

GREGORY S. KNOWLTON

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EDUCATION

University of Minnesota School of Public Health , Minneapolis, MN MS in Health Services Research, Policy & Administration <i>Area of Emphasis: Decision Sciences</i>	August 2022 GPA: 3.88/4.00
University of Minnesota School of Public Health , Minneapolis, MN MS in Biostatistics	May 2022 GPA: 3.96/4.00
Amherst College , Amherst, MA BA in Chemistry <i>Magna Cum Laude with Distinction, Phi Beta Kappa</i>	May 2015 GPA: 3.93/4.00

RESEARCH EXPERIENCE

Graduate Research Assistant

University of Minnesota Division of Health Policy & Management

January 2019-Present

Faculty Advisor: Eva Enns, PhD

- Co-developed *dampack*, an R package for conducting cost-effectiveness analysis using decision-analytic simulation models. Published package on CRAN and wrote accompanying manuscript currently in submission to Medical Decision Making.
- Co-developed the Minnesota COVID-19 Model in collaboration with the Minnesota Department of Health during the early stages of the pandemic. Contributed primarily to model calibration, quantifying uncertainty, and the creation of tables and figures for Governor Walz's public addresses and other press releases.
- Estimated the cost-effectiveness of public health interventions targeting the PrEP cascade of care through simulation modeling rooted in network statistics and real-world data.
- Characterized enrollment dynamics for Washington State's HIV drug assistance program through survival analysis of claims data.

Graduate Research Assistant

University of Minnesota Division of Biostatistics

June 2018-September 2019

Faculty Advisor: Julian Wolfson, PhD

- Harmonized and pooled data from two RCTs investigating use of losartan to improve immune recovery among persons with HIV. Executed statistical analyses of pooled data and prepared figures and tables to summarize findings.
- Estimated the potential population health benefit of ECMO-facilitated resuscitation for the treatment of out-of-hospital cardiac arrest in the Twin Cities.

TEACHING EXPERIENCE

Graduate Teaching Assistant

University of Minnesota School of Public Health

Statistics for Health Management Decision Making

Biostatistical Literacy

June 2021-August 2021
September 2017-August 2018

SKILLS

Computer: R, R Shiny, Python, SAS, Stata, SQL, Git, Linux, Unix, Microsoft Office

PUBLICATIONS

1. **Knowlton GS**, Alarid-Escudero F, Easterly CW, Kao SY, Krijkamp E, Yang A, Pehlivanoglou P, Jala H, Jenness SJ, Enns EA. *dampack: Visualizing and Analyzing Cost-Effectiveness Results from Decision-Analytic Models in R*. **In submission to Pharmacoeconomics*.
2. Wheatley MM, **Knowlton GS**, Butler M, Enns EA. Cost-Effectiveness of HIV Retention and Re-engagement Interventions in High-Income Countries: A Systematic Literature Review. *AIDS Behav.* Jan 2022; doi:10.1007/s10461-021-03561-w
3. Wheatley MM, **Knowlton GS**, Kao SY, Jenness SM, Enns EA. Cost-Effectiveness of Interventions to Improve HIV Pre-Exposure Prophylaxis Initiation, Adherence, and Persistence among Men Who Have Sex with Men. *JAIDS Journal of Acquired Immune Deficiency Syndromes.* Jan 2022; doi: 10.1097/QAI.00000000000002921.
4. Jenness SM, **Knowlton GS**, Smith DK, Marcus JL, Anderson EJ, Siegler AJ, Jones J, Sullivan PS, Enns EA. A decision analytics model to optimize investment in interventions targeting the HIV preexposure prophylaxis cascade of care. *AIDS.* July 2021. doi: 10.1097/QAD.0000000000002909.
5. Chan WC, **Knowlton GS**, Bishop AC. Activation of Engineered Protein Tyrosine Phosphatases with the Biarsenical Compound AsCy3-EDT2. *Chembiochem.* Oct 2017. doi: 10.1002/cbic.201700253

6. Leung HO, Marshall MD, Messinger JP, **Knowlton GS**, Sundheim KM, and Cheung-Lau JC, The Microwave Spectra and Molecular Structures of 2-Chloro-1,1-difluoroethylene and Its Complex with the Argon Atom. *Journal of Molecular Spectroscopy*. Oct 2014. doi: 10.1016/j.jms.2014.09.011
7. Syed A, Hew K, Kohli A, **Knowlton GS**, Nadeau KC. Air Pollution and Epigenetics. *Journal of Environmental Protection*. Aug 2013. doi: 10.4236/jep.2013.48A1014

CONFERENCE ABSTRACTS

1. **Knowlton GS**, Wheatley MM, Jenness SJ, Kao SY, Enns EA. Cost-Effectiveness of Interventions to Improve HIV Pre-Exposure Prophylaxis Uptake, Retention, and Adherence in Atlanta, Georgia. Annual Meeting of the Society for Medical Decision. Oct 2020.
2. Wheatley MM, **Knowlton GS**, Enns EA. Cost-Effectiveness of HIV Engagement In Care in High-Income Countries: A Systematic Review. Annual Meeting of the Society for Medical Decision. Oct 2020.
3. Baker JV, Wolfson J, Morse C, Rhame F, David C, Anderson J, Collins G, **Knowlton GS**, Cza chura J, Reilly C, Chipman J, Beilman G, Tracy RP, Sereti I, Schacker TW. Losartan does not improve lymphatic tissue fibrosis or T-Cell recover in HIV infection. Conference on Retroviruses and Opportunistic Infections. Mar 2020.