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Chantel D. Sloan-Aagard, Ph.D.

CONTACT INFORMATION

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PERSONAL DATA

Date and Place of Birth

April 10, 1982
Provo, Utah

Home Contact Information

459 N 1300 W
Springville, UT 84663
(603) 252-2142

EDUCATION AND EMPLOYMENT

07/2019- pres.	Associate Professor, Department of Public Health Brigham Young University, Provo, UT
08/2013-06/2019	Assistant Professor, Department of Public Health Brigham Young University, Provo, UT
07/2010-08/2013	Postdoctoral Research Fellow, Division of Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University, Nashville, TN
01/2010-06/2010	Postdoctoral Internship, Department of Preventive Medicine, State University of New York at Stony Brook, Stony Brook, NY
08/2004-11/2009	Dartmouth College, Hanover, NH, Ph.D., Genetics
09/2000-04/2004	Brigham Young University-Hawaii, Laie, HI, B.S. (<i>summa cum laude</i>) Biology pre-professional (minor in Biochemistry)

PROFESSIONAL ORGANIZATIONS

Sloan, Chantel D., Ph.D. (Continued)

03/10-Pres. Member, Association of American Geographers

04/11-Pres. Member, American Thoracic Society

01/08-01/11 Member, American Academy for the Advancement of Sciences

PUBLICATIONS AND PRESENTATIONS *(oldest to most recent)*

Original Research Articles

1. **Sloan C**, Duell E, Andrew A, Karagas M, Williams S, Moore J. (2009). Genetic population structure in New Hampshire. *PLoS One* 4(9):e6928.
2. **Sloan C**, Shen L, West,J, Wishart H, Flashman L, Rabin L, Santull, R, Guerin S, Rhodes C, Tsongalis G, McAllister T, Ahles T, Lee S, Moore J, Saykin A. (2010) Pathway-Based Hierarchical Clustering Analysis of Older Adults with Cognitive Complaints and Amnesic Mild Cognitive Impairment Using Clinical and Neuroimaging Phenotypes. *American Journal of Medical Genetics B Neuropsychiatric Genetics*. Jul;153B(5):1060-1069.
3. Shen L, Kim S, Rsacher S, Nho K, Swaminathan S, West J, Foroud T, Pankratz N, Moore J, **Sloan C**, Huentelman M, Craig D, DeChairo B, Potkin,S, Jack C, Weiner M, Saykin A, & Alzheimer's Disease Neuroimaging Initiative. (2010) Whole Genome Association Study of Brain-Wide Imaging Phenotypes for Identifying Quantitative Trait Loci in MCI and AD: A Study of the ADNI Cohort. *Neuroimage*. 53(3):1051-1063.
4. **Sloan, C**, Andrew A, Gruber J, Mwenda K, Moore J, Onega T, Karagas M, Shi X, Duell E. (2012) Indoor and Outdoor Air Pollution and Lung Cancer in New Hampshire and Vermont. *Toxicology and Environmental Chemistry* 94(3).
5. **Sloan C**, Jacquez G, Gallagher C, Ward M, Baastrup R, Raaschou-Nielsen O, Meliker J. (2012) Performance of Cancer Cluster Q-statistics for Case-Control Residential Histories. *Spatial and Spatio-temporal Epidemiology* 3(4):297-310.
6. **Sloan C**, Gebretsadik T, Wu P, Mitchel E, Hartert T. (2013) Reactive vs. Proactive Patterns of Inhaled Corticosteroid Use in Relationship to Asthma Exacerbations. *American Journal of Preventive Medicine*. *Annals of the American Thoracic Society* 10(2):131-134.
7. James K, Gebretsadik T, Escobar G, Wu P, Carroll K, Li S, Walsh E, Mitchel E, **Sloan C**, Hartert T. (2013) Risk of childhood asthma following infant bronchiolitis during RSV Season. *Journal of Allergy and Clinical Immunology*. 132(1):227-229.
8. Escobar G, Gebretsadik T, Carroll K, Xu Li S, Walsh E, Wu P, Mitchel E, **Sloan C**, Hartert T. (2013) Adherence to Immunoprophylaxis Regimens for RSV Infection in Insured and Medicaid Populations. *Journal of the Pediatric Infectious Diseases Society*. September.

Sloan, Chantel D., Ph.D. (Continued)

9. Straka B, Nian H, **Sloan C**, Byrd B, Woodard-Grice A, Yu C, Stone E, Steven G, Hartert T, Pare G, McCart, C, Brown N. (2013) Association of Presentation of Angiotensin-Converting Enzyme Inhibitor-Associated Angioedema with Pollen Count. *The Journal of Allergy and Clinical Immunology: In Practice*. 1(5):468-473.e4.
10. **Sloan C**, Gebretsadik T, Wu P, Carroll K, Mitchel E, Hartert T. (2013) Spatiotemporal Clusters of Infant Bronchiolitis in a Tennessee Medicaid Population. *Spatial and Spatiotemporal Epidemiology* 6:(17-23).
11. **Sloan C**, Baastrup R, Jacquez G, Raaschou-Nielsen O, Meliker J. (2015) Space-Time Analysis of Testicular Cancer Clusters Using Residential Histories: A Case-Control Study in Denmark. *PLoS One*. 10(3):e0120285
12. **Sloan C**, Chadrasekhar R, Mitchel E, Schaffner W, Lindegren M. (2015) Socioeconomic Disparities in Incidence of Influenza Hospitalizations in Tennessee. *Emerging Infectious Diseases*. September.
13. Nordsborg R, **Sloan C**, Shahid H, Jacquez G, DeRoos A, Cerhan J, Cozen W, Severson R, Ward M, Morton L, Raaschou-Nielsen O, Meliker, J. (2015) Investigation of Spatiotemporal Cancer Clusters Using Residential Histories in a Case-control Study of non-Hodgkin Lymphoma in the United States. *Environmental Health*. 14:48.
14. **Sloan C**, Philipp T*, Bradshaw R*, Chronister S*, Barber W*, and Johnston J. (2015) Applications of GPS-tracked personal and fixed-location PM_{2.5} continuous exposure monitoring. *Journal of the Air and Waste Management Association*. October.
15. Carroll K, Gebretsadik T, Escobar G, Wu P, Xu Li S, Walsh E.I, Mitchel E. **Sloan C**, Dupont W, Hartert T. (2017) Respiratory Syncytial Virus Immunoprophylaxis in High-Risk Infants and Development of Early Childhood Asthma. *Journal of Allergy and Clinical Immunology*. 139(1):66-71.
16. **Sloan C**, Gebretsadik T, Rosas-Salazar C, Wu P, Carroll K, Mitchel E, Anderson L, Larkin E, Hartert T. (2016) Seasonal Timing of Infant Bronchiolitis, Apnea and Sudden Unexplained Infant Death. *PLoS One*. 11(7):e0158521.
17. Lindsay G, Merrill R, Thackery R, **Sloan C**. (2016) Assessing Whether Americans Are Aware of the Nation's Declining Health Ranking, knowledge and practices. *Journal of Community Medicine & Health Education*. 6(6).
18. Payne H*, Steele M, Bingham J, **Sloan C**. (2017) Identifying and Reducing in Mental Health Outcomes Among American Indians and Alaska Natives Using Public Health, Mental Healthcare, and Legal Perspectives. *Administration and Policy in Mental Health and Health Services Research*. 45(1):5-14.
19. **Sloan C**, Weber F, Bradshaw R*, Philipp T*, Barber W*, Walker V*, Graul R*, Tuttle C*, Chartier R*, Johnston J. (2017) Elemental Analysis of Infant Airborne Particulate Exposures. *Journal of Exposure Science and Environmental Epidemiology*. 27:526-534.

Sloan, Chantel D., Ph.D. (Continued)

20. Achten N, Wu P, Bont L, Blanken M, Gebretsadik T, Chappell J, Li Wang L, Yu C, Larkin E, Carroll K, Anderson L, Moore M, **Sloan C**, Hartert T. (2017) Interference Between Respiratory Syncytial Virus and Human Rhinovirus Infection in Infancy. *The Journal of Infectious Diseases*. 215(7):1102-1106.
21. **Sloan C**, Heaton M, Kang S[†], Berrett C, Wu P, Gebretsadik T, Lee R, Hartert T. (2017) The Impact of Climate on Spatiotemporal Patterns of Infant Bronchiolitis in the Contiguous United States. *Health and Place*. 45:46-54.
22. Chandrasekhar R, **Sloan C**, Mitchel E, Ndi D, Alden N, Thomas A, et al. (2017) Social determinants of influenza hospitalization in the United States. *Influenza and Other Respiratory Viruses*. 11(6):479-88.
23. Chaney R, **Sloan C**, Cooper V*, Robinson D*, Hendrickson N*, McCord T*, et al. (2017) Personal exposure to fine particulate air pollution while commuting: An examination of six transport modes on an urban arterial roadway. *PloS One*. 12(11):e0188053.
24. Wu P, Escobar G, Gebretsadik T, Carroll K, Li Sherian, Walsh E, Mitchel E, **Sloan C**, Dupont W, Yu C, Horner J, Hartert T. (2018) Effectiveness of Respiratory Syncytial Virus Immunoprophylaxis in Reducing Bronchiolitis Hospitalizations Among High-Risk Infants. *American Journal of Epidemiology*. 187 (7):1490-1500.
25. Frutos A*, **Sloan C**, Merrill R. (2018) Modeling the Effects of Atmospheric Pressure on Suicide Rates in the USA through Geographically Weighted Regression. *PLoS One*.
26. Harding M*, **Sloan C**, Merrill R, Harding T*, Thacker B, Thacker E. (2018) Transition from Cardiovascular Disease to Cancer as the Leading Cause of Death in US States, 1999-2016. *Preventing Chronic Disease*. 15: E158.
27. Pugh S, Heaton MJ, Hartman B, Berrett C, **Sloan C**, Evans AM, Gebretsadik T, Wu P, Hartert TV, Lee RL (2019) : Estimating seasonal onsets and peaks of bronchiolitis with spatially and temporally uncertain data. *Statistics in medicine*, 38(11):1991-2001.
28. Chaney R, Montgomery H*, King J*, Hendrickson N*, **Sloan C**, Johnston J (2019): A Comparison of Perceived and Measured Commuter Air Pollution Exposures. *Journal of Environmental Health*, 82(4):8-15.
29. Heaton M, Berrett C, Pugh S[†], Evans A, **Sloan C** (2019): Modeling bronchiolitis incidence proportions in the presence of spatio-temporal uncertainty. *Journal of the American Statistical Association* 2019:1-23.
30. Callahan Z*, Smith T*, Ingersoll C[†], Gardner R[†], Korgenski K, **Sloan C**. (2020) Comparative Seasonal Respiratory Virus Epidemic Timing in Utah. *Viruses* 12(3):275.
31. **Sloan C**, Chandrasekhar R, Mitchel E, Ndi D, Miller L, Thomas A, Bennett N, Kirley P, Spencer M, Anderson E, Lynfield R, Yousey-Hindes K, Barsten M, Zansky S, Lung K, Schroeder M, Cummings C, Garg S, Schaffner W, Lindegren M. (2020) Spatial and

Sloan, Chantel D., Ph.D. (Continued)

- Temporal Clustering of Patients Hospitalized with Laboratory-Confirmed Influenza in the United States. *Epidemics* 31:100387.
32. Rosas-Salazar C, **Sloan C**, Gebretsadik T, Miller E, Carroll K, Hartert T. (2020) Urine Levels of γ -Aminobutyric Acid are Associated with the Severity of Respiratory Syncytial Virus Infection in Infancy. *Annals of the American Thoracic Society* 17(11).
 33. Christensen S*, Pilling EB*, Eyring JB*, Dickerson G*, **Sloan C**, Magnusson B. (2020) Political and personal reactions to COVID-19 during initial weeks of social distancing in the United States. *PloS One*.
 34. Raman R, Brennan J, Ndi D, **Sloan C**, Markus T, Schaffner W, Talbot HK. (2021) Marked Reduction of Socioeconomic and Racial Disparities in Invasive Pneumococcal Disease Associated with Conjugate Pneumococcal Vaccines. *The Journal of Infectious Diseases* 223(7).
 35. Spencer D, Grow L, Daniels B, **Sloan C**, Blades N. (2021) Viral Voter Suppression. *BYU Law Research Paper No. 21-13*.
 36. Magnusson B, Christensen S*, Tanner A*, Eyring JB*, Pilling E*, **Sloan-Aagard C**. (2021) Accessibility of pharmacist-prescribed contraceptives in Utah. *Obstetrics and Gynecology* 138(6).
 37. Drewes M*, Jones J*, Christiansen E*, Wilson J*, Allen B*, **Sloan C**. (2021) Geospatial and temporal associations between increases in opioid deaths, socioeconomics, and rates of sexually-transmitted infections in the Northeast United States 2012-2017. *International Journal of Drug Policy* 18(1).
 38. Heaton M, Ingersoll C[†], Berrett C, Hartman B, **Sloan C**. (2021) A Bayesian Approach to Real-time Spatiotemporal Prediction Systems for Respiratory Syncytial Virus. *Spatial and Spatio-temporal Epidemiology* 38.
 39. Bennion N[†], Redelfs A, Spruance L, Benally S, **Sloan-Aagard C**. (2022) Driving distance and food accessibility: a geospatial analysis of the food environment in the Navajo Nation and Border Town. *Frontiers in Nutrition* 9:904119.
 40. Grow L, Daniels B, Spencer D, **Sloan C**, Blades N, Gomez MT, Christensen S*. (2022) Disaster Vulnerability. *Boston College Law Review* (63).
 41. Redd D[†], Jensen J, Hughes S*, Pogue K*, **Sloan-Aagard C**, Miner D*, Altman J*, Crook T*, Zentz L*, Bodily R*, Poole B. (2022) Effects of Religious Practice and Teachings about Sexual Behavior on Intent to Vaccinate against Human Papillomavirus. *Vaccines* 10(3).
 42. Hall S, **Sloan-Aagard C**, Harris R, Emmett C, Prasetyadi C, Pettersson J, Cope A, Cox MH. (2022) Perceptions of Earthquake and Tsunami Susceptibility and Self-Efficacy in Indonesia: The influence of gender, religion, location, age, hazard information source, and past experience. *International Journal of Disaster Risk Reduction* 79.

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43. Link-Gelles R, Levy M, Gaglani M, Irving S, Stockwell M, Dascomb K, DeSilva MB, Reese SE, Liao IC, Ong TC, Grannis SJ, McEvoy MD, Patel P, Klein N, Hartmann E, Stenehjem E, Natarajan K, Naleway AL, Murthy K, Rao S, Dixon BE, Kharbanda AB, Akinseye A, Dickerson M, Lewis N, Grisel N, Han J, Barron MA, Fadel WF, Dunne MM, Goddard K, Arndorfer J, Konatham D, Valvi NR, Currey JC, Fireman B, Raiyani C, Zerbo O, **Sloan-Aagard C**, Ball SW, Thompson MG, Tenforde MW. (2022) Effectiveness of 2, 3, and 4 COVID-19 mRNA Vaccine Doses Among Immunocompetent Adults During Periods when SARS-CoV-2 Omicron BA.1 and BA.2/BA.2.12.1 Sublineages Predominated — VISION Network, 10 States, December 2021–June 2022. *Morbidity and Mortality Weekly Report* 71(29).

44. Spencer DM, Grow Sun L, Daniels B, **Sloan C**, Blades N. (2022) Survival Voting and Minority Political Rights. *American University Law Review*.

45. **Sloan-Aagard C**, Helgesen W, Nanez J, Law J, Currey JC, Meils J, Bishop J, Hartmann E. (2022) The value of community-integrated health information exchanges: three recent examples from El Paso, Texas. *Journal of the American Medical Informatics Association*.

46. **Sloan-Aagard C**, Glenn J, Nanez J, Crawford SB, Currey JC, Harman E. The Impact of Community Health Information Exchange Usage by Primary Care Physicians on Time to Re-utilization of Hospital Services. (2022) *Annals of Family Medicine*. *Accepted*.

Reviews, Case Reports, Letters, Editorials, Book Chapters

1. **Sloan, C**, Sayarath, V, Moore J. (2008) Systems Genetics of Alcoholism. *Alcohol Research and Health* 31:14-25.
2. **Sloan C**, Duell E, Shi X, Irwin R, Andrew A, Williams S, Moore J. (2009) Ecogeographic Genetic Epidemiology. *Genetic Epidemiology* 33(4):281-9.
3. **Sloan C**, Meliker J. Spatio-temporal Epidemiology: Principles and Opportunities. (2010) *Spatial and Spatio-temporal Epidemiology* 2(1): 1-9.
4. **Sloan C**, Moore M, Hartert T. Impact of Pollution, Climate, and Sociodemographic Factors on Spatiotemporal Dynamics of Seasonal Respiratory Viruses. (2011) *Clinical and Translational Science* 4(1): 48–54.
5. **Sloan C**, Johnston J. Can Extreme Air Pollution Events Provide a Window into Incident Asthma? (2016) *Journal of the American Thoracic Society* 194(12):1440-1441.
6. **Sloan C** and Beard J, Chapter 4. Designing policy to reduce particulate matter air concentrations in Cache County, Utah in Santella AJ: **Master of Public Health Competencies: A Case Study Approach**: Jones & Bartlett Learning; 2019.

Under final preparation or revise/resubmit

Sloan, Chantel D., Ph.D. (Continued)

1. Crawford C, Raman R, Schaffner W, Talbot K, Grijalva C, **Sloan C**. Spatial and temporal trends in antibiotic-resistant pneumococcal pneumonia strains in Tennessee following vaccine introduction. *In preparation*.
2. Boyer B, Shaw J, Tovar I, Read R, **Sloan C**. A Spatial Analysis of Negative Health Outcomes for Newborns Among Undocumented Immigrant Populations in the United States. *Europe PMC plus*.
3. COVID-Trust paper.

Abstracts (beginning at arrival at Brigham Young University in 2013, sorted oldest to newest)

1. **Sloan C**, Lee R, Gebretsadik T, Evans A, Berrett C, Heaton M, Sicignano N, Hartert, T. (2014) Spatiotemporal Patterns Of Winter Virus Season Bronchiolitis In A Nationwide US Infant Population. *American Thoracic Society Annual Meeting*, San Diego California.
2. **Sloan C**, Lee R, Gebretsadik T, Evans A, Berrett C, Heaton M, Sicignano N, Hartert, T. (2014) Bronchiolitis Seasonal Patterns In A Nationwide US Infant Population. *International Respiratory Syncytial Virus Symposium*, Stellenbosch, South Africa.
3. Gebretsadik T, Carroll K, Escobar G, Wu P, Xu Li S, Walsh E, Mitchel E, **Sloan C**, Dupont W, Hartert T. (2015) Comparison of Methods for Adjustment of Confounding by Indication in Assessing Respiratory Syncytial Virus (RSV) Immunoprophylaxis Impact on Childhood Asthma. *Joint Statistical Meeting*, Seattle, WA.
4. **Sloan C**, Bradshaw R, Philip T, Barber B, Walker V, Graul R, Tuttle C, Johnston J. (2015) GPS-enable real-time concentration and composition of PM2.5 in an infant population. *Geomed*, Florence, Italy.
5. Harding M, **Sloan C**, Merrill R, Harding T, Thacker B, Thacker E. (2016) Transition from cardiovascular disease to cancer as the leading cause of death in US states, 1999-2013. *American Heart Association*, New Orleans, LA.
6. Berrett C, Heaton M, and **Sloan C**. (2016) Modeling Environmental Impacts on Bronchiolitis in the Presence of Spatial Uncertainty. *International Society for Bayesian Analysis World Meeting*, Sardinia, Italy.
7. Berrett C, Heaton M, and **Sloan C**. (2016) Modeling Environmental Impacts on Bronchiolitis in the Presence of Spatial Uncertainty. *Joint Statistical Meetings*, Chicago, IL.
8. Wu P, Escobar G, Gebretsadik T, Carroll K, Li SX, Walsh E, Mitchel E, **Sloan C**, Dupont W, Yu C, Hartert T. (2016) Effectiveness of Respiratory Syncytial Virus Immunoprophylaxis on Bronchiolitis Hospitalization among High-risk Infants. *American Thoracic Society*, San Francisco, CA.

Sloan, Chantel D., Ph.D. (Continued)

9. **Sloan C**, Pugh S, Hartman B, Evans A, Lee R, Hartert T, Berrett C, Heaton M. (2016) Estimating Onset, Duration and Termination of Seasonal Bronchiolitis Epidemics. *RSV International Symposium*, Patagonia, Argentina.
10. Heaton M, Berrett C, Pugh S, **Sloan C**. (2017) Modeling Bronchiolitis Epidemics in the Presence of Spatio-temporal Uncertainty. *ENAR*, Washington DC.
11. Cunico L, **Sloan C**. (2017) Comparing Reporting of Campus Crimes to College Characteristics in the United States, 2014. *New Mexico Public Health Association*, Albuquerque, NM.
12. Sloan C, Chandrasekhar R, Mithcel E, Ndi D, Miller L, Anderson E, Zansky S, Lung K, Schroeder M, yousey-Hindes K, Meek J, Bargsten M, Thomas A, Felsen C, Mornoe M, Spencer M, Kirley P, Cummings C, Garg S, Schaffner W, Lindegren M. (2017) The Influence of Neighborhood-Level Social and Demographic Factors on Spatial and Temporal Trends of Influenza Hospitalization in the United States. *American Thoracic Society*, Washington, D.C.
13. Achten N, Wu P, Bont L, Gebretsadik T, Blanken M, Chappell J, Wang L, Yu C, Larkin E, Carroll K, Anderson L, Moore M, **Sloan C**, Hartert T. (2017) Interference Between Respiratory Syncytial Virus and Human Rhinovirus Infection in Infancy. *American Thoracic Society*, Washington, D.C.
14. Hendrickson N, Cooper V, Sloan C, Chaney R, Johnston J. (2017) Personal exposure to fine particulate air pollution (PM_{2.5}) while commuting: An examination of six transport modes on an urban arterial roadway. *American Industrial Hygiene Conference & Expo*, Seattle, WA.
15. Frutos A, **Sloan C**, Merrill R. (2017) Modeling the effects of atmospheric pressure on suicide rates in the USA through geographically weighted regression. *American Public Health Association*, Atlanta, GA.
16. Westhoff W, Hagerdorn R, Esplin J, **Sloan C**. (2017) Healthcare, education, and employment services for refugees in the United States: a state-by-state comparison. *American Public Health Association*, Atlanta, GA.
17. Stoneking N, Wu XJ, Nelson H, Brown T, **Sloan C**. (2017) Asthma, Eczema and Allergic Rhinitis Among Utah County Youth. *American Public Health Association*, Atlanta, GA.
18. Hendrickson N, King J, Montgomery H, Chaney R, **Sloan C**, Johnston J. (2018) Perceived risk of commuter air pollution exposure. *American Industrial Hygiene Conference & Expo*, *American Industrial Hygiene Association*, Philadelphia, PA.
19. Moody M, **Sloan C**. (2018) Social Determinants and Opioid Mortality Rates. *American Public Health Association*, San Diego, CA.
20. Thompson S*, **Sloan C**. (2019) Seasonality and Virus Transmission. *American Thoracic Society* Dallas, TX.

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21. Callahan Z*, Smith T*, Ingersoll C[†], Gardner R*, Korgenski K, Sloan C. (2019) Comparative Seasonal Respiratory Virus Epidemic Timing in Utah. *American Thoracic Society*, Dallas, TX.
22. Heaton M, Berrett C, Hartman B, Sloan C. (2019) Estimating and Predicting Seasonal Cycles of RSV. *Joint Statistical Meetings, American Statistical Association*, Denver, CO.

PROFESSIONAL ACTIVITIES

Intramural

- 2/15-2/17 Member, Health Science Writing Group (informal)
- 1/15 – 5/15 Member, Causal Inference Reading Group (informal)
- 10/10- 07/13 Founder and lead organizer of the Vanderbilt University Medical Center GIS User Group
- 07/10-07/13 Member, Newman Society, Vanderbilt University

Extramural

- 09/2021- 08/2022 Sabbatical with the Paso del Norte Health Information System in El Paso, TX
- 07/12 Student, Summer Institute in Statistics and Modeling of Infectious Diseases (5 courses completed), University of Washington, Seattle, WA.
- 04/11 Chair, Environmental Health: Air and Water Pollution Session, Association of American Geographers Annual Meeting.
- 06/08 Student, Summer Institute of Public Health, Harvard School of Public Health, Boston, MA.

Institutional Presentations

- 11/10 Elliot Newman Society Annual Research Retreat: “Mapping the Spread of Influenza and RSV in Tennessee: Approaches and Challenges,” Frist Center of Fine Arts, Nashville, TN.
- 10/11 Elliot Newman Society Annual Research Retreat: “Climate Variation and Patterns of Respiratory Syncytial Virus Seasonal Epidemics,” Frist Center of Fine Arts, Nashville, TN.
- 04/12 Pulmonary conference presentation: “Climate Variation and Patterns of Respiratory Syncytial Virus Seasonal Epidemics.” Monday Noon Conference,

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Division of Allergy, Pulmonary and Critical Care Medicine, Vanderbilt University Medical Center, Nashville, TN.

- 02/15 Guest lecturer for Department of Biostatistics. “Statistical applications in investigations of respiratory viruses.” Department of Biostatistics, Brigham Young University, Provo, UT.
- 11/17 Lecturer at BYU GIS Symposium. “GIS and Children’s Respiratory Health.” Department of Geography, Brigham Young University, Provo, UT.
- 12/17 Guest lecturer for the Department of Biostatistics. “Statistical Analyses for Bronchiolitis and RSV.” Department of Biostatistics, Brigham Young University, Provo, UT.

External Presentations (not listed under Abstracts)

- 03/21 Plenary guest speaker, Air Quality: Science for Solutions 2021
- 02/21 Invited speaker, Snow College “Darwin Day”
- 10/17 Author on talk given by Matthew Heaton at Texas A&M Department of Statistics, College Station, TX.
- 02/15 Invited speaker, Utah Air Quality Task Force.
- 04/13 Invited speaker, Vespucci Institute: Genetic and Medical Geography, Catalina Island, CA.
- 09/12 Respiratory Syncytial Virus Symposium: Contribution of Climate to Respiratory Syncytial Virus Seasonal Epidemics in Different Regions of the United States. Santa Fe, NM. *(This was an invited talk and poster.)*
- 10/08 New England Membrane Enzyme Group (NUTMEG): A GIS-based Analysis of Superfund Sites and Lung Cancer Rates in New Hampshire.

Reviewer Activities

Brain Imaging and Behavior

International Journal of Biometeorology

American Journal of Respiratory and Critical Care Medicine

Spatial and Spatiotemporal Epidemiology

Environmental Health

PLoS One

International Journal of Environmental Research and Public Health

Jornal de Pediatria

Allergy, Asthma and Clinical Immunology

Journal of Urban Health

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Honors and Awards

Postdoctoral

- 05/10 American Thoracic Society Annual Meeting, Environmental and Occupational Health Assembly, Travel Award Recipient
- 05/11 American Thoracic Society Annual Meeting, Environmental and Occupational Health Assembly, Travel Award Recipient
- 09/12 Respiratory Syncytial Virus International Symposium, Travel Award Recipient

TEACHING ACTIVITIES (beginning after graduate school)

Courses, Lectures and Teacher Training

Brigham Young University

- HLTH 311 Infectious Disease Prevention and Control
- HLTH 482 Medical Geography
- HLTH 315 Human Health and its Determinants Part II
- HLTH 492R Faith and Public Health Seminar
- HLTH 619 Chronic and Infections Disease Prevention and Control

Harvard TH Chan School of Public Health

- 06/17 Completed Course on Case-Based Teaching and Learning

Vanderbilt University

- 11/12 Epidemiology unit in graduate-level Toxicology course
- 09/11-11/11 Instructor, Graduate Directed Study in Spatial Epidemiology

Undergraduate and Professional Students Mentored

- 2005 Emily Eros, Women In Science Project Internship
- 2007-2008 Joanne Gruber, Howard Hughes Medical Research Fellowship
- 2008 Dylan Thomas, Internship
- 2008 Kevin Mwenda, Internship
- 2008 Kathleen Champion, Howard Hughes Medical Research Fellowship
- 2009 Sarah Streeter, Howard Hughes Medical Research Fellowship
- 2010 Kristina James, M.D, Medical research fellow
- 2013-2014 Reena Karki, Chelsea Westmoreland, Justice Arman, Tyler Philipp, Karlie Mitchell, Caitlin Schille
- 2014-2015 Sara Chronister, Tyler Philipp, Brad Barber, Trevor Becksted, Parker Dow
- 2015-2017 Ellen Woo, Lauren Cunico, Trevor Smith, Hailee Nelson

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2017- 2018	Eric Evans, Mamadou Tounkara, Sarah Hamner, Nathan Stoneking, Brynne Jackson, Taylor Brown, Whitney Bank, Robert Hagerdorn, Jordan Esplin, Aaron Frutos, Mariah Moody, Wade Whitt
2018-2019	Nathan Stoneking, Taylor Brown, Zayne Callahan, Brynne Jackson, Sarah Hamner, Mamadou Tounkara, Dexter Murray
2019-pres.	Brian Allen, Sydney Thompson, Dexter Murray, Eliza Broadbent, Brian Radmall, Rebekah Read, Shelby Guerts, Jenna Shaw, Sarah Bangerter-Christiansen, Natalie Bennion, Brittnee Westra, Jamison Jones, Matthew Drews, Glory Lim, Rylee Beckstead, Alyssa Ball, Emily Chahalis

Graduate Student Committees (years indicate academic year where I began work on committee. Some graduated after that date.)

2013-2015	Reena Karki (member), Jeanette Johnson (member)
2014- 2015	Sorah Kang (Department of Statistics, member), Shelby Hall (member)
2015- 2016	Cerissa Hayhurst (member), Rachel Ashby (chair)
2016-2017	Sierra Pugh (member), Ally Jones (member)
2017-2018	Chelsi Alexander (member), Kendra Thomas (member), Marco Verdeja (chair)
2018-2019	Emma Hanks (member), Curtis Hanson (member), Celeste Ingersoll (Department of Statistics, member)
2019-2020	Emily Chahalis (member), Malynne Cottam (advisor)

RESEARCH PROGRAM FUNDING

Proposals Funded

1. Overcoming barriers to HPV vaccine acceptance among Hispanic Immigrants to the US. Nov 2022-Oct 2024. \$177,577.47 (Pending)
Merck Pharmaceuticals

2. Overcoming barriers to HPV vaccine acceptance in religious populations. Nov 2020-October 2022. Poole, Jensen and Sloan, Merck- \$92,233
Merck Pharmaceuticals

3. New Faculty Funding- Year 3
College of Life Science, Brigham Young University 09/2015-08/2016
\$20,000

This proposal was a follow-up to the previous year. My second year new faculty funding was used to hire students, develop the survey methods and recruit the school board. The third year funding is to conduct the study, paying primarily for student research assistants and for customized Scantron survey forms for 6,500 people (about \$10,000 cost).

4. R03 ES025295-01, NIEHS 2014 – 2016
Principal Investigator: Matthew Heaton, PhD \$100,000
Modeling Environmental Impacts on Bronchiolitis in the Presence of Spatial Uncertainty.

Sloan, Chantel D., Ph.D. (Continued)

This proposal represents a collaboration between Dr. Sloan in the Department of Health Science and Dr.'s Heaton and Berrett in the Department of Statistics. We are using data from a Military Health System Database to develop methods for dealing with spatial uncertainty in large datasets. This proposal was scored in the top 6% and funded in 2015.

5. New Faculty Funding- Year 2
College of Life Science, Brigham Young University

09/2014-08/2015
\$20,000

We proposed conducting a survey study using the Global Asthma Network protocols among 3,000 Utah County children ages 13-14 during the 2015-2016 school year to determine rates of asthma and allergic diseases. This study will take place in Winter 2016.

6. New Faculty Funding- Year 1
College of Life Science, Brigham Young University

09/2013-08/2014
\$20,000

This proposal focused on measuring real-time air pollution exposure in northern Utah. Dr. Jim Johnston and I purchased new personal air pollution monitors, called microPEMs which allow for measurement of individual small particulate exposure as individuals travel outdoors and indoors during the course of a day. We conducted a study during the summer and another in January 2015 investigating exposures among adults and infants.

7. Toxicology Pilot Funding
Vanderbilt Center for Molecular Toxicology
Environmental Factors Inducing Sleep Apnea and Sudden Infant Death Syndrome

04/01/13-03/31/13
\$37,464

This proposal focuses on investigating the molecular and environmental interactions potentially leading to sudden infant death syndrome (SIDS) in infants with mild respiratory syncytial virus (RSV) infection through induction of central sleep apnea.

8. K12 Training Award (Sloan)
NIEHS, Vanderbilt University
Impact of Pollution and Climate on the Spread of Influenza and RSV Virus: A Spatial and Temporal Epidemiologic Analysis

07/01/10 – 06/31/12
\$226,040

This proposal is an interdisciplinary effort using biostatistical and computational methods to discern the patterns of respiratory syncytial virus (RSV) epidemic initiation, peak timing and cessation using two large healthcare administrative databases. Data on climate, air pollution and infant bronchiolitis rates (surrogate measure for RSV infection) were investigated together, and showed that factors tied to geography do influence the timing of RSV epidemic peaks. The research also has shown evidence of RSV epidemics being strongly correlated with both absolute humidity levels and temperature. This research has led to the collaborations and proposal currently under consideration by the NSF.

9. T32 ES 7028-38 (Sloan)
National Institute of Health
T32 Molecular Toxicology Training Grant

11/01/12 -10/31/13

Sloan, Chantel D., Ph.D. (Continued)

The T32 funding mechanism is designed to support research fellows in conducting translational research in environmental and molecular toxicology. Dr. Sloan received this appointment based on her work in the interactions between the environment, human behavior and respiratory syncytial virus in determining initiation, peak timing and cessation of seasonal recurring epidemics.

UNIVERSITY CITIZENSHIP

Department Committees

(away on professional development leave, summer 2021-summer 2022)

09/19-04/21 Professional Development committee, chair
08/18-09/19 CURA committee, chair
08/17-09/18 Ad-hoc Name Change Committee, Merit Pay Committee
09/16- 06/17 Faculty Search Committee
09/15- 04/16 Curriculum Committee
09/14- 06/15 Accreditation Committee
09/14- 06/15 Merit Pay Committee
09/13- 06/14 Alumni Relations Committee
09/13 -06/14 MPH Admissions Committee
09/13- 06/14 Scholarship Committee

College Committees

2013- 2017, ORCA Review Committee
09/16-12/16 MEG Review Committee
2020 LS COVID-19 Advisory Committee

University Committees

NA

Met with Steven E. Snow to discuss public health for church/missionaries in 2018, presented to broader church committee that summer.

Media and Other Related Service

1/28/15, 10/5/14, 10/8/14,
1/5/15, 5/25/16, 11/29/17, 6/8/20 I gave interviews for and was quoted in stories featured in BYU's student newspaper, *The Daily Universe* (dates are those on which the articles were published).

11/4/14, 1/27/15, 2/3/20 BYU Radio guest. I visited BYU Radio to discuss vaccinations, Zika, the Ebola epidemic and a measles outbreak, and diphtheria.

Sloan, Chantel D., Ph.D. (Continued)

4/1

KBYU News 11 Interview on Utah Pertussis outbreak.

March 2020-July 2020

KSL Interview on COVID-19

Deseret News Op-Ed on Masks and Liberty (BYU Homepage)

Utah Professional Organizers informational meeting on COVID-19

Presentations to Jenny Lai's class in Brooklyn about COVID-19

OTHER UNIVERSITY ACTIVITIES

Rotaract Club Advisor

As the advisor to the student version of Rotary International (Rotaract) on BYU's campus, I oversee and approve activities undertaken by the club. Students also meet in my office after hours once a week to discuss club plans. The Rotaract club undertakes service projects in public health, infrastructure building and education.

Faculty Women's Association

In 2014-2015 I participated in a web series created by the BYU faculty women's association and the Department of Theater and Media Arts titled "By Study, By Faith: Choosing a Good Part." These interviews with female faculty were designed to inspire female (and male) students to become life-long learners. The videos can be viewed at: <http://vimeo.com/byutma>.

PROGRAMMING AND SOFTWARE

ArcGIS, SpaceStat, SAS, Perl, R, STATA