

# Meagan C. Fitzpatrick, Ph.D.

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Center for Vaccine Development and Global Health  
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## Education

2014 Ph.D. in Epidemiology of Microbial Diseases, Yale University  
2006 B.S. in Biological Sciences, University of Notre Dame

## Positions

2019 – present Assistant Professor, Center for Vaccine Development and Global Health  
University of Maryland School of Medicine  
2018 – present Affiliate, Center for Infectious Disease Modeling and Analysis  
Yale School of Public Health  
2017 – 2019 Research Associate, Center for Vaccine Development and Global Health  
University of Maryland School of Medicine  
2016 – 2017 Postdoctoral Fellow, Center for Vaccine Development and Global Health  
University of Maryland School of Medicine  
2015 – 2016 Postdoctoral Associate, Center for Infectious Disease Modeling and Analysis  
Yale School of Public Health

## Publications

63. Laufer, RS; Baral, R; Buchwald, AG; Campbell, JD; Coulibaly, F; Diallo, F; Doumbia, M; Driscoll, AD; Galvani, AP; Keita, AM; Neuzil, KM; Sow, SO; Pecenka, C; Ortiz, JR; **Fitzpatrick, MC**. Optimizing next-generation RSV prevention in Mali: a cost-effectiveness analysis of pediatric vaccination, maternal vaccination, and extended half-life monoclonal antibody immunoprophylaxis. *PLOS Global Public Health*, in press.
62. Driscoll, AJ; Haidara, FC; Tapia, MD; Deichsel, EL; Bailey, JA; Bocoum, T; **Fitzpatrick, MC**; Goldenberg, RL; Kodio, M; Moulton, LH; Nasrin, D; Onwuchekwa, U; Samake, OS; Shaffer, AM; Sow, SO; Kotloff, KL. Antenatal, intrapartum, and infant azithromycin to prevent stillbirths and infant deaths: study protocol for a 2x2 factorial randomized controlled trial. *BMJ Open*, in press.
61. Galvani, AP; Parpia, AS; Pandey, A; Sah, P; Colón, K; Friedman, G; Campbell, T; Kahn, JG; Singer, BH; **Fitzpatrick, MC**. (2022) Universal healthcare as pandemic preparedness: the lives and costs that could have been saved during the COVID-19 pandemic by healthcare reform in the United States. *Proceedings of the National Academy of Sciences, USA*. 119(25): e2200536119.
60. Campbell, T; Galvani, AP; Friedman, G; **Fitzpatrick, MC**. (2022) Exacerbation of COVID-19 mortality by the fragmented United States healthcare system: a retrospective, observational study. *The Lancet Regional Health – Americas*. 12: 100264.
59. Savinkina, A; Bilinski, A; **Fitzpatrick, MC**; Paltiel, AD; Rizvi, Z; Salomon, JA; Thornhill, T; Gonsalves, G. (2022) Estimating deaths averted and cost per life saved by scaling-up mRNA COVID-19 vaccination in low and lower-middle income countries in the COVID-19 Omicron variant era: a modeling study. *BMJ Open*. 12(9): e061752.

58. Friedman-Klabanoff, DJ; **Fitzpatrick, MC**; Deming, ME; Agrawal, V; Sitar, S; Schaafsma, T; Brown, E; Neuzil, KM; Barnabas, RV; Laufer, MK. (2022) Hydroxychloroquine COVID-19 PEP Study Team. Risk of Severe Acute Respiratory Syndrome Coronavirus 2 Acquisition Is Associated with Individual Exposure but Not Community-Level Transmission. *The Journal of Infectious Diseases*. jiac029: <https://doi.org/10.1093/infdis/jiac029>.
57. Bilinski, A; Ciaranello, A; **Fitzpatrick, MC**; Giardina, J; Shah, M; Salomon, JA. Estimated Transmission Outcomes and Costs of SARS-CoV-2 Diagnostic Testing, Screening, and Surveillance Strategies Among a Simulated Population of Primary School Students. *JAMA Pediatrics*. 176(7): 679 – 689.
56. Giardina, J; Bilinski, A; **Fitzpatrick, MC**; Kendall, EA; Linas, BP; Salomon, JA; Ciaranello, A. (2022) Model-estimated association between simulated US elementary school-related SARS-CoV-2 transmission, mitigation interventions, and vaccine coverage across community incidence levels. *JAMA Network Open*. 5(2): e214827.
55. Wells, CR; Pandey, A; **Fitzpatrick, MC**; Crystal, WS; Singer, BH; Moghadas, SM; Galvani, AP; Townsend, JP. (2022) Quarantine and testing strategies to ameliorate transmission due to travel during the COVID-19 pandemic: a modelling study. *The Lancet Regional Health – Europe*. 14: 100304.
54. Du, Z; Wang, L; Bai, Y; Wang, X; Pandey, A; **Fitzpatrick, MC**; Chinazzi, M; Pastore y Piontti, A; Hupert, N; Lachmann, M; Vespignani, A; Galvani, AP; Cowling, BJ; Meyers, LA. (2022) Cost-effective proactive testing strategies during COVID-19 mass vaccination: a modelling study. *The Lancet Regional Health – Americas*. 8: 100182.
53. Vilches, TN; Sah, P; Moghadas, SM; Shoukat, A; **Fitzpatrick, MC**; Hotez, PJ; Schneider, EC; Galvani, AP. (2022) COVID-19 hospitalizations and deaths averted under an accelerated vaccination program in northeastern and southern regions of the USA. *The Lancet Regional Health – Americas*. 6: 100147.
52. Vilches, TN; Moghadas, SM; Sah, P; **Fitzpatrick, MC**; Shoukat, A; Panday, A; Galvani, AP. (2022) Estimating COVID-19 infections, hospitalizations, and deaths following the US vaccination campaigns during the pandemic. *JAMA Network Open*. 5(1): e2142725.
51. Bilinski, A; Salomon, JA; Giardina, J; Ciaranello, A; **Fitzpatrick, MC**. (2021) Passing the Test: A model-based analysis of safe school-reopening strategies. *Annals of Internal Medicine*. 174(8): 1090 – 1100.
50. Sah, P; **Fitzpatrick, MC**; Zimmer, CF; Abdollahi, E; Juden-Kelly, L; Moghadas, SM; Singer, BH; Galvani, AP. (2021) Asymptomatic SARS-CoV-2 infection: a systematic review and meta-analysis. *Proceedings of the National Academy of Sciences, USA*. 118(34): e2109229118.
49. Yamin, D; Kahana, D; Shahmoon, E; **Fitzpatrick, MC**; Galvani, AP. (2021) Influenza vaccination should have no border: cost-effectiveness of cross-border subsidy. *BMC Public Health*. 21(1): 1543.

48. Laufer, RS; Driscoll, AJ; Baral, R; Buchwald, AG; Campbell, JD; Coulibaly, F; Diallo, F; Doumbia, M; Galvani, AP; Haidara, FC; Kotloff, KL; Keita, AM; Neuzil, KM; Orenstein, EW; Orenstein, LAV; Pecenka, C; Sow, S; Tapia, MD; Ortiz, JR; **Fitzpatrick, MC**. (2021) Cost-effectiveness of infant respiratory syncytial virus preventative interventions in Mali: a modeling study to inform policy and investment decisions. *Vaccine*. 39(35): 5037 – 5045.
47. **Fitzpatrick, MC**; Galvani, AP. (2021) Optimizing age-specific vaccination. *Science*. 371 (6532): 890 – 891.
46. Sah, P; Vilches, TN; Moghadas, SM; **Fitzpatrick, MC**; Singer, BH; Hotez, PJ; Galvani, AP. (2021) Accelerated vaccine rollout is imperative to mitigate highly transmissible COVID-19 variants. *EClinicalMedicine*. 35: 100865.
45. Moghadas, SM; Vilches, TN; Zhang, K; Nourbakhsh, S; Sah, P; **Fitzpatrick, MC**; Galvani, AP. (2021) Evaluation of COVID-19 vaccination strategies with a delayed second dose. *PLOS Biology*. 19(4): e3001211.
44. Ortiz, JR; Robertson, J; Hsu, J; Yu, SL; Driscoll, AJ; Williams, SR; Chen, WH; **Fitzpatrick, MC**; Sow, S; Biellik, RJ; Neuzil, KM. (2021) The potential effects of deploying SARS-CoV-2 vaccines on cold storage capacity and immunization workload in countries of the WHO African Region. *Vaccine*. 39(15): 2165 – 2176.
43. Parpia, AS; Martinez, I; El-Sayed, AM; Wells, CR; Myers, L; Duncan, J; Collins, J; **Fitzpatrick, MC**; Galvani, AP; Pandey, A. (2021) Racial disparities in COVID-19 mortality across Michigan, United States. *EClinicalMedicine*. 33: 100761.
42. Moghadas, SM\*; **Fitzpatrick, MC\***; Shoukat, A\*; Zhang, K; Galvani, AP. (2021) Simulated Identification of Silent COVID-19 Infections Among Children and Estimated Future Infection Rates with Vaccination. *JAMA Network Open*. 4(4): e217097.  
\*Authors contributed equally to this paper.
41. Moghadas, SM; Vilches, TN; Zhang, K; Wells, CR; Shoukat, A; Singer, BH; Meyers, LA; Neuzil, KM; Langley, JM; **Fitzpatrick, MC**; Galvani, AP. (2021) The impact of vaccination on coronavirus disease 2019 (COVID-19) outbreaks in the United States. *Clinical Infectious Diseases*. 73(12): 2257 – 2264.
40. Du, Z; Pandey, A; Bai, Y; **Fitzpatrick, MC**; Chinazzi, M; Pastore y Pinotti, A; Lachmann, M; Vespignani, A; Cowling, BJ; Galvani, AP; Meyers, LA. (2021) Comparative cost-effectiveness of SARS-CoV-2 testing strategies: a modeling study. *The Lancet Public Health*. 6(3): E184-E191.
39. Wells, CR; Townsend, JP; Pandey, A; Moghadas, SM; Krieger, G; Singer, B; McDonald, RH; **Fitzpatrick, MC**; Galvani, AP. (2021) Optimal COVID-19 quarantine and testing strategies. *Nature Communications*. 12(1):356.
38. **Fitzpatrick, MC**; Pandey, A; Wells, CR; Sah, P; Galvani, AP. (2021) Buyer beware: inflated claims of sensitivity for rapid COVID-19 tests. *The Lancet*. 397(10268): 24 – 25.

37. Moghadas, SM\*; **Fitzpatrick, MC\***; Sah, P; Pandey, A; Shoukat, A; Singer, BH; Galvani, AP. (2020) The implications of silent transmission for the control of COVID-19 outbreaks. *Proceedings of the National Academy of Sciences, USA*. 117(30): 17513 – 17515.  
\*Authors contributed equally to this paper.
36. Wells, CR\*; **Fitzpatrick, MC\***; Sah, P; Shoukat, A; Pandey, A; El-Sayed, AM; Singer, BH; Moghadas, SM; Galvani, AP. (2020) Projecting the demand for ventilators at the peak of COVID-19 outbreaks in the United States. *The Lancet Infectious Diseases*. 20(10): P1123 – 1125.  
\*Authors contributed equally to this paper.
35. Moghadas, SM; Shoukat, A; **Fitzpatrick, MC**; Wells, CR; Sah, P; Pandey, A; Sachs, JD; Wang, Z; Meyers, LA; Singer, BH; Galvani, AP. (2020) Projecting hospital utilization during the COVID-19 outbreaks in the United States. *Proceedings of the National Academy of Sciences, USA*. 117(16): 9122 – 9126.
34. **Fitzpatrick, MC**; Galvani AP. (2020) The effect of Medicare for All on rural hospitals – Authors’ reply. *The Lancet*. 396(10260): 1392 – 1393.
33. Galvani, AP; Parpia, AS; Pandey, A; Zimmer, C; Kahn, JG; **Fitzpatrick, MC**. (2020) The imperative for universal healthcare to curtail the COVID-19 outbreak in the USA. *EClinicalMedicine*. 23: 100380
32. Galvani, AP; **Fitzpatrick, MC**. (2020) Cost-effectiveness of transitional US plans for universal health care. *The Lancet*. 395(10238): 1692 – 1693.
31. Galvani, AP; Parpia, AS; Foster, EM; Singer, BH; **Fitzpatrick, MC**. (2020) Improving the prognosis of healthcare in the United States. *The Lancet*. 395(10223): 15 – 21.
30. Wells, CR, Huppert, A; **Fitzpatrick, MC**; Pandey, A; Velan, B; Singer, BH; Bauch, CT; Galvani, AP. (2020) Prosocial polio vaccination in Israel. *Proceedings of the National Academy of Sciences, USA*. 117(23): 13138 – 13144.
29. Alfaro-Murillo, JA; Ávila-Agüero, ML; **Fitzpatrick, MC**; Crystal, CJ; Falleiros-Arlant, LH; Galvani, AP. (2020) The case for replacing the live oral polio vaccine with the inactivated vaccine throughout the Americas. *The Lancet*. 395(10230): 1163 – 1166.
28. Craig, R; Kunkel, E; Crowcroft, N; **Fitzpatrick, MC**; de Melker, H; Althouse, BM; Merkel, T; Scarpino, SV; Koelle, K; Friedman, L; Arnold, C; Bolotin, S. (2020) Asymptomatic infection and transmission of pertussis in households: a systematic review. *Clinical Infectious Diseases*. 70(1): 152 – 161.
27. **Fitzpatrick, MC**; Bauch, CT; Townsend, JP; Galvani, AP. (2019) Modelling microbial infection to address global health challenges. *Nature Microbiology*. 4(10): 1612 – 1619.
26. Sah, P; Alfaro-Murillo, JA; **Fitzpatrick, MC**, Neuzil, KM; Meyers, LA; Singer, BH; Galvani, AP. (2019) Future epidemiological and economic impacts of universal influenza vaccines. *Proceedings of the National Academy of Sciences, USA*. 116(41): 20786 – 20792.

25. Wells, CR; Pandey, A; Parpia, AS; **Fitzpatrick, MC**; Meyers, LA; Singer, BH; Galvani, AP. (2019) Ebola vaccination in the Democratic Republic of the Congo. *Proceedings of the National Academy of Sciences, USA*. 116(20): 10178 – 10183.
24. Beyene, TJ; **Fitzpatrick, MC**; Galvani, AP; Mourits, MCM; Revie CW; Cernicchiaro N; Sanderson MW; Hogeveen H. (2019) Impact of One-Health framework on vaccination cost-effectiveness: A case study of rabies in Ethiopia. *One Health*. 8:100103.
23. España, G; Yao, Y; Anderson, KB; **Fitzpatrick, MC**; Smith, DL; Morrison, AC; Wilder-Smith, A; Scott, TW; Perkins, TA. (2019) Model-based assessment of public health impact and cost-effectiveness of dengue vaccination following screening for prior exposure. *PLoS Neglected Tropical Diseases*. 13(7): e0007482.
22. Neuzil, KM; **Fitzpatrick, MC**. (2019) The Impact of Influenza Vaccine: It's the Size of the Glass. *Clinical Infectious Diseases*, ciz078. <https://doi.org/10.1093/cid/ciz078>.
21. Pandey, A; **Fitzpatrick, MC**; Galvani AP. (2019) Metrics and benchmarks for HIV transition – Authors' reply. *The Lancet HIV*. 6(3): e150.
20. Galvani, AP; Pandey, A; **Fitzpatrick, MC**; Medlock, J; Gray, GE. (2018) Defining control of HIV epidemics. *The Lancet HIV*. 5(11): 667 – 670.
19. **Fitzpatrick, MC**; Gray, GE; Galvani, AP. (2018) Facing the Future – the Challenge of Vanquishing HIV for the Next Generation. *JAMA Pediatrics*. 172(7): 609 – 610.
18. Sah, P; Medlock, J; **Fitzpatrick, MC**; Singer, BH; Galvani, AP. (2018) Optimizing the impact of low-efficacy influenza vaccines. *Proceedings of the National Academy of Sciences, USA*. 115(20): 5151 – 5156.
17. Durham, DP; **Fitzpatrick, MC**; Ndeffo-Mbah, ML; Parpia, MS; Michael, NL; Galvani, AP. (2018) Evaluating Zika vaccination strategies in the Americas. *Annals of Internal Medicine*. 168(9): 621 – 630.
16. Haidara, FC; Tapia, MD; Sow SO; Doumbia, M; Coulibaly, F; Diallo, F; Traoré, A; Kodio, M; Kelly, CL; **Fitzpatrick, MC**; Kotloff, K; Victor, JC; Neuzil, K. (2018) Evaluation of a Booster Dose of Pentavalent Rotavirus Vaccine Co-Administered with Measles, Yellow Fever and Meningitis A Vaccines in 9-month-old Malian Infants. *Journal of Infectious Diseases*. 218(4): 606 – 613.
15. **Fitzpatrick, MC**; Singer, BH; Hotez, PJ; Galvani, AP. (2017) Saving lives efficiently across sectors: the need for a Congressional cost-effectiveness committee. *The Lancet*. 6736(17): 17 – 19.
14. Galvani, AP; **Fitzpatrick, MC**; Vermund, SH; Singer, BH. (2017) Fund global health: Save lives and money. *Science*. 356: 1018 – 1019.
13. Sah, P; **Fitzpatrick, MC**; Pandey, A; Galvani, AP. (2017) HIV criminalization exacerbates subpar diagnosis and treatment across the United States: response to the 'Association of HIV diagnosis rates and laws criminalizing HIV exposure in the United States.' *AIDS*. 31(17): 2437 – 2439.

12. Galvani, AP; Durham DP; Vermund, SH; **Fitzpatrick MC**. (2017) California Universal Health Care: an economic stimulus and life-saving proposal. *The Lancet*. 390(10106): 2012 – 2014.
11. **Fitzpatrick, MC**; Shah, HA; Pandey, A; Bilinski, AM; Kakkar, M; Clark, AD; Townsend, JP; Abbas, SS; Galvani, AP. (2016) One Health approach to cost-effective rabies control in India. *Proceedings of the National Academy of Sciences, USA*. 113(51): 14574 – 14581.
10. Bilinski, AM; **Fitzpatrick, MC**; Rupprecht, CE; Paltiel, AD; Galvani, AP. (2016) Optimal frequency of rabies vaccination campaigns in sub-Saharan Africa. *Proceedings of the Royal Society B*. 283(1842): 20161211.
9. **Fitzpatrick, MC**; Wenzel, NS; Scarpino, SV; Althouse, BM; Atkins, KE; Galvani, AP; Townsend, JP. (2016) Cost-effectiveness of next-generation vaccines: the case of pertussis. *Vaccine*. 34(29): 3405 – 3411.
8. Atkins, KE\*; **Fitzpatrick, MC\***; Galvani, AP; Townsend, JP. (2016) Cost-effectiveness of pertussis vaccination during pregnancy in the US. *American Journal of Epidemiology*. 183(12): 1159 – 1170.  
\*Authors contributed equally to this paper.
7. DeAngelis, H; Scarpino, SV; **Fitzpatrick, MC**; Galvani, AP; Althouse, BM. (2016) Epidemiological and economic impacts of priming with whole-cell *Bordetella pertussis* vaccine. *JAMA Pediatrics*. 170(5): 459 – 465.
6. Alfaro-Murillo, JA\*; Parpia, AS\*; **Fitzpatrick, MC\***; Tamagnan, JA; Medlock, J; Ndeffo-Mbah, ML; Fish, D; Ávila-Agüero, ML; Marín, R; Ko, AI; Galvani, AP. (2016) A cost-effectiveness tool for informing policies on Zika virus control. *PLoS Neglected Tropical Diseases*. 10(5): e000473  
\*Authors contributed equally to this paper.
5. **Fitzpatrick, MC**; Hampson, K; Cleaveland, S; Mzimhiri, I; Lankester, F; Lembo, T; Meyers, LA; Paltiel, AD; Galvani, AP. (2014) Cost-effectiveness of canine vaccination to prevent human rabies in rural Tanzania. *Annals of Internal Medicine*. 160(2): 91 – 100
4. Dunn, JM; Krause, PJ; Davis, S; Vannier, EG; **Fitzpatrick, MC**; Rollend, L; Belperron, AA; States, SL; Stacey A; Bockenstedt, LK; Fish, D; Diuk-Wasser, MA. (2014) *Borrelia burgdorferi* promotes the establishment of *Babesia microti* in the northeastern United States. *PLoS ONE*. 9(12): e115494
3. **Fitzpatrick, MC**; Hampson, K; Cleaveland, S; Meyers, LA; Townsend, JP; Galvani, AP. (2012) Potential for rabies control through dog vaccination in wildlife-abundant communities of Tanzania. *PLoS Neglected Tropical Diseases*. 6(8): e1796
2. Coulibaly, MB; Lobo, NF; **Fitzpatrick, MC**; Kern, M; Grushko, O; Thaner, DV; Traore, SF; Collins, FH; Besansky, NJ. (2007) Segmental duplication implicated in the genesis of inversion 2Rj of *Anopheles gambiae*. *PLoS ONE*. 2(9): e849
1. Stump, AD; **Fitzpatrick, MC**; Lobo, NF; Traore, S; Sagnon, NF; Costantini, C; Collins, FH; Besansky, NJ. (2005) Centromere-proximal differentiation and speciation in *Anopheles gambiae*. *Proceedings of the National Academy of Sciences, USA*. 102(44): 15930 – 15935

## Awards & Fellowships

- 2022 Faculty Teacher of the Year Award, Division of Geographic Medicine, Department of Medicine, University of Maryland School of Medicine
- 2022 Advanced Course in Vaccinology (ADVAC) Scholarship, National Foundation for Infectious Diseases (NFID)
- 2017 Fellowship in Vaccinology (T32), University of Maryland School of Medicine
- 2014 Global Health Justice Partnership (Student Fellow), Yale University
- 2011 Lindsay Fellowship for Research in Africa, Yale University
- 2009 Downs International Health Student Travel Fellowship, Yale University
- 2006 Outstanding Senior Biological Scientist, University of Notre Dame
- 2005 Kellogg Institute Undergraduate Summer Research Grant, University of Notre Dame

## Research Support

- 2022 *RAPID: Identifying drivers of optimal COVID-19 vaccine allocation*  
Sponsor: National Science Foundation  
2138192  
PI, 8%
- 2021-2026 *Role of Data Streams in Informing Infection Dynamics in Africa – INFORM Africa*  
Sponsor: Fogarty International Center, National Institutes of Health  
1U54TW012041  
Co-I, 12%; MPI: Chenfeng Xiao; PI: Alash'le Abimiku
- 2021-2024 *AVENIR: Assessing the impact of azithromycin on child mortality in Niger*  
Sponsor: Bill and Melinda Gates Foundation  
Senior Health Economist, 15%, PI: Thomas Leitman
- 2020-2021 *Informing Public Health Expectations and Policy for Next Generation RSV Prevention Interventions in Mali: Modeling Studies to Estimate Health and Economic Impact*  
sponsor: PATH  
PI, 15%
- 2018-2023 *Mathematical modeling to optimize rotavirus vaccination in sub-Saharan Africa*  
sponsor: National Institute of Allergy and Infectious Diseases  
1K01AI141576-01  
PI, 75%
- 2018-2022 *Assessment of azithromycin impact to optimize future program design in Mali*  
sponsor: Bill and Melinda Gates Foundation  
OPP1196125  
Health Economics Lead, 10%; PI: Karen Kotloff
- 2018-2019 *Modeling the Population Impact and Cost-Effectiveness of Novel Pertussis Vaccines on Pertussis Infection and Associated Disease in the United States*  
sponsor: US Centers for Disease Control and Prevention  
PI, 19%

## Invited Talks

- 2022 Department of Epidemiology and Public Health, Swiss TPH  
*Passing the Test: A Model-Based Analysis of Safe School-Reopening Strategies*
- 2021 CoVPN All Site / Investigator Call  
*COVID-19 deaths and hospitalizations averted by rapid vaccination rollout in the United States*
- 2020 Division of Viral Products, Food & Drug Administration  
*Silent transmission of SARS-CoV-2 and implication for pandemic control*
- 2020 Johns Hopkins University Modeling & Policy Hub  
*Exploring the Balance Between Social Distancing Measures & Their Associated Social & Economic Costs*
- 2020 Grand Rounds, Department of Medicine, UMSOM  
*Preventing COVID-19 Transmission in Schools: A Model-Based Analysis of Safe Reopening Strategies*
- 2020 Grand Rounds, Department of Epidemiology and Public Health, UMSOM  
*Infectious Disease Models and Decision Support: RSV & COVID-19*
- 2020 Biology Department, Colgate University  
*Building the One Health Case for Canine Rabies Control*
- 2019 Grand Rounds, Mercy Medical Center, Baltimore  
*The Impact of Influenza Vaccine: Is the Glass Half-Empty or Half-Full?*
- 2019 IDWeek 2019, Infectious Disease Society of America  
*Influenza Vaccine and Indirect Protection: Optimizing the Impact of Influenza Vaccine*
- 2019 Grand Rounds, Department of Medicine, UMSOM  
*The Impact of Influenza Vaccine: Is the Glass Half-Empty or Half-Full?*
- 2019 Annual Conference on Vaccinology Research  
*Infectious Disease Modeling: Design and Pitfalls*
- 2017 Maryland Institute for Applied Environmental Health  
*One Health for Rabies Control: Mathematical and Economic Modeling*
- 2016 Arthur M. Sackler Colloquium of the National Academy of Sciences  
*One Health Approach to Rabies Control*
- 2015 Public Health Foundation of India  
*Modeling Rabies Control in Tamil Nadu*
- 2015 Dept. of Epidemiology and Environmental Health, SUNY Buffalo  
*Public Health Decision-Making with Mathematical Models*
- 2012 Using Modeling to Inform Public Health (series), New York University  
*Rabies Vaccination in Tanzania: Challenges and Strategies*

## Conferences & Meetings

- 2022 WHO Meeting to Assess RSV Prevention Cost-Effectiveness in Low- and Middle-Income Countries  
Member of the Meeting Secretariat
- 2022 K-12 COVID-19 Response Across the Nation Symposium  
Chicago, IL  
*Using Modeling to Make Decisions* (panel moderator)
- 2022 Models of Infectious Disease Agent Study (MIDAS) Network Annual Meeting  
Bethesda, MD  
*Reflections on COVID-19* (panel chair)
- 2022 Advanced Course in Vaccinology (ADVAC)  
Annecy, France



- 2020 American Society of Tropical Medicine and Hygiene  
*Ahead of the Curve: Challenges and Opportunities for Outbreak Science* (symposium)
- 2019 Respiratory Diseases Branch, DMID, NIAID consultation meeting  
“Overcoming Waning Immunity in Pertussis Vaccines”
- 2017 American Society of Tropical Medicine and Hygiene  
*One Health Approach to Cost-Effective Rabies Control in India* (poster)
- 2016 Mathematical Biology for Understanding Emerging Infectious Diseases at the  
Human-Animal-Environment Interface: a “One Health” Approach  
Banff International Research Station  
*One Health Approach to Rabies Control*
- 2016 Infectious Diseases Across Scales (IDEAS) invited workshop on pertussis resurgence  
Santa Fe Institute
- 2014 American Society of Tropical Medicine and Hygiene  
*Canine Vaccination to Prevent Human Rabies in Tanzania* (scientific session)
- 2014 Global Summit Meeting, Global Pertussis Initiative  
Dublin, Ireland
- 2012 Modeling of Infectious Disease Agents Study (MIDAS) meeting  
*Potential for Rabies Control by Dog Vaccination in Tanzania*
- 2009 American Society of Tropical Medicine and Hygiene  
*Dengue Risk along an Altitudinal Gradient in Venezuela* (poster)  
*The Effect of Wildlife Transmission on Rabies Vaccination Thresholds* (poster)

### Teaching

- 2022 Workshop Organizer, Society for Epidemiological Research Annual Meeting  
*Introduction to Compartmental Modeling*
- 2021 Guest Lecturer, Louis Stokes North STEM Alliance, Summer Research Program
- 2021 Guest Lecturer, UMSOM, *Vaccinology*
- 2020 Guest Lecturer, YPSH, *Immunology for Epidemiologists*
- 2020 Guest Lecturer, UMSOM, *Advanced Quantitative Methods in Epidemiology*
- 2019 Guest Lecturer, UMSOM, *Vaccinology*
- 2014 Guest Lecturer, Yale College, *Studies in Evolutionary Medicine*
- 2013 Guest Lecturer, YSPH, *Probabilistic Modeling in Ecology, Evolution, and Disease*
- 2012 Guest Lecturer, YSPH, *Probabilistic Modeling in Ecology, Evolution, and Disease*
- 2010 Guest Lecturer, YSPH, *Vaccines: Concepts in Biology*
- 2009, 2010 Teaching Fellow, YSPH, *Issues in Bioethics*
- 2009 Teaching Fellow, YSPH, *Biology of Disease Vectors*
- 2009 – 2014 Program in College Teaching Preparation  
McDougal Graduate Teaching Center at Yale University

### Additional Research Experience

- 2022 – present Scientific Expert, Sanofi Pasteur Global Vaccine Payers Panel
- 2022 – present Consultant, The Commonwealth Fund
- 2014 – 2015 Consultant, Yale School of Public Health, in collaboration with Merck
- 2012 – 2014 Consultant, Yale School of Public Health, in collaboration with Sanofi-Pasteur
- 2007 – 2008 Research Assistant, Center for Vaccine Development, University of Maryland  
PI: Dr. Kirsten Lyke
- 2006 – 2007 Senior Laboratory Technician, Johns Hopkins Bloomberg School of Public Health  
PIs: Dr. Joseph Margolick and Dr. Homayoon Farzadegan

2004 – 2006 Undergraduate Researcher, University of Notre Dame  
PI: Dr. Nora Besansky

### Public Service

2020 Expert Testimony to Congressional Progressive Caucus  
“Scaling Up Our COVID19 Response: Implementing Robust Testing and Contact Tracing Initiatives”

2020 Scientific Advisory Group, Anne Arundel County Department of Health

2020 Faculty Leader, COVID-19 Statistics, Policy Modelling, and Epidemiology Collective (C-SPEC, covid-spec.org)

### Academic Service

2022 CDC grant reviewer

2021 *Preparing for the Next Pandemic* workshop  
University System of Maryland COVID Research and Innovation Task Force

2021 MIDAS meeting abstract reviewer

2020 CDC grant reviewer

2020 NIH IRAP study section

Ad hoc reviewer for *American Journal of Tropical Medicine and Hygiene*, *BMC Medicine*, *JAMA Network Open*, *The Lancet*, *Nature Communications*, *Parasitology*, *PLOS Computational Biology*, *PLOS Neglected Tropical Diseases*, *PLOS ONE*, *Proceedings of the National Academy of Sciences*, *Proceedings of the Royal Society B*, *Science Translational Medicine*, *Transboundary and Emerging Diseases*, and *Vaccine*

### Media Interviews / Appearances

1. March 17, 2020. BuzzFeed News: *People Who Haven't Been Officially Diagnosed With The Coronavirus Are Fueling The Pandemic, Study Says.*  
<https://www.buzzfeednews.com/article/stephaniemlee/coronavirus-undocumented-infections-study>
2. April 6, 2020. The Baltimore Sun: *When will the normalcy return in Maryland? Coronavirus modelers suggest it will be awhile.* <https://www.baltimoresun.com/coronavirus/bs-hs-modeling-coronavirus-20200406-ep7v462jp5hxl1ckguqxm7xq-story.html>
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