged women: who’s at risk?. *Epidemiology*.

#### MANUSCRIPTS SUBMITTED OR UNDER REVIEW

Woodul, R.+, **Delamater, P.L.**, and M. Emch. Hospital Surge Capacity for an Influenza Pandemic in the Triangle Region of North Carolina. *Spatial and Spatio-temporal Epidemiology*.

Mohanti, S., **Delamater, P.L.**, Reiss, D.R., Klein, N.P., Salmon, D., Omer, S.B., and A.M. Bутtenheim. Application of Conditional Admission Criteria for School Entry Vaccine Requirements in California. *Vaccine*.

Bryant, J.+, and **P.L. Delamater**. Examination of spatial accessibility at micro- and macro-levels using the enhanced two-step floating catchment area (E2SFCA) method. *Annals of GIS*.

Pingali, C., **Delamater, P.L.**, Bутtenheim, A.M., Klein, N.P., Salmon, D., and S.B. Omer. Assessment of Large-scale Vaccine Interventions on Kindergarteners Not-Up-To-Date on Vaccines in California. *JAMA*.

#### EDITORIALS / COMMENTARIES [NON-PEER REVIEWED]

**Delamater, P.L.** 2017. Geographic Information Analysis: Using Spatial Data to Display, Manipulate, and Analyze. *Journal of Mason Graduate Research*. 4(1):i–ii.

#### RESEARCH AWARDS

Emerging Scholar Award. 2019. Health Geography Specialty Group, AAG.

Frank J. McDevitt, DO Excellence in Research Award, Blue Cross Blue Shield of Michigan Foundation. 2014. Do More Hospital Beds Lead to Higher Hospitalization Rates? A Spatial Examination of Roemer’s Law. \$10,000.

Jacque May Thesis Award, Doctoral division, Health Geography Specialty Group, AAG. 2013. Access to Hospitals in a Regulated Health Care System: Implications for Utilization. \$250.

## GRANT ACTIVITY

### FUNDED, EXTERNAL

ASPiRE: Advancing Science & Practice in the Retail Environment. 2018–2023. National Cancer Institute. Ribisl, Henriksen, Luke [Co-PI], **Delamater, P.L. [Co-I]**. (Year 1: 20% FTE)

CON/Health Policy Mapping. 2018–2019. \$86,233. Michigan Department of Health and Human Services. Pearson, A.L. [PI], **Delamater, P.L. [Co-I]**. (16.7% FTE)

Accessible metrics of access: Novel tools to measure immunization coverage. 2018–2019. \$100,000. Bill and Melinda Gates Foundation. Boyce, R. [PI], **Delamater, P.L. [Co-I]**. (4.2% FTE)

Impact of eliminating nonmedical exemptions in California. 2016–2021. \$739,056. National Institute of Allergy and Infectious Diseases. Omer, S.B. [PI], **Delamater, P.L. [Co-I]**. (Year 2: 8.3% FTE, Year 3: 4.2% FTE)

CON/Health Policy Mapping. 2017–2018. \$87,717. Michigan Department of Health and Human Services. Shortridge, A.M. [PI], **Delamater, P.L. [Co-I]**. (14.6% FTE)

CON/Health Policy Mapping. 2016–2017. \$86,606. Michigan Department of Health and Human Services. Shortridge, A.M. [PI], **Delamater, P.L. [Co-I]**. (16.7% FTE)

Climate Communication Consortium of Maryland (CCCCom), GMU Research Support. 2015–2016. \$286,412. Town Creek Foundation. Akerlof, K.L.[PI], **P.L. Delamater [Co-I]**. (4.2% FTE)

CON/Health Policy Mapping. 2015–2016. \$82,000. Michigan Department of Health and Human Services. Shortridge, A.M. [PI], **Delamater, P.L. [Co-I]**. (16.7% FTE)

CON/Health Policy Mapping. 2014–2015. \$82,000. Michigan Department of Health and Human Services. Shortridge, A.M. [PI], **Delamater, P.L. [Co-I]**. (16.7% FTE)

Measurement and empirical research on inter-regional competition within the hospital space and quality of the impact of health care costs. 2013–2015. \$210,000 RMB. NSFc (China). Pan J. [PI], **Delamater, P.L. [Co-I]**. (0% FTE)

### FUNDED, INTERNAL

Dynamics of Extreme Events, Populations, and Places (DEEPP). 2018–2019. \$5,000. Creativity Hubs Pilot Award, University of North Carolina Chapel Hill. Frankenberg, E. [PI], **Delamater, P.L. [Co-I]**. (0% FTE)

The spatial and social clustering and diffusion of vaccine refusal. 2018. \$11,500. Carolina Population Center Seed Grant, University of North Carolina Chapel Hill. **Delamater, P.L. [PI]**. (0% FTE)

Mapping the Likely Impact of Climate Change on Security Threats Related to Tickborne Emerging Infectious Diseases. 2016–2017. \$6,500. College of Science, George Mason University. Cash, B.A. [PI], **Delamater, P.L. [Co-I]**. (0% FTE)

Vaccine-preventable disease outbreaks and community-level vaccination coverage. 2015–2016. \$25,000. Provost Multidisciplinary Research Initiatives, George Mason University. **Delamater, P.L [PI]**. (0% FTE)

Health Narratives: A Multidisciplinary Approach to Understanding Health-Related Information Generation and Dissemination in Social Media. 2015–2016. \$50,000. Provost Multidisciplinary Research Initiatives, George Mason University. Stefanidis, A. [PI], **Delamater, P.L., [Participating Investigator]**. (0% FTE)

Curriculum Development – Scholarship Development Grant. 2015–2016. \$16,000. Office of Student Scholarship, Creative Activities, and Research – Students as Scholars, George Mason University. **Delamater, P.L. [Co-PI]**. (4.2% FTE)

### SUBMITTED OR UNDER REVIEW, EXTERNAL

Undervaccinated Schoolchildren and Unintended Consequences: Analyses of Provisionally Enrolled Kindergartners and School Entry Vaccination Requirements. 2019–2021. \$146,083. National Institutes of Health. Yang, Y.T. [PI], **Delamater, P.L. [Co-I]**. Submitted October 2018.

## PRESENTATIONS

(\*) presenting author, if not given by me; (+) student coauthor; (#) invited

## CONFERENCES

- [22] **Delamater, P.L.** 2019. The spatial and social clustering of vaccine refusal. Association of American Geographers Annual Meeting. New Orleans, LA. April 7, 2019
- [21] **Delamater, P.L.** 2018. The spatiotemporal evolution of vaccine refusal in California, 2000-2013. National Immunization Conference. Atlanta, GA. May 16, 2018
- [20] **Delamater, P.L.#** 2018. Geography of Vaccine Refusal in California and Impact of Legislation. Annual Conference on Vaccinology Research. Bethesda, MD. April 23, 2018
- [19] **Delamater, P.L.** 2018. Using Floating Catchment Area (FCA) metrics to predict health care utilization patterns. Association of American Geographers Annual Meeting. New Orleans, LA. April 13, 2018
- [18] **Delamater, P.L.**, Leslie, T.F., and Y.T. Yang. 2017. Is vaccine-related behavior contagious? Examining non-medical exemptions from vaccination in California from 2000 to 2015. Association of American Geographers Annual Meeting. Boston, MA. April 8, 2017
- [17] **Delamater, P.L.**, Leslie, T.F., and Y.T. Yang\*. 2016. Senate Bill 277's "Grandfather Clause" and Nonmedical Vaccine Exemptions in California: A Spatiotemporal Analysis. American Public Health Association Annual Meeting & Exposition. Denver, CO. November, 2016
- [16] **Delamater, P.L.** 2016. Who is the "herd" in herd immunity?: How herd definition affects vaccination coverage rates and herd immunity status. AAG Mid-Atlantic Division Annual Meeting. Fairfax, VA. November 19, 2016
- [15] Radzikowski, J.\*, Croitoru, A., Crooks, A., **Delamater, P.L.**, Jacobsen, K.H., Lampryanidis, G., Pfoser, D., Stefanidis, A., and E. Vraga. 2016. Health Crises in Twitter: A Comparative Study of Spatial Patterns of Participation for Ebola and Zika. GeoSocial Workshop, GIScience Conference. Montreal, QC. September 27, 2016
- [14] **Delamater, P.L.**, Leslie, T.F., Jacobsen, K.H., Yang, Y.T., and E.J. Street+. 2016. Estimating Vaccine-preventable Disease Outbreak Risk at a Local Scale. Association of American Geographers Annual Meeting. San Francisco, CA. March 31, 2016
- [13] Yang, Y.T.\*, **Delamater, P.L.**, Leslie, T.F., and M.M. Mello. 2015. Who Takes Advantage of Personal Belief Exemption Laws? A Multivariate Analysis of California Schools and Communities. American Public Health Association Annual Meeting & Exposition. Chicago, IL. November 2, 2015
- [12] **Delamater, P.L.**, Yang, Y.T., and T.F. Leslie. 2015. Spatial clustering of non-medical exemptions from vaccination in schoolchildren: A case study of California, 2005-2014. International Medical Geography Symposium. Vancouver, Canada. July 6, 2015
- [11] **Delamater, P.L.** 2015. Floating Catchment Area (FCA) Metrics: Catching Potential Spatial Accessibility?. Association of American Geographers Annual Meeting. Chicago, IL. April 23, 2015
- [10] **Delamater, P.L.** 2014. The effects of aggregation error on geographic accessibility in network data space. Association of American Geographers Annual Meeting. Tampa, FL. April 12, 2014
- [9] Andresen, J.\*, Jain, A.K., Niyogi, D.S., Alagarswamy, G., **Delamater, P.L.**, and X. Liu, X. Assessing the Impact of Climatic Variability and Change on Maize Production in the Midwestern USA. Association of American Geographers Annual Meeting. Tampa, FL. April 10, 2014
- [8] Andresen, J.\*, Jain, A.K., Niyogi, D.S., Alagarswamy, G., Biehl, L., **Delamater, P.L.**, Doering, O., Elias, A.A., Elmore, R., Gramig, B., Hart, C., Kellner, O., Liu, X., Mohankumar, E., Prokopy, L.S., Song, C., Todey, D., and M. Widhalm. 2013. Assessing the Impact of Climatic Variability and Change on Maize Production in the Midwestern USA. American Geophysical Union Fall Meeting. San Francisco, CA. December 9-13, 2013
- [7] **Delamater, P.L.** 2013. The Effects of Unmet Need and Supplier-Induced Demand on Health Care Planning and Regulation. International Medical Geography Symposium. East Lansing, MI. July 11, 2013
- [6] **Delamater, P.L.** 2013. The effects of potential spatial access to health care services on realized patterns of utilization. Association of American Geographers Annual Meeting. Los Angeles, CA. April 12, 2013
- [5] **Delamater, P.L.** 2012. Spatial accessibility for suboptimally configured health care systems: A modified two-step floating catchment area metric. West Lakes / East Lakes Association of American Geographers Regional Meeting. DeKalb, IL. October 27, 2012

- [4] **Delamater, P.L.** 2012. The relationship between potential spatial accessibility of hospitals and utilization of hospital services. Association of American Geographers Annual Meeting. New York, NY. February 24, 2012
- [3] Salazar, E.\*, Sanso, B., Finley, A.O., Hammerling, D., Steinsland, I., Wang, X., and **P.L. Delamater**. 2011. A Bayesian Spatio-Temporal Approach to Forecast Future Climate - Blending Regional Climate Model Predictions for the American Southwest. American Geophysical Union Fall Meeting. San Francisco, CA. December 5-9, 2011
- [2] **Delamater, P.L.** and J.P. Messina. 2004. Mapping and Modeling Tropical Defoliation: A Case Study of the Effects of Plan Colombia. Association of American Geographers Annual Meeting. Philadelphia, PA.
- [1] **Delamater, P.L.** and J.P. Messina. 2004. Mapping and Modeling Vegetation Changes in the Tropics. Ecuadorian Amazon Symposium. Quito, Ecuador. June, 2004

COLLOQUIA and INVITED PRESENTATIONS

- [15] **Delamater, P.L.** 2017. What is herd immunity? Individual decisions to vaccinate impact the entire community. Galileo's Science Cafe, George Mason University, Manassas, VA. April 6, 2017
- [14] **Delamater, P.L.** 2017. Exemptions from Childhood Vaccination Requirements: A Geographic Analysis. Carolina Population Center Interdisciplinary Research Seminars, University of North Carolina at Chapel Hill, Chapel Hill, NC. February 10, 2017
- [13] **Delamater, P.L.** 2016. Geography, GIS, and Childhood Vaccination in California. Honors 110 (Research Methods) Colloquium Series, George Mason University, Fairfax, VA. September 23, 2016
- [12] **Delamater, P.L.** 2016. Creating, Delivering, and Evaluating Effective Oral Presentations. Earth Systems and Geoinformation Sciences Colloquium Series, George Mason University, Fairfax, VA. September 1, 2016
- [11] **Delamater, P.L.** 2016. Exemptions from Childhood Vaccination Requirements: A Geographic Analysis. College of Science, Science Fridays, George Mason University, Fairfax, VA. March 25, 2016
- [10] **Delamater, P.L.** 2016. Estimating Community-level Vaccination Coverage using School-level Data and Population Mobility Information. Computer Science Seminar Series, Virginia Tech University, National Capital Region Campus, Falls Church, VA. February 5, 2016
- [9] **Delamater, P.L.** 2015. Creating, Delivering, and Evaluating Effective Oral Presentations. Earth Systems and Geoinformation Sciences Colloquium Series, George Mason University, Fairfax, VA. September 3, 2015
- [8] **Delamater, P.L.** 2015. A Geographic Information Systems (GIS) Analysis of Exemptions from Vaccination Requirements in California. ASSIP Hot Topics in Science Seminar, George Mason University, Fairfax, VA. July 16, 2015
- [7] **Delamater, P.L.** 2014. Do more hospital beds lead to higher hospitalization rates? A spatial examination of Roemer's Law. Earth Systems and Geoinformation Sciences Colloquium Series, George Mason University, Fairfax, VA. September 10, 2014
- [6] **Delamater, P.L.** 2014. The Light at the End of the Tunnel: Attempting to Secure an Assistant Professor Position. Professional Development Series, Michigan State University, Department of Geography. East Lansing, MI. January 29, 2014
- [5] **Delamater, P.L.** 2013. Do more hospital beds lead to higher hospitalization rates? A spatial examination of Roemer's Law. Lucia Harrison Colloquium Series, Western Michigan University, Department of Geography. Kalamazoo, MI. February 8, 2013
- [4] **Delamater, P.L.** 2013. Responsible Conduct in Research: Authorship and Allocation of Credit. Professional Development Series, Michigan State University, Department of Geography. East Lansing, MI. January 31, 2013
- [3] Sanso, B.\*, **Delamater, P.L.**, Finley, A.O., Hammerling, D., Salazar, E., Steinsland, I., and X. Wang. 2010. Comparing and blending regional climate model predictions for the American south-west. Workshop on Environmetrics. The National Center for Atmospheric Research, Boulder, CO. October 15, 2010
- [2] **Delamater, P.L.** and J.P. Messina, 2005. Mapping and Modeling Tropical Defoliation Using Vegetation Indices. Ecociencia. Quito, Ecuador. June, 2005
- [1] Messina, J.P. and **P.L. Delamater**. 2004. The Unintended Consequences of the Drug War: Social and Physical Changes along the Colombia / Ecuador Border. MSU Center for Latin American and Caribbean Studies. February 11, 2004



## POSTER PRESENTATIONS

- [17] **Delamater, P.L.**, Leslie, T.F., and Y.T. Yang. 2017. A spatiotemporal analysis of non-medical exemptions from vaccination in California schools before and after SB277. 20th Annual Conference on Vaccine Research. Bethesda, MD. April 24-26, 2017
- [16] **Delamater, P.L.**, Leslie, T.F., Jacobsen, K.H., Yang, Y.T. and E.J. Street+. 2017. Vaccine-preventable disease outbreaks and community-level vaccination coverage. GMU Biotech and Health Sciences Research Symposium. Fairfax, VA. April 21, 2017
- [15] Marchiori, M.J.+ , Pearson, A.L., Rzotkiewicz, A., Shortridge, A.M., and **P.L. Delamater**. 2017. Understanding the relationship between exposure to freshwater blue spaces and mental health in Michigan: An ecological study. MSU University Undergraduate Research and Arts Forum. East Lansing, MI. April 7, 2017
- [14] **Delamater, P.L.**, Jacobsen, K.H., Leslie, T.F., Street, E.J.+ , and Y.T. Yang. 2016. Who is the “herd” in herd immunity?: How herd definition affects vaccination coverage rates and herd immunity status. 19th Annual Conference on Vaccine Research. Baltimore, MD. April 18-20, 2016
- [13] Snyder, K.+ , Durand, S., Sanchez, J.F., Gerbasi, R, Hakami, R, **Delamater, P.L.**, and A.G. Lescano. 2016. Multiple Episodes of Plasmodium vivax Malaria in the Peruvian Amazon: Relapses or Frequent Reinfection?. National Conferences on Undergraduate Research. Asheville, NC. April, 2016
- [12] Tanyu, B.F., Tecuci, G., **Delamater, P.L.**, and H. Delano. 2016. Natural Hazard Security: Forecasting Landslides. GMU Multi-Disciplinary Research Symposium, Fairfax, VA. February, 2016
- [11] Snyder, K.+ , Durand, S., Sanchez, J.F., Gerbasi, R, Hakami, R, **Delamater, P.L.**, and A.G. Lescano. 2016. Multiple Episodes of Plasmodium vivax Malaria in the Peruvian Amazon: Relapses or Frequent Reinfection?. American Association for the Advancement of Science. Washington, DC. February, 2016
- [10] Mousam, A.+ , Maggioni, V., **Delamater, P.L.**, Cash, B., and A.M. Quispe. 2015. Utilizing remote sensing and modeling to understand malaria prevalence rates in Loreto, Peru. American Geophysical Union Fall Meeting. San Francisco, CA. December, 2015
- [9] Snyder, K.+ , Durand, S., Sanchez, J.F., Gerbasi, R, Hakami, R, **Delamater, P.L.**, and A.G. Lescano. 2016. Multiple Episodes of Plasmodium vivax Malaria in the Peruvian Amazon: Relapses or Frequent Reinfection?. American Society of Tropical Medicine and Hygiene Annual Meeting, Philadelphia, PA. October, 2015
- [8] Mousam, A.+ , Maggioni, V., **Delamater, P.L.**, Kephart, J., and A. Quispe. 2015. The impact of climate variability on malaria prevalence rates in Loreto, Peru. American Society of Tropical Medicine and Hygiene Annual Meeting, Philadelphia, PA. October, 2015
- [7] Gruber, N.+ and **P.L. Delamater**. 2015. The Role of Vaccination Exemption in California Pertussis Outbreaks: A Geographic Information System Analysis. 2015 Aspiring Scientists Summer Internship Program Poster Session, Manassas, VA. August, 2015
- [6] Malik, S.+ and **P.L. Delamater**. 2015. A Geographic Information System (GIS) Analysis of Exemptions from Required Vaccinations and Pertussis Cases in Los Angeles County, California. 2015 Aspiring Scientists Summer Internship Program Poster Session, Manassas, VA. August, 2015
- [5] **Delamater, P.L.**, Leslie, T.F., and Y.T. Yang. 2015. Vaccine-preventable Disease Outbreaks and Community-level Vaccination Coverage. GMU Multi-Disciplinary Research Symposium, Fairfax, VA. April, 2015
- [4] Messina, J.P. and **P.L. Delamater**. 2004. Simulating the Effects of “Plan Colombia” on Land Use and Land Cover in the Ecuadorian Amazon: A Complex Systems Approach. NASA LCLUC Meeting, College Park, MD.
- [3] **Delamater, P.L.** 2003. Modeling Green Vegetation Cover Using Fractional Coverage and Field Data: A Case Study in the Ecuadorian Amazon. AAG East Lakes/West Lakes Conference. *2nd place in the graduate student poster competition.*
- [2] **Delamater, P.L.** and J. Althausen. 2001. Developing a Bathymetric Model for the Khor Al Bazm, United Arab Emirates using Remotely Sensed Imagery and a Digital Terrain Model. Association of American Geographers Annual Meeting. New York, NY. *1st place in the Remote Sensing Specialty Group undergraduate student poster competition.*
- [1] **Delamater, P.L.** and A.K. Lobben. 2001. Design Guidelines for Authoring Dynamic Atlases. Association of American Geographers Annual Meeting. New York, NY.



## DISCUSSION PANELS

- [1] Multidisciplinary and Collaborative Approaches to Public Health Crises. University Scholars Fall Institute, George Mason University, Fairfax, VA. August 23, 2016

## TEACHING

---

### COURSE INSTRUCTION (Course evaluations available upon request)

#### 2018-2019

GEOG 491 (Spring): Introduction to Geographic Information Systems, University of North Carolina Chapel Hill  
GEOG 541 (Fall): GIS and Public Health, University of North Carolina Chapel Hill  
GEOG 446 (Fall): Geography of Health Care Delivery, University of North Carolina Chapel Hill

#### 2017-2018

GEOG 541 (Spring): GIS and Public Health, University of North Carolina Chapel Hill  
GEOG 491 (Spring): Introduction to Geographic Information Systems, University of North Carolina Chapel Hill  
GEOG 446 (Fall): Geography of Health Care Delivery, University of North Carolina Chapel Hill

#### 2016-2017

GGG 653 (Spring): Geographic Information Analysis, George Mason University  
GGG 553 (Spring): Geographic Information Systems, George Mason University  
GGG 300 (Fall): Quantitative Methods for Geographical Analysis, George Mason University  
GGG 540/340 (Fall): Health Geography, George Mason University

#### 2015-2016

GGG 653 (Spring): Geographic Information Analysis, George Mason University (*Special issue of JMGR*)  
GGG 553 (Spring): Geographic Information Systems, George Mason University  
GGG 300 (Fall): Quantitative Methods for Geographical Analysis, George Mason University  
GGG 540/399 (Fall): Health Geography, George Mason University

#### 2014-2015

GGG 553 (Spring): Geographic Information Systems, George Mason University  
GGG 300 (Fall): Quantitative Methods for Geographical Analysis, George Mason University

#### 2013-2014

NRE 531 (Fall): Principles of GIS, School of Natural Resources & Environment, University of Michigan  
HM 810 (Fall): GIS and Public Health, Program in Public Health, Michigan State University

### ONLINE COURSE DEVELOPMENT

HM 810: GIS and Public Health, Program in Public Health, Michigan State University

## STUDENT MENTORING

---

GEOG: Geography (UNC-CH), CPC: Carolina Population Center (UNC-CH), EPI: Epidemiology (UNC-CH), HB: Health Behavior (UNC-CH), HPM: Health Policy and Management (UNC-CH)

GEO: Geography (MSU)

ESGS: Earth Systems and Geoinformation Science (GMU), GECA: Geographic and Cartographic Science (GMU), GEOI: Geoinformatics and Geospatial Intelligence, AOES: Atmospheric, Oceanic, and Earth Sciences (GMU), BIS: Bachelor of Individualized Studies (GMU), CEIE: Civil, Environmental and Infrastructure Engineering (GMU)

### CURRENT COMMITTEE MEMBER

Bethany DiPrete (PhD EPI), Michael Fliss (PhD EPI), Danielle Gartner (PhD EPI), Anne Haley (MS GECA), Elizabeth Kamai (PhD EPI), Corinna Keeler (PhD GEOG), Amanda Kong (PhD HB), Christine Kim (PhD HPM), Kathryn Kulbicki (PhD ESGS), Phil Morefield (PhD ESGS), Khristopher Nicholas (PhD Nutrition), Jonnell Sanciangco (PhD GEO), Mary Schwoerer (PhD ESGS), Sharon Spradling (PhD ESGS), Kelly Vanderbrink (PhD ESGS)

## COMPLETED

**Dennis Nicholas (PhD ESGS, Fall 2015), chair**

**Caitlin Blackwell (MS GECA, Summer 2017), chair**

**Ed Amrhein (MS GECA, Fall 2016), chair**

**Rachel Woodul (Undergraduate Honors Thesis, GEOG, Spring 2018), chair**

**Christopher Noble (MS GECA, Spring 2017), comprehensive exam chair**

**Christopher Lee (MS GECA, Fall 2016), comprehensive exam chair**

**Sue Zywokarte (MS GECA, Summer 2016), comprehensive exam chair**

**Marcella Cavallaro (MS GECA, Spring 2016), comprehensive exam chair**

**Christopher Cortina (CPC Undergraduate Internship Program, Summer 2018), faculty mentor**

**Daniel Ohlendorf (BIS, Spring 2016), faculty mentor**

**Kathryn Snyder (Undergraduate Research Scholars Program, 2015-2016), faculty mentor**

**Naomi Gruber (Aspiring Scientists Program, James Madison HS, Summer 2015), faculty mentor**

**Subul Malik (Aspiring Scientists Program, Thomas Jefferson HS, Summer 2015), faculty mentor**

Marcus Boyd (PhD ESGS, Spring 2017), committee

Greg Hammann (PhD ESGS, Fall 2016), committee

David Alexander (PhD ESGS, Summer 2016), committee

Kalyn Rossiter (PhD ESGS, Fall 2015), committee

Michael Tischler (PhD ESGS, Spring 2015), committee

Zachary Toll (MS GEOI, Summer 2017), committee

Xiechun Lu (MS GECA, Summer 2017), committee

Michael Sanchez (MS GECA, Fall 2016), committee

Nathan Black (MS GEOI, Summer 2016), committee

Aneela Mousam (MS CEIE, Spring 2016), committee

Hatim Gazaz (MS GEOI, Spring 2016), committee

Julie Sapanik (MS AOES, Spring 2015), committee

Chelsea Cook (MS GECA, Spring 2015), committee

Amber Huffman (MS GECA, Fall 2016), comprehensive exam committee

Kenneth Mitchell (MS GECA, Fall 2016), comprehensive exam committee

## SERVICE, MEMBERSHIPS, & ACADEMIC DEVELOPMENT

---

### EDITORIAL BOARD

*2018-2020*, Journal of Applied Geography

*2018-*, Academic Editor, PLOS ONE

### MANUSCRIPT REVIEWER

*2018*: BMC Medicine; International Journal of Health Geographics; Health and Place [2]; Journal of Applied Geography; Social Science and Medicine; Health Services Research [2]; Journal of Urban Health; BMC Health Services Research; BMC Public Health; PLOS ONE [2]; Vaccine

*2017*: International Journal of Health Geographics; Health and Place; Inquiry; Journal of Applied Geography [2]; International Dental Journal; PLOS ONE; Environmental Monitoring and Assessment

*2016*: International Journal of Health Geographics; Pediatrics; Journal of Applied Geography [2]; BMC Health Services Research; Health Services Research; BMJ Supportive & Palliative Care; Decision Support Systems

*2015*: American Journal of Public Health; Health & Place; International Journal of Health Geographics; Spatial and Spatio-temporal Epidemiology; Computers, Environment and Urban Systems; BMC Health Services Research; Journal of Transport Geography; Service Science; AIMS Public Health; ISPRS International Journal of Geo-Information

*2014*: BMC Health Services Research; PLOS ONE; Social Science & Medicine; Spatial and Spatio-temporal Epidemiology; Health & Place [2]; Geoinformatics & Geostatistics: An Overview

*2013*: Health & Place; PLOS ONE; International Journal of Health Geographics; Pediatrics; Birth Defects Research Part A: Clinical and Molecular Teratology; Remote Sensing; Plant Ecology; Journal of Ecology and the Natural Environment

*2012*: International Journal of Applied Geospatial Research

## PROPOSAL REVIEWER

*2018*: National Science Foundation (ad hoc)

*2017*: National Science Foundation (ad hoc)

## SERVICE

GEOG: Geography (department-level)

*2018-2019*: Graduate Student Committee, GEOG; Judge, NCGIS Innovative GIS Competition, GEOG

*2017-2018*: Colloquium Committee, GEOG; Graduate Student Committee, GEOG

At George Mason University - GGS: Geography and Geoinformation Science (department-level); COS: College of Science (college-level); GMU: George Mason University (university-level)

*2016-2017*: Task Force on Multidisciplinary Education, GMU; Fenwick Fellow Selection Committee, GMU; Curriculum Committee, GGS; Co-organizer, GIS Day Event, GGS; Organizer, Student Research Poster Competition and Student Map Competition, GGS

*2015-2016*: Task Force on Multidisciplinary Education, GMU; Hiring Committee, GGS / Center for Location Science; Curriculum Committee, GGS; Student Awards Committee, GGS; Co-organizer, GIS Day Event, GGS; Organizer, Student Research Poster Competition and Student Map Competition, GGS

*2014-2015*: Judge, COS Undergraduate Research Colloquium, COS; Student Awards Committee, GGS; Co-organizer, GGS GIS Day Event, GMU; Organizer, GGS Student Research Poster Competition and Student Map Competition, GMU

*2012*: Judge, Student paper and poster competition, West Lakes / East Lakes Association of American Geographers Regional Meeting

## ACADEMIC DEVELOPMENT

*2015*: Scholarship Development Grant, Faculty Development Workshops, GMU

*2014*: Innovations in Teaching & Learning Conference, GMU

*2013*: Responsible Conduct in Research Series, MSU

## MEMBERSHIPS

Association of American Geographers

Interdisciplinary Association for Population Health Science