

JONATHAN FINTZI

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Department of Biostatistics, University of Washington

1705 NE Pacific Street ◊ Seattle, WA 98195-7232

EDUCATION

University of Washington, Seattle, WA

2012 — 2018 (*expected*)

Ph.D. in Biostatistics

- Dissertation topic: Bayesian modeling of infectious disease data with underreporting
- Advisers: Dr. Jon Wakefield and Dr. Vladimir Minin

Columbia University, New York City, NY

2009 — 2012

M.A. in Statistics

Cornell University, Ithaca, NY

2004 — 2008

B.A. in Economics

RESEARCH INTERESTS

Bayesian modeling; infectious diseases; disease progression; epidemic count data; stochastic processes; non-linear dynamical systems; missing data; multi-state models; MCMC and computational methods.

RESEARCH

Peer reviewed publications:

Fintzi, J., Cui, X., Wakefield, J., Minin, V.N. (2017). Efficient Data Augmentation for Fitting Stochastic Epidemic Models to Prevalence Data. *Journal of Computational and Graphical Statistics*, 1-12.

Larson T., Gould T., Riley E.A., Austin E., **Fintzi J.**, Sheppard L., Yost M., Simpson C. (2017). Ambient Air Quality Measurements from a Continuously Moving Mobile Platform: Estimation of Area-Wide, Fuel-Based, Mobile Source Emission Factors Using Absolute Principal Component Scores. *Atmospheric Environment*, 152, 201-211.

Riley E.A., Banks L., **Fintzi J.**, Gould T., Hartin K., Schaal L., Davey M. et al. (2014). Multi-Pollutant Mobile Platform Measurements of Air Pollutants Adjacent to a Major Roadway. *Atmospheric Environment*, 98, 492-499.

Manuscripts in preparation:

Fintzi, J., Wakefield, J., Minin, V.N. (2017). Dynamic Transmission Modeling of Pandemic A(H1N1)pdm09 Influenza via the Linear Noise Approximation. *In preparation*.

Quinn, R., Salvatierra, J., Solari V., Calderon M., **Fintzi J.**, Winder R, Eller N., Zunt J.R. Effects of Human Papilloma Virus Co-Infection on Viral Persistence in Men who have Sex with Men in Lima, Peru. *In preparation*.

Oral presentations and posters:

Fintzi, J., Wakefield, J., Minin V.N. Fitting Stochastic Epidemic Models to Partially Observed Incidence via the Linear Noise Approximation. *Epidemics*, Stitges, Barcelona, Spain (upcoming, November 2017). **Supported by a Graduate School Fund for Excellence and Innovation travel award.**

Fintzi, J., Bayesian Modeling of Infectious Disease County data. *UW Biostatistics Student Seminar*. Seattle, WA (February 2017).

Fintzi, J., Wakefield, J., Minin, V.N. Fitting Stochastic Epidemic Models to Partially Observed Incidence via the Linear Noise Approximation. *Models for Infectious Disease Agent Study Network Meeting*, Atlanta, GA (May 2017).

Fintzi, J., Wakefield, J., Minin, V.N. An Agent-Based Data Augmentation Framework for Tractably Fitting Stochastic Epidemic Models to Noisy Time Series Data. *XXVIIIth International Biometric Conference*, Victoria, BC Canada (July, 2016). **Winner: Best oral presentation.**

Fintzi, J., Wakefield, J., Minin, V.N. Agent-based data Augmentation for Tractably Fitting Stochastic Epidemic Models to Noisy Time Series Data. *Models for Infectious Disease Agent Study Network Meeting*, Reston, VA (May 2016).

Fintzi, J., Wakefield, J., Minin, V.N. Bayesian Data Augmentation for Tractable Fitting of Stochastic Epidemic Models to Time Series Count Data. *The Western North America Region of the International Biometric Society*, Boise, Idaho (June 2015).

Software:

Fintzi, J. (2016). **ECctmc**: Simulation from Endpoint-Conditioned Continuous Time Markov Chains. R package version 0.1.2. URL: cran.r-project.org/web/packages/ECctmc/index.html.

Fintzi, J. (2016). **stemr**: Stochastic Epidemic Models in R via Bayesian Data Augmentation. R package version 0.1.0. URL: github.com/fintzij/stemr.

WORK EXPERIENCE

Center for Inference and Dynamics of Infectious Diseases

Research assistant

January 2015 – present

Center for Clean Air Research

Research assistant

July 2012 – September 2014

New York Carriage Company

Horse-drawn carriage driver (part-time, while doing my BA and MA)

2005 – 2012

TEACHING

Medical Biometry

Teaching assistant

Spring 2015

Biostatistics II

Teaching assistant

Winter 2015

Math and Statistics Tutor

2010 – 2012

SERVICE

Education Policy & Teaching Evaluation Committee

Department of Biostatistics, University of Washington

2014 – 2015

Faculty-Student Relations Committee,

Department of Biostatistics, University of Washington

2012 – 2013

OTHER

Spoken Languages

English, Hebrew

Computer Languages

R, C++, MATLAB

Software packages & Tools

Stan, pomp, L^AT_EX