

# Samuel M. Jenness, PhD MPH

## CURRICULUM VITAE

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EDUCATION	<i>PhD, Department of Epidemiology</i> University of Washington, School of Public Health <i>MPH, Department of Health Law &amp; Bioethics</i> Boston University, School of Public Health <i>BA, Department of Philosophy</i> Boston University, College of Arts & Sciences	2011–2015  2004–2005  1998–2002
ACADEMIC POSITIONS	<i>Assistant Professor, Department of Epidemiology</i> Emory University, Rollins School of Public Health <i>Postdoctoral Research Associate, Department of Epidemiology</i> University of Washington, School of Public Health	2016–  2015
OTHER POSITIONS	<i>Research Scientist, HIV Epidemiology Program</i> New York City Department of Health & Mental Hygiene <i>Research Analyst, HIV/AIDS Bureau</i> Massachusetts Department of Public Health	2006–2011  2002–2006
RESEARCH AREAS	HIV & STI epidemiology; mathematical modeling of infectious disease; network science; causal inference methods; complex survey sampling design and analysis; computer science, computational epidemiology, and scientific software development	

JOURNAL  
PUBLICATIONS

1. **Jenness SM**, Murrill CS, Liu KL, Wendel T, Begier E, Hagan H. Missed Opportunities for HIV Testing among High-Risk Heterosexuals. *Sexually Transmitted Diseases*. 2009; 36(11): 704–10.
2. **Jenness SM**, Neaigus A, Hagan H, Murrill CS, Wendel T. HIV Infection and Sexual Partnerships between Injection Drug Users and Non-Injectors. *AIDS Patient Care & STDS*. 2010; 24(3): 175–81.
3. Hagan H, **Jenness SM**, Wendel T, Murrill CS, Neaigus A, Gelpi-Acosta C. Herpes Simplex Virus Type 2 Associated with HIV Infection among New York Heterosexuals Living in High-Risk Areas. *International Journal of STD & AIDS*. 2010; 21(8): 580–3.
4. **Jenness SM**, Hagan H, Wendel T, Murrill CS, Neaigus A, Gelpi-Acosta C. Reconsidering the Internet as an HIV/STD Risk for Men Who Have Sex with Men. *AIDS & Behavior*. 2010; 14(6): 1353–61.
5. **Jenness SM**, Hagan H, Liu KL, Wendel T, Murrill CS. Continuing HIV Risk in New York City Injection Drug Users: The Association of Syringe Source and Syringe Sharing. *Substance Use & Misuse*. 2011; 46(2-3): 192–200.
6. **Jenness SM**, Neaigus A, Murrill CS, Gelpi-Acosta C, Wendel T, Hagan H. Estimated HIV Incidence among High-Risk Heterosexuals in New York City, 2007. *Journal of Acquired Immune Deficiency Syndrome*. 2011; 56(2): 193–97.
7. Smith BD, Teshale E, Jewett A, Weinbaum CM, Neaigus A, Hagan H, **Jenness SM**, Melville SK, Burt R, Thiede H, Al-Tayyib A, Pannala PR, Miles IW, Oster AM, Smith A, Finlayson T, Bowles KE, DiNenno E. Performance of Pre-Market Rapid Hepatitis C Virus Antibody Assays in Four National HIV Behavioral Surveillance System Sites. *Clinical Infectious Diseases*. 2011; 53(8): 780–6.
8. **Jenness SM**, Begier E, Neaigus A, Murrill CS, Wendel T, Hagan H. Unprotected Anal Intercourse and Sexually Transmitted Diseases in High-Risk Heterosexual Women. *American Journal of Public Health*. 2011; 101(4): 745–50.
9. **Jenness SM**, Kobrak P, Wendel T, Neaigus A, Murrill CS, Hagan H. Patterns of Exchange Sex among High-Risk Heterosexual Men and Women. *Journal of Urban Health*. 2011; 88(2): 329–41.

10. Gelpi-Acosta C, Hagan H, **Jenness SM**, Wendel T, Neaigus A. Sexual and Injection-Related Risk in Puerto Rican-Born Injection Drug Users Living in New York City: a Mixed-Methods Analysis. *Harm Reduction Journal*. 2011; 8(1): 28.
11. **Jenness SM**, Neaigus A, Hagan H, Wendel T, Gelpi-Acosta C, Murrill CS. Recruitment-Adjusted Estimates of HIV Prevalence and Risk among Men Who Have Sex with Men: Effects of Weighting Venue-Based Sampling Data. *Public Health Reports*. 2011; 126(5): 635–42.
12. Neaigus A, **Jenness SM**, Hagan H, Murrill CS, Torian LV, Wendel T, Gelpi-Acosta C. Estimating HIV Incidence and the Correlates of Infection in Venue-Recruited Men Who Have Sex with Men in New York City. *AIDS & Behavior*. 2012; 16(3): 516–24.
13. Bertolli J, Shouse RL, Beer L, Valverde E, Fagan J, **Jenness SM**, Wogayehu A, Johnson C, Neaigus A, Hillman D, Courogen M, Brady KA, Bolden B. Using HIV Surveillance Data to Monitor Missed Opportunities for Linkage and Engagement in HIV Medical Care. *Open AIDS Journal*. 2012; 6(Supp 1): 131–41.
14. **Jenness SM**, Myers J, Neaigus A, Lulek J, Navejas M, Raj-Singh S. Delayed Entry into HIV Medical Care after HIV Diagnosis: Risk Factors and Research Methods. *AIDS Care*. 2012; 24(10): 1240–8.
15. Cassels S, Manhart L, **Jenness SM**, Morris M. Short-term Mobility and Increased Partnership Concurrency among Men in Zimbabwe. *PloS One*. 2013; 8(6): e66342.
16. Neaigus A, **Jenness SM**, Hagan H, Murrill CS, Wendel T. Reciprocal Sex Partner Concurrency and Sexually Transmitted Diseases among Heterosexuals at High-Risk of HIV Infection. *Journal of Urban Health*. 2013;90(5): 902–14.
17. Reilly KH, Neaigus A, **Jenness SM**, Hagan H, Wendel T, Gelp-Acosta C. High HIV Prevalence Among Low-Income, Black Women in New York City with Self-Reported HIV Negative and Unknown Status. *Journal of Women's Health*. 2013; 22(9): 745–54.
18. Neaigus A, Reilly KH, **Jenness SM**, Hagan H, Wendel T, Gelpi-Acosta C. Dual HIV Risk: Receptive Syringe Sharing and Unprotected Sex Among HIV-Negative Injection Drug Users in New York City. *AIDS & Behavior*. 2013; 17(7): 2501–9.

19. Beletsky L, Heller D, **Jenness SM**, Neaigus A, Gelpi-Acosta C, Hagan H. Syringe Access, Syringe Sharing, and Police Encounters among People who Inject Drugs in New York City: A Community-Level Perspective. *International Journal of Drug Policy*. 2014; 25(1): 105–11.
20. Reilly KH, Neaigus A, **Jenness SM**, Wendel T, Hagan H, Marshall DM, Murrill CS, Koblin BA. Trends in HIV Prevalence and Risk Behavior Among Men Who Have Sex with Men in New York City, 2004–11. *AIDS Education & Prevention*. 2014; 26(2): 134–43.
21. Cassels S, **Jenness SM**, Biney AA, Ampofo WK, Dodoo FN. Migration, Sexual Networks, and HIV in Agbogbloshie, Ghana. *Demographic Research*. 2014; 31(28): 861–88.
22. Reilly KH, Neaigus A, **Jenness SM**, Wendel T, Marshall DM, Hagan H. Factors Associated with Recent HIV Testing among Men Who Have Sex with Men in New York City. *AIDS & Behavior*. 2014; 18(S3): 297–304.
23. Neaigus A, Reilly KH, **Jenness SM**, Wendel T, Marshall DM, Hagan H. Multi-level Risk Factors for Greater HIV Infection of Black Men Who Have Sex With Men in New York City. *Sexually Transmitted Diseases*. 2014; 41(7): 433–9.
24. Cassels S, **Jenness SM**, Khanna AS. Conceptual Framework and Research Methods for Migration and HIV Transmission Dynamics. *AIDS & Behavior*. 2014; 18(12): 2302–13.
25. **Jenness SM**, Neaigus A, Wendel T, Gelp-Acosta C, Hagan H. Spatial Recruitment Bias in Respondent-Driven Sampling: Implications for HIV Prevalence Estimation in Urban Heterosexuals. *AIDS & Behavior*. 2014; 18(12): 2366–73.
26. Gwadz M, Cleland CM, Hagan H, **Jenness SM**, Kutnick A, Leonard NR, Applegate E, Ritchie AS, Banfield A, Belkin M, Cross B, Del Olmo M, Ha K, Martinez BY, McCright-Gill T, Swain QL, Perlman DC, Kurth AE. Strategies to Uncover Undiagnosed HIV Infection among Heterosexuals at High Risk and Link Them to HIV Care with High Retention: a “Seek, Test, Treat, and Retain” Study. *BMC Public Health*. 2015; 15(1): 481.
27. **Jenness SM**, Biney AA, Ampofo WK, Nii-Amoo Dodoo F, Cassels S. Minimal Coital Dilution in Accra, Ghana. *Journal of Acquired Immune Deficiency Syndrome*. 2015; 69: 85–91.

28. Gwadz M, Cleland CM, **Jenness SM**, Silverman E, Hagan H, Ritchie AS, Leonard NR, McCright-Gill T, Martinez B, Swain Q, Kutnick A, Sherpa D. Exploring Factors Associated with Recent HIV Testing among Heterosexuals at High Risk for HIV Infections Recruited with Venue-Based Sampling. *Journal of AIDS & Clinical Research*. 2016; 7:2: 1000544.
29. Neaigus A, **Jenness SM**, Reilly KH, Youm Y, Hagan H, Wendel T, Gelpi-Acosta C. Community Sexual Bridging Among Heterosexuals at High-Risk of HIV in New York City. *AIDS & Behavior*. 2016; 20(4): 722–36.
30. Reilly KH, Neaigus A, **Jenness SM**, Wendel T, Marshall DM, Hagan H. Experiences of Discrimination and HIV Risk Among Men Who Have Sex with Men in New York City. *American Journal of Men's Health*. 2016; 10(6): 505–514.
31. Reilly KH, Neaigus A, Shepard CW, Cutler BH, Sweeney MM, Rucinski KB, **Jenness SM**, Wendel T, Marshall DM, Hagan H. It's Never Just HIV: Exposure to an HIV Prevention Media Campaign and Behavior Change Among Men Who Have Sex with Men Participating in the National HIV Behavioral Surveillance System in New York City. *LGBT Health*. 2016; 3(4):314–18.
32. **Jenness SM**, Goodreau SM, Morris M, Cassels S. Effectiveness of Combination Packages for HIV-1 Prevention in Sub-Saharan Africa Depends on Partnership Network Structure. *Sexually Transmitted Infections*. 2016; 92: 619–624.
33. **Jenness SM**, Goodreau SM, Rosenberg E, Beylerian EN, Hoover KW, Smith DK, Sullivan PS. Impact of CDC's HIV Pre-Exposure Prophylaxis Guidelines among MSM in the United States. *Journal of Infectious Diseases*. 2016; 214(12): 1800–1807.  
*Web App:* [<https://prism.shinyapps.io/cdc-prep-guidelines/>]
34. **Jenness SM**, Sharma A, Goodreau SM, Rosenberg E, Hoover KW, Smith DK, Sullivan P. Individual HIV Risk versus Population Impact of Risk Compensation after Preexposure Prophylaxis Initiation among US Men Who Have Sex with Men. *PLoS One*. 2017; 12(1): e0169484.
35. Gwadz M, Cleland C, Perlman D, Hagan H, **Jenness SM**, Leonard N, Ritchie A, Kutnick A. Public Health Benefit of Peer-Referral Strategies for Detecting Undiagnosed HIV Infection among High-Risk Heterosexuals in New York City. *Journal of Acquired Immune Deficiency Syndrome*. 2017; 74(5): 499–507.

36. Cassels S, **Jenness SM**, Biney AA, Doodoo FN. Geographic Mobility and Potential Bridging for Sexually Transmitted Infections in Agbogbloshie, Ghana. *Social Science and Medicine*. 2017; 184: 27–39.
37. Neaigus A, Reilly KH, **Jenness SM**, Hagan H, Wendel T, Gelpi-Acosta C, Marshall DM. Trends in HIV and HCV Risk Behaviors and Prevalent Infection among People Who Inject Drugs in New York City, 2005–2012. *Journal of Acquired Immune Deficiency Syndrome*. 2017; 75 Suppl 3: S325–S332.
38. Goodreau SM, Rosenberg ES, **Jenness SM**, Luisi N, Stansfield SE, Millett G, Sullivan P. Sources of Racial Disparities in HIV Prevalence among Men Who Have Sex with Men in Atlanta, GA: A Modeling Study. *Lancet HIV*. 2017; 4(7): e311–e230.  
*Web App:* [<https://prism.shinyapps.io/mixing/>]
39. **Jenness SM**, Weiss KM, Goodreau SM, Rosenberg E, Gift T, Chesson H, Hoover KW, Smith DK, Liu AY, Sullivan P. Incidence of Gonorrhea and Chlamydia Following HIV Preexposure Prophylaxis among Men Who Have Sex with Men. *Clinical Infectious Diseases*. 2017; 65(5): 712–18.
40. Goodreau SM, Hamilton DT, **Jenness SM**, Sullivan PS, Valencia RK, Wang LY, Dunville RL, Barrios LC, Rosenberg ES. Targeting Strategies for HIV Pre-Exposure Prophylaxis among Adolescent Sexual Minority Males in Higher Prevalence Areas of the United States: A Modeling Study. *Journal of Adolescent Health*. 2018; 62(3): 311–319.
41. **Jenness SM**, Goodreau SM, Morris M. EpiModel: An R Package for Mathematical Modeling of Infectious Disease over Networks. *Journal of Statistical Software*. 2018; 84(8): 1-47.
42. **Jenness SM**, Weiss KM, Goodreau SM, Rosenberg E, Gift T, Chesson H, Hoover KW, Smith DK, Liu AY, Sullivan P. Moving Forward with Treatment of Gonorrhea for Users of HIV Preexposure Prophylaxis Given the Threat of Antimicrobial Resistance. *Clinical Infectious Diseases*. 2018; 67(1): 155–156.
43. Luo W, Katz DA, Hamilton DT, McKenney J, **Jenness SM**, Goodreau SM, Stekler JD, Rosenberg ES, Sullivan P, Cassels S. Development of an Agent-Based Model to Investigate the Impact of HIV Self-Testing Programs for Men Who Have Sex with Men in Atlanta and Seattle. *Journal of Medical Internet Research Public Health Surveillance*. 2018; 4(2): e58.

44. Jones J, Guest JL, Sullivan PS, Kramer M, **Jenness SM**, Sales J. Concordance Between Monetary and Sexual Delay Discounting in Men Who Have Sex with Men. *Sexual Health*. 2018; 15(3): 214–222.
45. Jones J, Guest JL, Sullivan PS, Kramer M, **Jenness SM**, Sales J. The Association Between Monetary and Sexual Delay Discounting and Risk Sexual Behavior in an Online Sample of Men Who Have Sex with Men. *AIDS Care*. EPUB AHEAD OF PRINT. DOI: 10.1080/09540121.2018.1427851.
46. Goldstein ND, **Jenness SM**, Tuttle D, Power M, Paul DA, Eppes SC. Evaluating a neonatal intensive care unit HRSA surveillance programme using agent-based network modeling. *Journal of Hospital Infection*. EPUB AHEAD OF PRINT. DOI: 10.1016/j.jhin.2018.05.002.
47. **Jenness SM**, Weiss KM, Prasad P, Zlotorzynska M, Sanchez T. Bacterial STI Screening Rates by Symptomatic Status among Men Who Have Sex with Men in the United States: A Hierarchical Bayesian Analysis. *Sexually Transmitted Diseases*. EPUB AHEAD OF PRINT. DOI: 10.1097/OLQ.0000000000000896.  
*Web App:* [<https://epimodel.shinyapps.io/sti-screen/>]
48. **Jenness SM**, Maloney K, Smith SK, Hoover KW, Rosenberg ES, Goodreau SM, Weiss KM, Liu AY, Rao D, Sullivan PS. Addressing Gaps in HIV Preexposure Prophylaxis Care to Reduce Racial Disparities in HIV Incidence in the United States. *American Journal of Epidemiology*. EPUB AHEAD OF PRINT. DOI: 10.1093/aje/kwy230.

PRE-PRESS/  
IN REVIEW

1. Hamilton DT, Goodreau SM, **Jenness SM**, Sullivan PS, Wang LY, Dunville RL, Aslam M, Barrios LC, Rosenberg ES. Impact and Efficiency of Preexposure Prophylaxis among Black and White Adolescent Sexual Minority Males: A Modeling Study. *American Journal of Public Health*. IN PRESS.
2. Chapin-Bardales J, Rosenberg ES, Sullivan PS, **Jenness SM**, Paz-Bailey G. Trends in Number and Composition of Sex Partners among Men Who Have Sex with Men in the United States, National HIV Behavioral Surveillance, 2008–2014. IN REVIEW.
3. Jones J, Weiss K, Mermin J, Dietz P, Rosenberg ES, Gift T, Chesson H, Sullivan PS, Lyles C, Bernstein K, **Jenness SM**. Proportion of Incident HIV Cases among Men Who Have Sex with Men Attributable to Gonorrhea and Chlamydia: A Modeling Analysis. IN REVIEW.

4. Weiss KM, Jones JS, Anderson EJ, Gift T, Chesson H, Bernstein K, Workowski K, Tuite A, Rosenberg ES, Sullivan PS, **Jenness SM**. Optimizing Bacterial STI Screening for Men Who Have Sex with Men by Coverage, Frequency, and Behavioral Risk. IN REVIEW.
5. Chapin-Bardales J, Rosenberg ES, Sullivan PS, Paz-Bailey G, **Jenness SM**. Distribution of HIV Transmission Events by Age, Partner Type, and Clinical Factors among Men Who Have Sex with Men in the United States. IN REVIEW.
6. Uong S, Rosenberg ES, Luisi N, Goodreau SM, Sullivan PS, **Jenness SM**. Assessing the Validity of Sexual Network Degree among Men Who Have Sex with Men using Prospective Cohort Data. IN REVIEW.
7. Cassels S, **Jenness SM**, Biney A. No Evidence of Increased Exposure to HIV/STI for Pregnant Women from Male Partner's Concurrent Partnerships in Agbogbloshie, Ghana. IN REVIEW.
8. Vaz O, Ellingson MK, Weiss P, **Jenness SM**, Bardaji A, Bednarczyk RA, Omer SB. Associations Between Mandatory Vaccination in Europe and Incidence of Measles and Pertussis and Vaccination Rates. IN REVIEW.

CONFERENCE  
PAPERS

1. **Jenness SM**, Cranston K. HIV Partner Counseling and Referrals Services in the Third Decade. *National HIV Prevention Conference*. Atlanta; 2005.
2. **Jenness SM**. HIV Partner Counseling and Referral Services: Legal and Ethical Implications. *Massachusetts HIV/AIDS Conference*. Mansfield MA; 2005.
3. **Jenness SM**, Hagan H, Liu KL, Wendel T, Woodall A, Raj-Singh S, Murrill CS. Association of Syringe Source and Syringe Sharing in New York City: Results from National HIV Behavioral Surveillance among Injection Drug Users. *American Public Health Association Conference*. Washington DC; 2007.
4. **Jenness SM**, Hanna DB, Murrill CS. Barriers to HIV Medical Care among Adults Newly Diagnosed with HIV in New York City. *National HIV Prevention Conference*. Atlanta; 2007.
5. **Jenness SM**, Murrill CS, Liu KL, Wendel T, Begier E, Hagan H. HIV Testing among High-Risk Heterosexuals in New York City. *National Summit on HIV Diagnosis, Prevention, and Access to Care*. Arlington VA; 2008.



6. **Jenness SM**, Neaigus A, Wendel T, Murrill CS, Hagan H. HIV Infection and Sexual Partnerships between Heterosexual Injection Drug Users and Non-Injectors. *National HIV Prevention Conference*. Atlanta; 2009.
7. **Jenness SM**, Hagan H, Wendel T, Murrill CS, Neaigus A, Gelpi-Acosta C. Recruitment-Adjusted Estimates of HIV Prevalence and Risk among Men Who Have Sex with Men: Effects of Weighting Venue-Based Sampling Data. *American Public Health Association Conference*. Denver; 2010.
8. **Jenness SM**, Cassels S. Study Design and Measurement Methods of Sexual Networks in Ghana. *Population Association of America Annual Meeting*. New Orleans; 2013.
9. **Jenness SM**, Biney A, Ampofo WK, Dodoo F, Cassels S. Minimal Evidence for Coital Dilution in Accra, Ghana. *Centers for AIDS Research Social and Behavioral Sciences Research Network Conference*. Los Angeles; 2014.
10. **Jenness SM**, Goodreau SM, Morris M, Cassels S. Effectiveness of Male Circumcision for HIV-1 Prevention Depends on Contact Network Structure. *Sunbelt Conference of the International Network for Social Network Analysis*. Brighton (United Kingdom); 2015.
11. **Jenness SM**, Goodreau SM, Morris M, Cassels S. Greater Age-Differential in Heterosexual Partnerships Predicts Lower HIV-1 Incidence. *Society of Epidemiological Research Annual Meeting*. Denver; 2015.
12. **Jenness SM**, Goodreau SM, Rosenberg, Beylerian EN, Hoover KW, Smith DK, Sullivan P. Impact of CDC's HIV Preexposure Prophylaxis Guidelines among MSM in the United States. *National HIV Prevention Conference*. Atlanta; 2015.
13. **Jenness SM**, Sharma A, Goodreau SM, Rosenberg E, Hoover KW, Smith DK, Sullivan P. Individual-Level HIV Risk versus Population-Level Impact of Risk Compensation after PrEP Initiation among MSM in the US: A Modeling Study. *HIV Research 4 Prevention Conference*. Chicago; 2016.
14. **Jenness SM**, Weiss K, Goodreau SM, Gift T, Chesson H, Hoover KW, Smith DK, Sullivan P, Rosenberg E. STI Incidence Among MSM Following HIV Preexposure Prophylaxis: A Modeling Study. *Conference on Retroviruses and Opportunistic Infections (CROI)*. Seattle; 2017.
15. **Jenness SM**, Weiss KM, Rosenberg ES, Goodreau SM. Agent-Based Modeling for Estimation of Dynamic Sensitivity and Specificity of Bio-Behavioral Indications for HIV Preexposure Prophylaxis. *Society for Epidemiological Research Annual Meeting*. Seattle; 2017.

16. **Jenness SM**, Goodreau SM, Morris M. EpiModel: An R Package for Mathematical Modeling of Infectious Disease over Networks. *2017 UseR! Conference*. Brussels; 2017.
17. **Jenness SM**, Maloney K, Smith DK, Hoover KW, Goodreau SM, Weiss KM, Rosenberg E, Sullivan P. The PrEP Care Continuum and HIV Racial Disparities among Men Who Have Sex with Men. *Conference on Retroviruses and Opportunistic Infections (CROI)*. Boston; 2018.
18. **Jenness SM**. Validation of Network Data for Dynamic Network Models of HIV/STI Transmission. *Integration of Empirical Data in Network Epidemiology Satellite, NetSci Conference*. Paris; 2018.
19. **Jenness SM**, Goodreau SM, Morris M. Integrating Agent-Based Models for Infectious Disease and Statistical Methods for Dynamic Networks with EpiModel. *Sunbelt Conference of the International Network for Social Network Analysis*. Utrecht (Netherlands); 2018.

INVITED  
TALKS

1. HIV Testing among an Urban High-Risk Heterosexual Population: Implications for Routine and Risk- Based Testing Strategies. *New York City Department of Health Epidemiology Grand Rounds*. New York; 2008.
2. Reconsidering the Internet as an HIV/STD Risk for Men Who Have Sex with Men. *New York City Department of Health HIV Grand Rounds*. New York; 2010.
3. The Design, Implementation, and Analysis of Respondent-Driven Sampling and Venue-Based Sampling Studies. *New York University Grand Rounds*. New York; 2011.
4. HIV-1 Transmission Across Sexual Networks: Implications for Comprehensive Prevention Strategies in Sub-Saharan Africa. *University of Washington Center for Studies in Demography & Ecology*. Seattle; 2015.
5. HIV-1 Transmission Across Sexual Networks: Mathematical Methods for Evaluating HIV Prevention Strategies in Sub-Saharan Africa. *Emory University Department of Epidemiology Seminar*. Atlanta; 2015.
6. Network-Based Mathematical Models to Evaluate Interference within HIV Prevention Trials. *Harvard University Department of Biostatistics Causal Inference Working Group*. Boston; 2015.
7. Impact of CDC's HIV Preexposure Prophylaxis Guidelines among MSM in the United States. *CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Meeting*. Atlanta; 2016.

8. Data-Driven Stochastic Modeling of HIV Epidemics over Networks using EpiModel. *Applying Simulation Science to HIV Prevention (NIAID/NIMH Research Consultation)*. Washington DC; 2016.
9. Mathematical Models for Infectious Disease Transmission Dynamics over Networks: Statistical Methods, Software Tools, and Applications for HIV/STI Prevention Science. *Northwestern University Center for Prevention Implementation Methodology (Ce-PIM) Grand Rounds*. Chicago; 2016.
10. Network Modeling for Infectious Disease Dynamics: A Brief Workshop. *University of California San Francisco PhD Program in Epidemiology and Translational Science*. San Francisco; 2016.
11. STI Incidence Following HIV PrEP Initiation among United States Men Who Have Sex with Men. *National Coalition of STD Directors Seminar*. Atlanta; 2017.
12. Mathematical Models for Infectious Disease Transmission Dynamics over Complex Contact Networks: Statistical Methods and Applications for HIV/STI Prevention Science. *Northwestern University Institute on Complex Systems (NICO) Seminar*. Chicago; 2017.
13. Network Modeling for Epidemics with EpiModel. *Public Health Dynamics Lab, University of Pittsburgh School of Public Health*. Pittsburgh; 2018.
14. Agent-Based Modeling and Network Analysis for Infectious Disease Epidemiology: Methods, Software, and Applications. *Department of Epidemiology and Biostatistics Seminar, Drexel University*. Philadelphia; 2018.
15. EpiModel: Software Tools for Modeling Infectious Disease over Dynamic Contact Networks. *NIH Modeling Infectious Disease Agents Study (MIDAS) Annual Meeting*. Bethesda MD; 2018.
16. Network Models for HIV/STI Transmission Dynamics: Statistical Methods and Computational Tools. *Society for Prevention Research Symposium*. Washington DC; 2018.

SOFTWARE

1. **EpiModel** Tools for simulating mathematical models of infectious disease. Epidemic model classes include deterministic compartmental models, stochastic individual contact models, and stochastic network models using the stochastic framework of temporal exponential random graph models. [<http://epimodel.org/>]
2. **EpiModelHIV** Extension package to EpiModel for simulating network models for HIV transmission dynamics, based on generalized framework of heterosexual couples in Sub-Saharan Africa and men who have sex with men (MSM) in the United States, with a focus on assessing emerging biomedical HIV prevention technologies. [<http://github.com/statnet/EpiModelHIV/>]
3. **tergmLite** Methods for simulating dynamic contact networks with ERGMs using a sparse matrix representation of the networks, resulting in a large improvement in the efficiency and speed of epidemic models. [<http://github.com/statnet/tergmLite/>]
4. **EpiModelHPC** Supports simulating large-scale stochastic network models on modern high-performance computing systems. Functionality provided to simulate models in parallel using either single-node, multiple-core or multiple-node setups. [<http://github.com/statnet/EpiModelHPC/>]

FUNDING  
(ACTIVE)

**EpiModel 2.0: Integrated Network Models for HIV/STI Prevention Science** 2018–2022  
NIH R01 AI138783

*Role:* Principal Investigator

This project will develop methods and software tools to forecast the performance of innovative HIV/STI prevention technologies, providing robust computational infrastructure to address critical questions in HIV/STI prevention over the next decade.

**Modeling the Evolutionary and Public Health Impact of HIV Adaptation in Response to Vaccination** 2017–2021  
NIH R01 GM125440

*Role:* Site PI (PI: Herbeck)

This study will model the population-level impact of an HIV evolutionary response to a partially effective vaccine similar to RV144 to quantify viral adaptation across vaccine-related parameters.

**Washington State HIV Prevention Models** 2018–2019  
*Role:* Site PI (PI: Morris) *WA State DOH 23192*

This project will use dynamic epidemic models paired with health economic optimization models to evaluate the optimal mix of HIV prevention strategies for the Washington State Department of Health.

**Modeling Antiretroviral-Based Prevention among Men Who Have Sex with Men in the US** 2017–2019  
*NIH R21 MH112449*

*Role:* Principal Investigator

This study collects network data from MSM in 15 high-incidence cities across the US, and integrate those into our model-based software platform for HIV transmission dynamics and interventions in this population.

**CONTEXT: The Role of Casual Contact and Migration in XDR Tuberculosis Transmission** 2018–2022  
*NIH R01 AI38646*

*Role:* Co-Investigator (PI: Gandhi)

This study will integrate geospatial, genomic, and social network data to characterize the contributions of casual contact and migration to XDR TB transmission in Sub-Saharan Africa.

**Making it Last: An RCT of a Home Care System to Promote Persistence in PrEP Care** 2017–2022  
*NIH R01 MH114692*

*Role:* Co-Investigator (PIs: Siegler & Mayer)

This trial will develop a home-based monitoring and support system to replace quarterly, in-person provider visits for ongoing HIV PrEP care, measuring the levels of retention in PrEP with biomarker and self-report.

**Theoretically Based Mobile App to Increase PrEP Uptake among Men Who Have Sex with Men** 2017–2022  
*NIH R01 DA045612*

*Role:* Co-Investigator (PI: Sullivan)

This study will test the efficacy of a mobile phone application (HealthMindr) to promote PrEP uptake in 3 US cities, with self-administered assessments for behavioral risk, HIV testing, and initiation of HIV PrEP.

**ePrEP: An RCT of an Electronic HIV PrEP Care System among Rural Men Who Have Sex with Men** 2017–2021  
*NIH U19 HD089881*

*Role:* Co-Investigator (PIs: Siegler & Mena)

ePrEP is a home-care system for PrEP allowing rural MSM to initiate and maintain PrEP clinical care without travel to a clinician office. The intervention will combine behavioral surveillance with app-based telemedicine.

**Center for Prevention Implementation Methodology** 2016–2021  
*NIH P30 DA027828*

*Role:* Co-Investigator (PIs: Brown & Mustanski)  
NIDA Center for Excellence addressing HIV prevention as it relates to drug use and abuse, implementation science, and network science. Funded as an *Early Stage Investigator* to develop novel methods and applications in these areas.

**Enhancing Models of HIV, Viral Hepatitis, STIs, and Tuberculosis to Inform and Improve Public Health** 2014–2019  
*CDC U38 PS004646*

*Role:* Co-Investigator (PI: Sullivan)

Economic and epidemic modeling projects for directing national, state, and local infectious disease prevention activities.

FUNDING  
(COMPLETED) **Local Models for Comprehensive HIV Prevention Planning** 2016–2017  
*NIH P30 AI050409*

*Role:* Principal Investigator

Feasibility study to develop a model of HIV transmission dynamics among heterosexual populations in Atlanta and Seattle. Funded through a competitive internal review of the Emory Centers for AIDS Research Developmental Core.

**Statistical Methods for Network Epidemiology** 2011–2016  
*NIH R01 HD068395*

*Role:* Co-Investigator (PI: Morris)  
Builds the statistical theory, methods, and computer software to establish a principled approach to network epidemiology, with a focus on a modeling platform for simulating epidemics over dynamic networks.

**Peer-Driven Intervention to Seek, Test & Treat Heterosexuals at High Risk for HIV** 2011–2015  
*NIH R01 DA032083*

*Role:* Co-Investigator (PI: Gwadz)

Evaluates the efficacy of a multi-level enhanced peer-driven intervention to identify and HIV test high-risk heterosexuals, and to link newly diagnosed infected persons to HIV medical care with retention and ART adherence.

	<b>National HIV Behavioral Surveillance System</b>	2006–2011
	<i>Role:</i> Project Director (PI: Neigus)	CDC U62 PS000964
	Study of HIV risk behaviors, prevention services, and HIV prevalence among high-risk populations, including men-who-have-sex-with-men, injection drug users and heterosexuals at increased-risk of HIV in New York City.	
	<b>Never in Care Study</b>	2005–2010
	<i>Role:</i> Project Director (PI: Neigus)	CDC U01 PS000108
	Study in New York City and other project areas to investigate the demographics, risk factors, and barriers to care for adults who delay entry into HIV medical care after HIV diagnosis.	
TEACHING (Formal)	<b>Emory EPI 570 (3 credits)</b> <i>Infectious Disease Dynamics: Theory and Models</i>	2017–present
SHORT COURSES	<b>Network Modeling for Epidemics</b> University of Washington	2013–present
	<b>Modeling for HIV/STI Prevention Science</b> Harvard University School of Public Health	2017
	<b>Network Statistics in Health Research</b> University of Ghent (Belgium)	2014–2015
	<b>Modeling Epidemics with EpiModel</b> INSNA Sunbelt Conference	2014–2015
GUEST LECTURES	<b>Emory EPI 546 (HIV Epidemiology)</b> <i>Lecture:</i> Mathematical Modeling for HIV Epidemiology	2017, 2018
	<b>Emory EPI 590R (Infectious Disease Epi Methods)</b> <i>Lecture:</i> Contact Networks for Infectious Diseases	2017
	<b>Emory BSHE 535 (Social Determinants of Health)</b> <i>Lecture:</i> Agent-Based Modeling of Social Determinants of Health	2016, 2017
	<b>Emory EPI 550 (STI Epidemiology)</b> <i>Lecture:</i> Mathematical Modeling for STI Epidemics	2016
	<b>Emory EPI 590 (Implementation Science)</b> <i>Lecture:</i> Mathematical Modeling for Implementation Science Research	2016

**UW HSERV 490 (Social Networks & Health)** 2014

*Lecture: Networks and Infectious Disease*

**UW EPI 554 (Intro to Epidemic Modeling)** 2012–2014

*Lecture: Stochastic Models for Infectious Disease*

MENTORING

<b>Laura Mann</b> <i>PhD, Epidemiology, Emory</i>	Spring 2022 (planned) <i>Faculty Advisor</i>
<b>Emeli Anderson</b> <i>PhD, Epidemiology, Emory</i>	Spring 2021 (planned) <i>Faculty Advisor</i>
<b>Supriya Sarkar</b> <i>PhD, Epidemiology, Emory</i>	Spring 2020 (planned) <i>PhD Committee Member</i>
<b>Pragati Prasad</b> <i>MPH, Epidemiology, Emory</i>	Spring 2019 (planned) <i>MPH Thesis Chair</i>
<b>Kristin Nelson</b> <i>PhD, Epidemiology, Emory</i>	Fall 2018 (planned) <i>PhD Committee Member</i>
<b>Farah Ahmed</b> <i>MPH, Epidemiology, Emory</i>	Spring 2018 <i>MPH Thesis Chair</i>
<b>Steven Uong</b> <i>MPH, Epidemiology, Emory</i>	Spring 2018 <i>MPH Thesis Chair</i>
<b>Caleb Ebert</b> <i>MPH, Epidemiology, Emory</i>	Spring 2018 <i>MPH Thesis Chair</i>
<b>Bonnie Gale</b> <i>MPH, Epidemiology, Emory</i>	Spring 2018 <i>MPH Thesis Chair</i>
<b>Johana Bardales</b> <i>PhD, Epidemiology, Emory</i>	Spring 2018 <i>PhD Committee Member</i>
<b>Kyndall White</b> <i>MPH, Epidemiology, Emory</i>	Spring 2017 <i>MPH Thesis Chair</i>
<b>Romana Fetherolf</b> <i>MPH, Epidemiology, Emory</i>	Spring 2017 <i>MPH Thesis Chair</i>
<b>Jeb Jones</b> <i>PhD, Epidemiology, Emory</i>	Fall 2016 <i>PhD Committee Member</i>
<b>Ilya Shats</b> <i>BS/MS, Computer Science, Emory</i>	Spring 2016 <i>MS Thesis Committee Member</i>



COMMITTEE SERVICE	1. MPH/MSPH Admission Committee	2016–present
	<i>Department of Epidemiology, Rollins School of Public Health</i>	
	2. PhD Program Committee	2017–present
	<i>Department of Epidemiology, Rollins School of Public Health</i>	
	3. PhD Admissions Committee	2017–present
	<i>Department of Epidemiology, Rollins School of Public Health</i>	
GRANT REVIEW	1. Emory Center for AIDS Research	2017–present
	<i>Development Core Pilot Grant Program</i>	
	2. Emory University Research Committee	2018–present
	<i>Interdisciplinary Pilot Grants Subcommittee</i>	
JOURNAL REVIEW	<i>AIDS &amp; Behavior</i>	
	<i>AIDS Care</i>	
	<i>AIDS Patient Care &amp; STDs</i>	
	<i>American Journal of Public Health</i>	
	<i>Annals of Epidemiology</i>	
	<i>BMC Public Health</i>	
	<i>Clinical Infectious Diseases</i>	
	<i>Demography</i>	
	<i>Drug &amp; Alcohol Dependence</i>	
	<i>Epidemics</i>	
	<i>Epidemiology</i>	
	<i>International Journal of STD &amp; AIDS</i>	
	<i>Journal of AIDS (JAIDS)</i>	
	<i>Journal of the International AIDS Society (JIAS)</i>	
	<i>Journal of Statistical Software</i>	
	<i>Journal of Women’s Health</i>	
<i>Network Science</i>		
<i>PLoS One</i>		
<i>Sexually Transmitted Diseases</i>		
<i>Sexually Transmitted Infections</i>		

ACADEMIC	2002	John D. Finlay Award for Excellence in Philosophy
AWARDS	2004	Community Health Scholars Fellowship
	2005	Top Master's Thesis in Health Law Department
	2012	University of Washington Center for AIDS Research Travel Award
	2013	Pre-Doctoral Fellowship, University of Washington
	2013	University of Washington Center for AIDS Research Travel Award