

JULIANNE MEISNER

CONTACT

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PROFESSIONAL QUALIFICATIONS AND MEMBERSHIPS

Licensed veterinarian *Washington*
Member *Society for Epidemiologic Research*
 American Public Health Association

EDUCATION

PhD *Epidemiology, University of Washington*
2017-2021 (expected)

MS *Epidemiology, University of Washington*
2015-2017

BVM&S *DVM equivalent, University of Edinburgh Royal (Dick) School of Veterinary Studies*
2011

PROFESSIONAL POSITIONS

**October 2019-
Present** *Adjunct Clinical Professor, College of Veterinary Medicine*
Seattle, WA | Washington State University

**June 2018-
Present** *Postdoctoral Scholar- Fellow, Department of Environmental and Occupational Health Sciences*
Seattle, WA | University of Washington

**March 2015-
Present** *Sole Proprietor, Veterinarian | Julianne Meisner- Relief Veterinarian*
Seattle, WA | Small animal predominant

**September 2012-
March 2015** *Associate Veterinarian | La Costa Animal Hospital*
Carlsbad, CA | Small animal exclusive

**August 2011-
August 2012** *Associate Veterinarian | Roosevelt Veterinary Center*
Brewster, NY | Small animal predominant

RESEARCH/FIELD EXPERIENCE

**June 2018 -
Present** *Postdoctoral Scholar- Fellow | Biostatistics, Epidemiologic, and Bioinformatic Training in*
Environmental Health, University of Washington

My research uses already-collected data to perform a spatially-explicit analysis of the association between cattle and pig density and human African trypanosomiasis (HAT) occurrence, and the degree to which this association is mediated by

environmental change. The final aim of this research adapts an existing mathematical model to evaluate the likelihood of HAT occurrence under varying control strategies. I have also taken a leading role in submitting three large grants to the NIH and NSF proposing a multi-disciplinary explanatory model for human-animal contact networks along which endemic and emerging zoonoses, such as SARS-CoV-2, are transmitted. In this role I established collaborations with researchers in Kenya, Mongolia, and Israel, drafted research plans, liaised with program officers, and managed all aspects of the budget. I also have strong interests in biostatistics and am involved in several projects in this regard, including COVID-19 excess death modeling in collaboration with statisticians at the University of Washington and Ohio State University, and subnational under-five mortality estimation for a UN Technical Advisory Group.

April 2020 - August 2020 **Postdoctoral Scholar- Fellow | UW Metacenter for Pandemic Preparedness**
Department of Global Health, University of Washington

I served as member of the University of Washington's COVID-19 Literature Report team, which provides daily literature digests of public health and policy relevance to the Washington Department of Health, the Office of the Governor, and other local and regional stakeholders, under a contract with the Washington State Department of Health. In this role I rotated between selecting 10-12 articles for inclusion in digests (out of 400-800 per day), and drafting digests for submission.

July 2017 - December 2017 **Graduate Research Student Assistant | Global WACH**
Department of Global Health, University of Washington

I constructed a decision analytic tool to model the cost effectiveness of repeat maternal testing for HIV, for a WHO consultancy.

August 2016 - July 2016 **Masters Practicum | Neglected Zoonotic Diseases in Uganda study**
Veterinarians Without Borders/Vétérinaires San Frontières
Moyo, Uganda

I performed animal sampling alongside of the human sampling team, and created and administered an Animal Worker Health Survey to describe household delegation of livestock tasks and relevant occupational hazards, specifically animal injury.

September 2015 - August 2015 **Group Leader | Syndromic Surveillance for Livestock Health (SSLH)**
Veterinarians Without Borders/Vétérinaires San Frontières
Kampala, Uganda

I lead a team of four American veterinarians through seven districts in central and southwestern Uganda, in each district executing training sessions of livestock producers and community animal health workers in the identification and reporting of key animal diseases.

May 2011 **Research Extern | Plum Island Animal Disease Center**
Foreign Animal Disease Research Unit
Orient Point, NY

I assisted in ongoing projects related to foot and mouth disease pathogenesis and vaccine development, including the assessment of porcine vaccine trial control groups.

August 2010 - July 2010 **Research Extern | Integrated Control of Neglected Zoonoses (ICONZ)**
Kampala, Uganda

I assisted in field sampling of cattle herds previously mass-treated with trypanocides and carried out a baseline ICONZ study quantifying mastitis prevalence in rural and peri-urban dairy herds, comprising both local and exotic breeds.

[\(http://iconzafrica.com/\)](http://iconzafrica.com/)

July 2009 - June 2009 **Research Extern | Stamp Out Sleeping Sickness/Makerere University**
Kampala, Uganda

I primarily worked in remote villages in eastern Uganda, mass treating cattle for trypanosomiasis ('nagana') and distributing trypanocidal drugs (diminazene diaceturate; VeribenTM, Ceva Santé Animal) to cattle keepers. I also worked within the Faculty of Veterinary Medicine at Makerere University, treating local bovine cases of nagana.

[\(http://www.stampoutsleepingsickness.com/\)](http://www.stampoutsleepingsickness.com/)

PUBLICATIONS

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1. **Meisner J**, Curtis K, Graham T, Rabinowitz P. Occupational practices and hazards of rural livestock keepers in Uganda: a Cross-Sectional Study. *East African Health Research Journal* 2017; **2**(1).
 2. **Meisner J**, Vora M, Fuller M, Phipps A, Rabinowitz P. Maternal Veterinary Occupation and Adverse Birth Outcomes in Washington State, 1992-2014: a Population-Based Retrospective Cohort Study. *Occupational and Environmental Medicine* 2018; **75**: 359-368
 3. **Meisner J**, Curtis, K, Graham T, Apamaku M, Manhart L, Rabinowitz, P. Cattle-associated risk factors for human tuberculosis in rural livestock keeping communities, Uganda. *Zoonoses and Public Health* 2018; **66**(1): 73-82.
 4. **Meisner J**, Barnabas R, Rabinowitz P. A mathematical model for evaluating the role of trypanocide treatment of cattle in the epidemiology and control of *Trypanosoma brucei rhodesiense* and *Trypanosoma brucei gambiense* sleeping sickness in Uganda. *Parasite Epidemiology and Control* 2019; **5**: e00106.
 5. **Meisner J**, Mooney, S, Rabinowitz P. The curse of dimensionality: animal-related risk factors for pediatric diarrhea in western Kenya, and methods for dealing with a large number of predictors. *PLoS ONE* 2019; **14**(4): e0215982.
 6. **Meisner J**, Clifford W, Wohrle R, Kangiser D, Rabinowitz P. Soil and climactic predictors of canine coccidioidomycosis seroprevalence in Washington State: an ecological cross-sectional study. *Transboundary and Emerging Diseases* 2019; **66**(5): 2134-2142.
 7. Rodriguez PJ, Roberts DA, **Meisner J**, Sharma M, Owiredo MN, Gomez B, de Mello M, Bobrik A, Vodianyik A, Storey A, Githuka G, Chidarikire T, Barnabas R, Barr-Dichiara M, Jamil MS, Baggaley R, Johnson C, Taylor MM, Drake A. Cost-effectiveness of dual maternal HIV and syphilis testing strategies in high and low HIV prevalence countries. *Lancet Global Health* 2021; **9**(1): E61-E71.
 8. **Meisner J**, Roberts DA, Rodriguez P, Sharma M, Owiredo MN, Gomez B, de Mello MB, Bobrik A, Vodianyik A, Storey A, Githuka G, Chidarikire T, Barnabas R, Farid S, Essajee S, Jamil MS, Baggaley R, Johnson C, Drake A. Optimizing HIV retesting during pregnancy and postpartum in four countries: a cost-effectiveness analysis. *JIAS* 2021; **24**(4): e25686.
 9. Dostal T, **Meisner J**, Munayco C, Garcia P, Carcamo C, Perez Lu JE, Morin C, Frisbie LA, Rabinowitz PM. The effect of weather and climate on dengue outbreak risk in Peru, 2000-2018: a time-series analysis. *PLoS NTD* [In Review].
 10. **Meisner J**, Munayco C, Garcia P, Carcamo C, Morin C, Pigott DM, Rabinowitz PM. A novel approach to modeling epidemic vulnerability, applied to *Aedes aegypti*-vectored diseases in Peru. *BMC Infectious Diseases* [In Review].
 11. **Meisner J**, Baszler TV, Kuehl KE, Ramirez V, Baines A, Frisbie LA, Lofgren ET, DeAvila DM, Wolking RM, Bradway DS, Rabinowitz PM. Household transmission of SARS-CoV-2 from humans to dogs in Washington and Idaho: burden and risk factors. *One Health* [Submitted].

POLICY GUIDANCE AND REPORTS

December 2019

WHO 2019 Guidelines | Prevention of mother-to-child HIV transmission

Updated guidelines for maternal retesting in pregnancy were based on a cost-effectiveness I conducted as a graduate research student assistant in the Department of Global Health.

March 2021

UN IGME | Subnational under-five mortality estimates, 1990-2019

I worked with a team of statisticians and demographers to produce under-five mortality estimates at administrative levels 1 and 2 for 22 countries across sub-Saharan Africa and Southern Asia. Report link: <https://data.unicef.org/resources/subnational-under-five-mortality-estimates-1990-2019/>

TA/TEACHING EXPERIENCE

Summer 2018, Autumn 2019	Facilitator Research Methods School of Medicine, University of Washington
Spring 2018	Teaching Assistant Outbreak Investigation and Response (EPI 201) Department of Epidemiology, University of Washington
Winter 2018	Teaching Assistant Epidemiologic Methods II (EPI 513) Department of Epidemiology, University of Washington Teaching Assistant Introduction to Epidemiology (EPI 320) Department of Epidemiology, University of Washington
Fall 2017	Teaching Assistant Epidemiologic Methods I (EPI 512) Department of Epidemiology, University of Washington Teaching Assistant Advanced Epidemiologic Methods I (EPI 515) Department of Epidemiology, University of Washington
Spring 2017	Teaching Assistant Introduction to One Health (ENVH 439/539) Department of Environmental and Occupational Health Sciences, University of Washington
Winter 2017	Tutor Medical Biometry II (BIOSTAT 512) Department of Biostatistics, University of Washington
Fall 2016, 2018	Tutor Epidemiologic Methods I (EPI 512) Department of Epidemiology, University of Washington

OTHER TRAINING

June 2018	Harvard Program on Causal Inference Harvard T.H. Chan School of Public Health <i>Short course</i>
July 2018	Summer Institutes: Statistics and Modeling in Infectious Diseases Department of Biostatistics, University of Washington <i>Simulation-based Inference for Epidemiological Dynamics</i> <i>MCMC for Infectious Diseases, modules I and II</i>
July 2017	Summer Institutes: Statistics and Modeling in Infectious Diseases Department of Biostatistics, University of Washington <i>Stochastic Epidemiologic Models with Inference</i> <i>Spatial Statistics in Epidemiology and Public Health</i>

PRESENTATIONS

November 2020	Livestock and the Epidemiology of Sleeping Sickness: mechanisms and implications World One Health Conference [Oral] Virtual
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- June 2019** ***Finding the scientific question in the exposure haystack: re-analysis of a matched case-control study of animal-related risk factors for pediatric diarrhea in Kenya***
Society for Epidemiologic Research Annual Meeting [Oral]
Minneapolis, MN
- March 2018, 2019
2020** ***Zoonotic diseases and One Health***
Guest lecturer, Infectious Disease Epidemiology (EPI 520)
University of Washington, Seattle, WA
- November 2017, 2018,
2019, 2020** ***One Health: integrating human, animal and environmental health in the global health context.***
Guest lecturer, Core Topics in Global Health (GH 501/401)
University of Washington, Seattle, WA
- September 2018** ***Soil and climactic predictors of canine coccidioidomycosis seroprevalence in Washington***
Washington State Zoonotic Disease Conference [Oral]
Ellensburg, WA
- July 2018** ***Modeling the cost-effectiveness of repeat maternal HIV testing in Kenya and South Africa***
AIDS 2018 [Poster]
Amsterdam, Netherlands
- June 2018** ***One Health and epidemiologic methods: in the same neighborhood?***
Society for Epidemiologic Research Annual Meeting [Poster]
Baltimore, MD
- June 2018** ***Causal inference and One Health interventions: the need for epidemiologic methods.***
5th International One Health Congress [Poster]
Saskatchewan, Canada
- December 2017** ***A Markov model of the cost effectiveness of repeat maternal HIV testing: Kenya and South Africa***
World Health Organization [Written Report]
Geneva, Switzerland
- November 2017** ***Cattle-associated risk factors for human tuberculosis in rural livestock keeping communities, Uganda.***
American Society of Tropical Medicine and Hygiene Annual Meeting [Poster]
Baltimore, MD
- April 2017** ***Animal injury, zoonotic disease, and other occupational hazards of rural livestock keepers in Uganda***
Consortium of Universities for Global Health [Poster]
Washington, DC
- February 2017** ***Animal injury, zoonotic disease, and other occupational hazards of rural livestock keepers in Uganda***
Invited presenter, Department of Global Health “Cheers to 10 years” Celebration [Poster]
Seattle, WA
- January 2017** ***Animal injury, zoonotic disease, and other occupational hazards of rural livestock keepers in Uganda***
Semiahmoo Symposium on Environmental, Occupational, and Public Health [Poster]
Semiahmoo, WA

American Society for Tropical Medicine and Hygiene Annual Meeting Travel Award, 2020/2021
Department of Epidemiology Travel Award 2017, 2018, 2019, 2020
Graduate Student Fund for Excellence in Innovation Travel Award 2017
Occupational Health at the Human-Animal Interface Scholar 2015-2017
Best Poster, Semiahmoo Symposium on Environmental, Occupational, and Public Health 2017
Stergachis Endowed Fellowship for International Exchange 2016
RCVS EMS Vacation Research Scholarship 2010
Edinburgh University Small Projects Grant 2009

COMMUNITY SERVICE

American Public Health Association

Student Liaison, Veterinary Public Health Select Primary Interest Group, 2018-2019

Section Councillor, Veterinary Public Health Select Primary Interest Group, 2019-2022

Society for Epidemiologic Research

Social Media Contributor, 2018-2019

Western Regional International Health Conference Planning Committee

Lead Organizer, One Health and Changing Ecosystems sub-theme, 2015-2016

Epidemiology Department Student Representative

Social Chair, 2015-2016