

BRITTANY LAUREN MORGAN BUSTAMANTE

UC President's Postdoctoral Fellow

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EDUCATION

2025	Postdoc	University of California, Berkeley , Emerging Infectious Diseases
2023	Ph.D.	University of California, Davis , Public Health Sciences
2018	MPH	Oregon Health & Science University , Epidemiology
2016	BS	Portland State University , Community Health Education

PROFESSIONAL APPOINTMENTS

2026	Incoming Assistant Professor , Epidemiology and Biostatistics, University of California, Irvine
2025	Assistant Researcher , University of California, Berkeley
2023 – 26	UC President's Postdoctoral Fellow , Justin Remais Lab, University of California, Berkeley
2021 – 23	Graduate Student Researcher , Center for Animal Disease Modeling and Surveillance, University of California, Davis
2019	Research Scientist I (Epidemiology/Biostatistics) , California Department of Food & Agriculture – Antimicrobial Use & Stewardship Program
2018 – 19	California Epidemiologic Investigation Service (Cal-EIS) Fellow , California Department of Public Health
2016 – 18	Research Assistant II , Oregon Prevention Research Center
2018	Research Intern , McGregor Lab, Oregon Health & Science University
2016	Research Assistant I , Institute on Aging, Portland State University
2015	Research Intern , Central City Concern
2014	Infectious Disease Reporting and Analysis Volunteer , Holgate Center

RESEARCH & TRAINING SUPPORT

National Institutes of Health, NIAID, K01 Career Development Award (**\$943,532 total costs**)
“Advancing Fungal Disease Epidemiology through Multilevel Modeling and Data Integration”
K01AI190048, 2025-2030
Role: PI

National Institutes of Health, NIAID, Loan Repayment Program (**\$46,924 total costs**)

“An epidemiologic exploration of fungal diseases using a massive, multi-regional EHR database”

2024-2026

Role: Awardee

UC President’s Postdoctoral Fellowship (**\$172,070 total costs**)

“Infectious Disease Epidemiology and Modeling of Fungal Disease Disparities”

2024-2026

Role: Fellow

UC Davis DataLab Translational Health Data Science Grant (**\$25,000 total costs**)

“Evaluation of Geographic Variation in Community-Acquired Methicillin-Resistant *Staphylococcus aureus* Infections with Healthcare Services and Access in California Medical Service Study Areas”

2022-2023

Role: PI

Santa Fe Institute Complexity-GAINS International Summer School (**\$5,000 total costs**)

2022

Role: Fellow

UC Davis Floyd & Mary Schwall Medical Research Fellowship (**\$96,400 total costs**)

2019-2021

Role: Fellow

California Epidemiologic Investigation Service Fellowship (**\$45,000 total costs**)

2018-2019

Role: Fellow

SUBMITTED/PENDING RESEARCH SUPPORT

National Institutes of Health, NIAID, Loan Repayment Program Renewal (**\$46,924 total costs**)

“An epidemiologic exploration of fungal diseases using a massive, multi-regional EHR database”

2026-2028

Role: Awardee

Status: Submitted December 4, 2025

PUBLICATIONS

Peer-Reviewed Publications **Denotes co-first authorship*

- 19 **Morgan Bustamante BL et al.**, A comparative analysis estimating aspergillosis and histoplasmosis diagnoses among inpatients in the United States using multi-regional electronic health record and national discharge data, 2014-2020. (*Accepted: AJE Advances: Research in Epidemiology*)

- 18 **Morgan Bustamante BL***, Rupasinghe R*, Robbins RC, Clavijo MJ, Martinez-Lopez B. Bayesian network models to assess antimicrobial resistance patterns of *Streptococcus suis* isolated from swine production systems in the United States between 2014-2021. *PLoS Computational Biology* 2026;26(3):e1014117. doi:[10.1371/journal.pcbi.1014117](https://doi.org/10.1371/journal.pcbi.1014117)
- 17 **Morgan Bustamante BL**, Martinez EG, Lee A, Kane NJ, Camponuri SK, Reynolds RM, Snow TT, Bartels JGE, Hoffman M, White TC, Remais JV. Epidemiology of aspergillosis diagnoses in U.S. adults using a national EHR database, 2013-2023. *Open Forum Infectious Diseases* (2026). doi:[10.1093/ofid/ofag094](https://doi.org/10.1093/ofid/ofag094)
- 16 Bartels JGE, Camponuri SK, Snow TT, **Morgan Bustamante BL**, Kane NJ, Reynolds RM, Lee A, Hoffman M, White TC, Remais JV, Head JR. Updating the epidemiology of blastomycosis and histoplasmosis in the United States, using national electronic health record data, 2013-2023. *Journal of Infectious Diseases* (2025). doi:[10.1093/infdis/jiaf472](https://doi.org/10.1093/infdis/jiaf472)
- 15 **Morgan Bustamante BL**, Gomez-Vazquez JP, Gonzalez Crespo C, Fejerman L, May L, Martínez-López B. Evaluating bias in electronic health record data: using agent-based models to examine whether geographic disparities in community-acquired Methicillin-resistant *Staphylococcus aureus* are due to differential healthcare-seeking behaviors. *American Journal of Epidemiology* (2025). doi:[10.1093/aje/kwae481](https://doi.org/10.1093/aje/kwae481) Epub ahead of print.
- 14 **Morgan Bustamante BL**, Miglioretti DL, Keegan THM, Stewart E, Shrestha A, Yang NT, Cress RD, Carvajal-Carmona LG, Dang JHT, Fejerman L. Breast cancer screening needs assessment in 19 Northern California counties: geography, poverty, and racial/ethnic identity composition. *Cancer Causes & Control* (2024). doi:[10.1007/s10552-024-01943-8](https://doi.org/10.1007/s10552-024-01943-8). Epub ahead of print.
- 13 **Morgan Bustamante BL**, Fejerman L, May L, Martínez-López B. Community-Acquired *Staphylococcus aureus* skin and soft tissue infection risk assessment using hotspot analysis and risk maps: the case of California emergency departments. *BMC Public Health*. 2024;24:123. doi:[10.1186/s12889-023-17336-6](https://doi.org/10.1186/s12889-023-17336-6)
- 12 **Morgan Bustamante BL**, Chigerwe M, Martínez-López B, Aly SS, McArthur G, ElAshmawy WR, Fritz H, Williams DR, Wenz J, Depenbrock S. Antimicrobial susceptibility in respiratory pathogens and farm and animal variables in weaned California dairy heifers: logistic regression and Bayesian network analyses. *Antibiotics*. 2024;13(1):50. doi:[10.3390/antibiotics13010050](https://doi.org/10.3390/antibiotics13010050)
- 11 **Morgan Bustamante BL**, May L, Fejerman L, Martínez López B. A Bayesian multilevel analysis exploring population-level effects mediating the relationship between area-level poverty and community-acquired Methicillin-resistant *Staphylococcus aureus* infection across California communities. *Health and Place*. 2023;83. doi:[10.1016/j.healthplace.2023.103094](https://doi.org/10.1016/j.healthplace.2023.103094)

- 10 **Morgan Bustamante BL***, Ford JS*, Virk MK, Ramirez N, Matsumoto C, Lee D, MacDonald S, May L. Use of clinical decision support for antibiotic stewardship in the emergency department and outpatient clinics: An interrupted time series analysis. *Antimicrobial Stewardship & Healthcare Epidemiology*. 2023; 3(1);e80. doi:[10.1017/ash.2023.140](https://doi.org/10.1017/ash.2023.140)
- 9 **Morgan BL**, Stern MC, Pérez-Stable EJ, Webb Hooper M, Fejerman L. Adding a One Health approach to a research framework for minority health and health disparities. *eLife*. 2022;11:e76461. doi:[10.7554/eLife.76461](https://doi.org/10.7554/eLife.76461)
- 8 Donald C, Rajani K, Singer M, Skye M, Craig Rushing S, Kelley A, **Morgan BL**, Zaback T, Becker T, Lambert W. A Qualitative Review of Barriers and Facilitators Identified while Implementing the Native STAND Curriculum in a Multisite Dissemination and Implementation Study. *Health Education & Behavior*. 2022. doi:[10.1177/10901981221123228](https://doi.org/10.1177/10901981221123228)
- 7 Ford JS, Rouleau S, Voong S, **Morgan BL**, Toosi K, Waldman S, Meng Z, Chechi T, Tran N, May L. Universal HIV screening in the emergency department: an interrupted time series analysis. *AIDS*. 2022;36(11):1605. doi:[10.1097/QAD.0000000000003282](https://doi.org/10.1097/QAD.0000000000003282)
- 6 Kelley A, McCoy T, Skye M, Singer, M, Rushing SC, Perkins T, Donald C, Rajani K, **Morgan BL**, Milligan K, Zaback T, Lambert W. Psychometric Evaluation of Protective Measures in Native STAND: A Multi-site Cross-Sectional Study of American Indian Alaska Native High School Students. *PLoS ONE*. 2022;17(5):e0268510. doi:[10.1371/journal.pone.0268510](https://doi.org/10.1371/journal.pone.0268510)
- 5 **Morgan BL**, Depenbrock S, Martínez López B. Identifying associations in minimum inhibitory concentration profiles of *Escherichia coli* samples obtained from weaned dairy heifers in California using Bayesian Network Analysis. *Frontiers in Veterinary Science*. 2022;9. doi:[10.3389/fvets.2022.771841](https://doi.org/10.3389/fvets.2022.771841)
- 4 **Morgan BL**, Bettencourt H, May L. Interrupted time-series analysis to evaluate the impact of a behavioral change outpatient antibiotic stewardship intervention. *Antimicrobial Stewardship & Healthcare Epidemiology*. 2021;1(1): e37. doi:[10.1017/ash.2021.203](https://doi.org/10.1017/ash.2021.203)
- 3 Skye M, McCoy T, Kelley A, Singer M, Rushing SC, Donald C, Rajani K, **Morgan BL**, Zaback T, Lambert W. Effectiveness of Native STAND: A Five-Year Study of a Culturally Relevant Sexual Health Intervention. *Adolescents*. 2021;1(3):321-334. doi:[10.3390/adolescents1030024](https://doi.org/10.3390/adolescents1030024)
- 2 Skye M, Craig S, Donald C, Kelley A, **Morgan BL**, Rajani K, Singer M, Zaback T, Lambert W. Are AI/AN adolescent health behaviors different? A review of AI/AN youth in the Native STAND curriculum, 2014-2017 United States. *Maternal and Child Health Journal*. 2021;25(12):1893-1902. doi:[10.1007/s10995-021-03256-7](https://doi.org/10.1007/s10995-021-03256-7)

- 1 Ford J, Chechi T, Otmar M, Baker M, Waldman S, **Morgan BL**, Tran N, Tan D, May L. (2021) ED syphilis and gonorrhea/chlamydia cotesting practices before and after the implementation of an electronic health record-based alert. *Emergency Medicine Journal*. 2021;39(10):753-759. doi:[10.1136/emered-2020-210331](https://doi.org/10.1136/emered-2020-210331)

Non-Peer-Reviewed Publications

- 2 California Department of Food and Agriculture. Antimicrobial Use and Stewardship Program Annual Report 2019. Sacramento, California, 2019. https://www.cdffa.ca.gov/AHFSS/AUS/docs/AUS_AnnualReport-2019.pdf
- 1 Carder PC, Luhr G, West M, **Morgan BL**. *Housing with Services Program Evaluation*. Portland, OR: Institute on Aging, Portland State University, 2016. https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1046&context=aging_pub

Papers in Progress

Morgan Bustamante BL, Camponuri SK, Lee A, Roberts L, Couper L, Tartof S, Kane NJ, Reynolds RM, Hoffman M, White TC, Zelner J, Remais JV (2026) Temporal and structural associations between flooding and aspergillosis diagnoses in the United States. (*To be submitted summer 2026*)

Montoya MC, White TC, **Morgan Bustamante BL**. (2026) Chapter 2: Environmental and Transmission/Exposure Contributions to Human Fungal Pathogen Epidemiology (*Book chapter to be submitted July 31st*)

Morgan Bustamante BL, White TC, Montoya MC. (2026) Chapter 3: Biological and Socio-economic Contributions to Human Fungal Pathogen Epidemiology (*Book chapter to be submitted July 31st*)

Chen W, **Morgan Bustamante BL**, Camponuri SK, Bartels JGE, Head JR, Kane NJ, Reynolds RM, Lee A, Hoffman M, White TC, Remais JV, Heaney A (2026) Coccidioidomycosis epidemiology in mandatory and non-mandatory reporting states — United States, 2014–2023. (*Manuscript in preparation*)

Camponuri SK, Couper L, Head JR, Heaney AK, Roberts L, **Morgan Bustamante BL**, Sondermeyer-Cooksey G, Karmarkar E, Yu A, Eisen E, Remais JV. (2026) The impact of extreme weather events on coccidioidomycosis incidence in California: a time-stratified case crossover analysis (*Manuscript in preparation*)

Roberts L, Montoya M, Camponuri SK, Lee A, Reynolds RM, Hoffman M, White TC, Remais JV, **Morgan Bustamante BL**. (2026) Geographic variation in cryptococcosis in the United States: the roles of HIV and antiretroviral therapy in a national electronic health record cohort (2016-2024) (*To be submitted fall 2026*)

Couper L, **Morgan Bustamante BL**, Chowdhary A, Gusa A, Head JR, Heaney AK. (2026) Impacts of climate change on fungal infection risk. (*Book chapter under review*)

White TC, Kane NJ, Davis S, Esquivel BD, Allsworth JE, Noel-MacDonnel J, **Morgan Bustamante BL**, Remais JV, Hoffman M. (2026) Increased paracoccidioides diagnoses in the last ten years in the Western United States, as detected by electronic health record data. (*In revision: Medical Mycology*)

Snow TT, Bartels JGE, Camponuri SK, Balmes JR, Kane NJ, Reynolds RM, Hoffman H, White TC, Remais JV, **Morgan Bustamante BL**. (2026) Cryptococcosis epidemiology in the US: insights from a large electronic health record cohort, 2013-2023. (*Under review: Open Forum Infectious Diseases*)

SELECT CONFERENCE PRESENTATIONS & POSTERS

- 2026 A Two-Stage Bayesian Framework for Pathway-Aware Inference of Infectious Disease Risk Following Extreme Weather Events, *Society for Epidemiologic Research (SER) 2026 Annual Meeting*, June
- 2024 Assessing the role of healthcare-seeking behaviors in the development of small-area health inequalities in EHR data using complex systems science methods, *34th European Society of Clinical Microbiology & Infectious Diseases (ESCMID) Global*, April
- 2023 Therapeutic Drug Monitoring of Triazole Antifungals for Coccidioidal Meningitis, *Infectious Disease Week (ID Week)*, October
- 2022 Telehealth versus In-Person Visits: Appropriate Antibiotic Use for Viral Respiratory Tract Infections, *32nd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID)*, April
- 2021 Proposed Incorporation of a One Health Approach in a Framework to Address Minority Health & Health Disparities, Plenary Presentation University of California, *San Francisco Health Disparities Symposium*, October
- 2021 Interrupted Time-Series Analysis to Evaluate the Impact of a Behavioral Change Outpatient Antibiotic Stewardship Intervention, *31st European Congress of Clinical Microbiology & Infectious Diseases (ECCMID)*, April
- 2021 Interrupted Time-Series Analysis to Evaluate the Impact of a Behavioral Change Outpatient Antibiotic Stewardship Intervention, *Society for Healthcare Epidemiologists of America (SHEA)*, Spring
- 2021 Using Bayesian Networks to Identify MIC Distribution Profiles for E. coli Isolates from Dairy Heifers in California, *Conference of Research Workers in Animal Diseases*, December

TEACHING, GUEST LECTURES, & INVITED TALKS

- 2026 Climate epidemiology revisited: a step-by-step guide and emerging data resources, *PH271G: Health Implications of Climate Change*, March 19, 2026, University of California, Berkeley
- 2025 Bias in EHR Data: Using agent-based models to examine geographic disparities, *Latest in Public Health Research Seminar Series*, September 16, 2025, University of California, Berkeley

- 2022-24 Guest Lectures on Conceptual and Theoretical Frameworks, *SPH213: Health Disparities* (Spring 2022, 2023, 2024), University of California, Davis
- 2021 Graduate Teaching Assistant, *SPH222: Social and Behavioral Aspects of Public Health* (Winter), University of California, Davis

AWARDS

- 2024 UCLA Modelers and Storytellers: Transdisciplinary Training to Advance Community Health Intervention Research, invited participant (competitively accepted)
- 2023 Excellence in Public Health Award, UC Davis
- 2022 Santa Fe Institute Complexity-GAINS International Summer School (competitively accepted, full funding)
- 2016 Best Poster, Portland State University School of Public Health

TRAININGS & CERTIFICATIONS

- 2023 American Public Health Association: Climate Change & Health Equity Workshop
- 2021 UC Davis Social Network Analysis workshop
- 2021 University College of London Social Determinants of Health Summer Course
- 2019 Community Assessment for Public Health Emergency Response Training
- 2018 Certified in Public Health (NBPHE Number 14417)
- 2017 Human Subjects Research certified

STUDENT MENTORING

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|-----------------------------------|---|
| Research Supervisor and Mentoring | <p>Julie Bartels
MPH student, Global and Environmental Health, UC Berkeley</p> <p>Theo Snow
MPH student, Epidemiology and Biostatistics, UC Berkeley</p> <p>Elijah Martinez
MPH student, Epidemiology and Biostatistics, UC Berkeley</p> <p>Aidan Lee
BS student, Data Science, UC Berkeley</p> <p>MPH student, Epidemiology and Biostatistics, UC Berkeley</p> <p>Grace Campbell
MPH student, Environmental Health Sciences, UC Berkeley</p> <p>Maria Cruz
PhD student, Public Health Sciences, UC Davis</p> <p>Lucy Rios
PhD student, Public Health Sciences, UC Davis</p> |
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PROFESSIONAL ACTIVITIES & SERVICE

Membership/Advisory:

- 2025 – *Executive Committee*: UC Disaster Resilience Network
- 2022 – 23 *Student Ambassador*: Planetary Health, University of California Global Health Institute

- 2021 – 23 *Founder: Public Health Sciences First Generation Peer Mentorship Program, University of California, Davis*
- 2021 – 23 *Student Representative: Educational Policy & Curriculum Development Committee, University of California, Davis – Public Health Sciences*
- 2021 *Student Facilitator: One Health Conference, University of California, Davis*
- 2017 – 18 *Chair: Communications Committee, American Public Health Association – Student Assembly*
- 2017 *Co-Organizer: Summer Research Institute, Northwest Portland Area Indian Health Board*
- 2016 – 17 *President: Public Health Seminar Series, Oregon Health & Science University*

Peer Reviewer for Publishers and Professional Societies:

Epidemiology & Infection; International Journal of Environmental Health Research; PLOS Computational Biology; AJE Advances: Research in Epidemiology; 2024 Annual Meeting of the Society for Epidemiologic Research (abstract reviewer); Frontiers in Public Health; Drugs in Context; BMC Veterinary Research; 2022 Annual Meeting of the American Public Health Association (abstract reviewer)

Media Mentions & Features:

Financial Times

Professional Memberships:

- 2022 – Interdisciplinary Association for Population Health Science (IAPHS)
- 2022 – Society for Epidemiologic Research (SER)
- 2022 – International Society for Computational Social Science (ISCSS)
- 2021 – Models of Infectious Disease Agent Study (MIDAS)
- 2021 – European Society of Clinical Microbiology & Infectious Diseases (ESCMID)
- Past World One Health Congress
- Past American Public Health Association
- Past American Society of Tropical Medicine and Hygiene

REFERENCES

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Larissa May, Professor and Director

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