# Curriculum Vitae

May 6, 2020

## Samuel J. Clark

## Personal & Contact Information

Name: Samuel Joseph Clark

238 Townshend Hall

Mailing address: 1885 Neil Avenue Mall

Columbus OH, 43210

United States

Office phone: +1 (614) 292-6681

Office fax: +1 (614) 292-6687

Cell phone: +1 (206) 303-9620

Email: clark.2962@osu.edu

work@samclark.net

Room 350G, Pomerene Hall  $(3^{rd} floor)$ 

Office at TDAI: Columbus Campus

The Ohio State University

Room 60D, Townshend Hall (basement)

Office at IPR: Columbus Campus

The Ohio State University

## Education

2001:	Ph.D. in Demography, University of Pennsylvania
1995:	M.A. in Demography, University of Pennsylvania
1993:	B.S. in Biology, California Institute of Technology – emphasis in Neurophysiology
1993:	B.S. in Engineering and Applied Science, California Institute of Technology – emphasis in Computational Neural Systems

## Ph.D. Dissertation

CLARK, SAMUEL J. 2001. "An Investigation into the Impact of HIV on Population Dynamics in Africa." PhD diss., University of Pennsylvania.

# **Employment**

### Current & Affiliations

2016 – :	Professor, Department of Sociology, The Ohio State University, Columbus, Ohio
2007 – :	Senior Researcher, MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, University of the Witwatersrand, South Africa
2006 – :	Affiliate, Population Unit, Institute of Behavioral Science, University of Colorado at Boulder

### Previous

2011 – 2016:	Associate Professor, Department of Sociology, University of Washington, Seattle, Washington
2005 – 2011:	Assistant Professor, Department of Sociology, University of Washington, Seattle, Washington
2008:	Honorary Research Associate, School of Computational and Applied Mathematics, University of the Witwatersrand, South Africa
2007 – 2008:	Visiting Senior Researcher, School of Public Health, University of the Witwatersrand, South Africa
2003 – 2007:	Honorary Research Officer, School of Computational and Applied Mathematics, University of the Witwatersrand, South Africa
2002 - 2007:	Honorary Lecturer/Research Officer, Agincourt Health and Population Unit, School of Public Health, University of the Witwatersrand, South Africa

2001 – 2006: Postdoctoral Fellow, Population Unit, Institute of Behavioral Science,

University of Colorado at Boulder

Research Associate, Graduate Group in Demography, University of

2001 – 2005: Pennsylvania

## Research Support

#### Current

Vital Strategies contract: \$33,000. 2019. The openVA Pipeline Phase III. CLARK, SAMUEL (PI). Period: October 2019–March 2020 Role: Project Leader. Principal Author: S. J. CLARK. Hosting Institution: OSU.

Bill and Melinda Gates Foundation, Invited Project. 2018. Demand for Modern Contraception in sub-Saharan Africa: New Methods, New Evidence. Casterline, John and Clark, Samuel (PI). Period: 2018-2021. Role: Co-PI. Principal Authors: J. Casterline and S. J. CLARK. Hosting Institution: Institute for Population Research, The Ohio State University.

NIH: NICHD, R01 No. 1R01HD086227-01: \$490,000 per year. 2016. Verbal Autopsy: Reimagining Data & Automated Cause Assignment (using ALPHA Network data). CLARK, SAMUEL J (PI). Period: 2016-2021. Role: Principal Investigator. Principal Authors: S. J. CLARK, T. H. McCormick. Hosting Institution: The Ohio State University.

#### Completed

- Vital Strategies contract: \$69,000. 2018. The openVA Pipeline Phase II. CLARK, SAMUEL (PI). Period: July 2017–March 2019 Role: Project Leader. Principal Author: S. J. CLARK. Hosting Institution: OSU.
- OSU IPR Seed grant: \$60,000. 2017. A General Mortality Modeling Framework in the Era of the SDGs. CLARK, SAMUEL J (PI). Period: 2017. Role: Principal Investigator. Principal Authors: S. J. CLARK. Hosting Institution: The Ohio State University Institute for Population Research (IPR).
- Bill and Melinda Gates Foundation, Invited Project. \$1,500,000. 2015. Supplement to 'Deaths Among HIV Infected Adults in African Populations since the Introduction of Antiretroviral Treatment'. Zaba, Basia (PI), Period: 2014-2016 (24 months, extended). Role: Co-Applicant. Principal Authors: B. Zaba, J. Todd, G. Reniers and S. J. CLARK. Hosting Institution: London School of Hygiene and Tropical Medicine.
- London School of Hygiene and Tropical Medicine, Subaward. \$240,000. 2015. Supplement to 'Deaths Among HIV Infected Adults in African Populations since the Introduction of Antiretroviral Treatment'. CLARK, SAMUEL J (PI). Period: 2014-2016 (24 months). Role: Principal Investigator. Principal Authors: S. J. CLARK, T. McCormick and B. Zaba. Hosting Institution: University of Washington.

- Center for Studies in Demography and Ecology (CSDE), University of Washington, Seed Grant: \$20,000. 2014. Survey-based Cause of Death Assignment. McCormick, Tyler and CLARK, SAMUEL J (PI). Period: 2014. Role: Co-Principal Investigator. Principal Authors: T. McCormick and S. J. Clark. Hosting Institution: University of Washington.
- Wellcome Trust, Strategic Award. \$425,000 per year. 2014. Preventing Cardiometabolic Diseases in Africa: Life-Course and Multi-sector Approaches. Tollman, Stephen M. (PI). Period: 2014-2016. Role: Co-Applicant. Principal Authors: S. M. Tollman, K. Kahn, S. J. CLARK, S. Norris. Hosting Institution: University of the Witwatersrand.
- Bill and Melinda Gates Foundation, Invited Project. \$1,398,000 per year. 2013. Deaths Among HIV Infected Adults in African Populations since the Introduction of Antiretroviral Treatment. Zaba, Basia (PI). Period: 2013-2015 (30 months, extended). Role: Co-Applicant. Principal Authors: B. Zaba, J. Todd, G. Reniers and S. J. CLARK. Hosting Institution: London School of Hygiene and Tropical Medicine.
- ICF-I & US Agency for International Development (USAID), Ad hoc Contract: \$114,000. 2013. Exploring the Hyak Real-time Health and Population Measurement Platform in Tanzania using DHS Surveys and Health and Demographic Surveillance System Data. CLARK, SAMUEL J (PI). Period: 2013. Role: Principal Investigator. Principal Authors: S. J. CLARK, J. Wakefield and T. McCormick. Hosting Institution: University of Washington.
- London School of Hygiene and Tropical Medicine, Subaward. \$73,000 per year. 2013. Deaths Among HIV Infected Adults in African Populations since the Introduction of Antiretroviral Treatment. CLARK, SAMUEL J (PI). Period: 2013-2015 (30 months, extended). Role: Principal Investigator. Principal Authors: S. J. CLARK, T. McCormick and B. Zaba. Hosting Institution: University of Washington.
- NIH: NICHD R01 No. R01HD070936: \$295,000 per year. 2012. Probabilistic Population Projections for All Countries. Rafery, A. E. (PI). Period: 2012-2017. Role: Investigator. Principal Author: A. E. Raftery. Hosting Institution: University of Washington.
- Center for Studies in Demography and Ecology (CSDE), University of Washington, Seed Grant: \$15,000. 2009. A New Look at Indirect Methods for Estimating Demographic Indicators: Evaluation, Validation and Reformulation. CLARK, SAMUEL J (PI). Period: Summer 2009. Role: Principal Investigator. Principal Author: S. J. CLARK. Hosting Institution: University of Washington.
- Wellcome Trust, Programme Grant: No. 090959/Z/09/Z. \$360,000 (200,000 pounds sterling) per year. 2009. Collaborative Network for Data Analysis in African Community-Based, Longitudinal HIV Studies. Zaba, Basia (PI). Period: 04/01/2010 03/31/2015 (extended). Role: Co-Applicant. Principal Authors: B. Zaba, V. Hosegood, S. J. CLARK, D. Mayer and J. Kagaayi. Hosting Institution: London School of Hygiene and Tropical Medicine.
- Wellcome Trust, Programme Grant: No. 085477/Z/08/Z: \$850,000 (575,000 pounds sterling) per year. 2008. Health, Population and Social Transitions in Rural South Africa: Elucidating Pathways and Testing Interventions. Tollman, Stephen M. (PI). Period: 2008 2012.

- Role: Co-Applicant. Principal Authors: S. M. Tollman, K. Kahn, M. A. Collinson and S. J. CLARK. Hosting Institution: University of the Witwatersrand.
- CSSS, University of Washington. Seed Grant: \$20,000. 2007. Estimating HIV Prevalence in Africa by Applying Bayesian Melding to a Cohort Component Projection Model. CLARK, SAMUEL J (PI). Period: 2007. Role: Principal Investigator. Principal Author: S. J. CLARK. Hosting Institution: University of Washington.
- NIH: NIA, R24: No. R24AG032112: \$300,000 per year. 2007. Deaths Among HIV Infected Adults in African Populations since the Introduction of Antiretroviral Treatment. Menken, Jane; Tollman, Stephen and CLARK, SAMUEL J (Co-PIs). Period: 09/30/2007 08/31/2012. Role: Co-Principal Investigator. Principal Authors: S. J. CLARK, J. Menken and S. M. Tollman. Hosting Institution: University of Colorado at Boulder.
- NIH: NICHD R01 No. R01HD054511: \$320,000 per year. 2007. Assessing Uncertainty in Population Projection Models via Bayesian Melding. Raftery, A. E. (PI). Period: 2007-2011. Role: Investigator. Principal Author: A. E. Raftery. Hosting Institution: University of Washington.
- NIH: NICHD, K01: No. K01HD057246: \$115,000 per year. 2007. Predicting Impacts of Infectious Disease on Structure and Dynamics of Populations. CLARK, SAMUEL J (PI). Period: 06/15/2008 09/31/2013. Role: Principal Investigator. Principal Author: S. J. CLARK. Hosting Institution: University of Washington.
- University of California, Los Angeles, Subaward: \$50,000 per year. 2007. Design and Implementation of MIPopLab Demographic Surveillance System Data Management System. CLARK, SAMUEL J (PI). Period: 09/21/2007 09/31/2014. Role: Principal Investigator. Principal Authors: S. J. CLARK and P. Heuveline. Hosting Institution: University of Washington.
- NIH: NIA, R03 No. R03AG028640: \$45,000 per year. 2006. Extending Access to Data from Demographic Surveillance System Sites in Africa. CLARK, SAMUEL J (PI). Period: 09/15/2006 06/30/2008 extended 06/30/2009. Role: Principal Investigator. Principal Author: S. J. CLARK. Hosting Institution: University of Colorado at Boulder.
- NIH: FIC (Fogarty International Center), R25 No. R25TW007491: \$125,000 per year. 2005. Framework in Global Health: Local to Global Health. Kimball, Ann-Marie (PI). Period: 09/21/2005 07/31/2006. Role: Instructor. Principal Authors: A-M. Kimball and M. Morris. Hosting Institution: University of Washington.
- NIH: NICHD, R03: No. R03HD041537: \$50,000 per year. 2004. Cambodia between the Khmers Rouges and the Red Plague? Heuveline, P. (PI). Period: 2002 2004. Role: Consultant. Principal Author: P. Heuveline. Hosting Institution: University of Chicago.
- NIH: NIA, Supplement to R37 No. 3 R37AG10168-09S2: \$50,000. 1999. Racial and Ethnic Mortality Differences at Older Ages. Preston, Samuel H. (PI). Period: 1999 2001. Role: Author/Principal Investigator of Supplement. Principal Author: S. J. CLARK. Hosting Institution: University of Pennsylvania.

NSF: No. SBR-9505738. \$100,000 per year. 1995. Long Term Study of Social Change in Rural Zambia. Scudder, T. (PI). Period: 08/01/1995 – 07/31/1998. Role: Investigator. Principal Authors: T. Scudder, E. Colson and S. J. CLARK. Hosting Institution: California Institute of Technology (Caltech).

## Publications & Manuscripts

### Clickable Links to Online Bibliographies

- NIH National Center for Biotechnology Information (NCBI) bibliography
- Web of Science Publons Profile
- Google Scholar

#### Journal Articles

I collaborate with researchers in a range of disciplines (demography, statistics, public health, global health, sociology, anthropology, etc.), and I have adopted the medical publishing convention of occupying the last author slot when I am the senior investigator on the team and have overall responsibility for the research described in the publication. A dagger † indicates the senior author who is responsible for motivating the work, coordinating the research and publication, and raising funds to support the work. An asterisk \* indicates a student author.

The blue text contains links to either download a PDF of the article (article title text), or to take you to the publisher's site (DOI text).

#### Published

Calvert, Clara, Milly Marston, Emma Slaymaker, Amelia C Crampin, Alison Price, Nigel Klein, Kobus Herbst, Denna Michael, Mark Urassa, SAMUEL J CLARK, Carine Ronsmans, and Georges Reniers. 2020 (in press). "Direct Maternal Deaths Attributable to HIV in the Era of ART: Evidence from Three Population-based HIV Cohorts with Verbal Autopsy." AIDS.

Gómez-Olivé<sup>†</sup>, F. Xavier, Brian Houle, Molly S Rosenberg, Chodziwadziwa W. Kabudula, Sanyu Mojola, Julia Katherine Rohr, SAMUEL J CLARK, Nicole Angotti, Enid J. Schatz, Kathleen Kahn, Till Bärnighausen, and Jane Menken. 2020 (in press). "HIV incidence among older adults in a rural South African setting: 2010-2015." Journal of Acquired Immune Deficiency Syndromes.

Houle<sup>†</sup>, Brian, Shao-Tzu Yu\*, Nicole Angotti, Enid Schatz, Chodiwadziwa Kabudula, F. Xavier Gómez-Olivé, Jane Menken, Sanyu Mojola, and SAMUEL J CLARK. 2020 (in press). "Clusters of HIV Risk and Protective Sexual Behaviors in Agincourt, Rural South Africa: Findings from the Ha Nakekela Population-Based Study of Ages 15 and Older." *Archives of Sexual Behavior*. doi:10.1007/s10508-020-01663-5.

- Kunihama, Tsuyoshi, Zehang Richard Li, SAMUEL J CLARK<sup>†</sup>, and Tyler H McCormick<sup>†</sup>. 2020. "Bayesian Factor Models for Probabilistic Cause of Death Assessment with Verbal Autopsies." *The Annals of Applied Statistics (Preprint: arXiv:1803.01327v2)*. doi:10. 1214/19-AOAS1253.
- Li\*, Zehang (Richard), Tyler H McCormick, and SAMUEL J CLARK<sup>†</sup>. 2020. "Non-confirming Replication of 'Performance of InSilicoVA for Assigning Causes of Death to Verbal Autopsies: Multisite Validation Study using Clinical Diagnostic Gold Standards', BMC Medicine 2018; 16:56." BMC Medicine. doi:10.1186/s12916-020-01518-9.
- Byass<sup>†</sup>, Peter, Laith Hussain-Alkhateeb, Lucia D'Ambruoso, SAMUEL J CLARK, Justine Davies, Edward Fottrell, Jon Bird, Chodziwadziwa Kabudula, Stephen Tollman, Kathleen Kahn, Linus Schiöler, and Max Petzold. 2019. "An Integrated Approach to Processing WHO-2016 Verbal Autopsy Data: the InterVA-5 Model." *BMC Medicine* 17 (102). doi:10.1186/s12916-019-1333-6.
- CLARK<sup>†</sup>, SAMUEL J. 2019. "A General Age-Specific Mortality Model with An Example Indexed by Child or Child/Adult Mortality (Reproducibility code)." *Demography* 56 (3): 1131–1159. doi:10.1007/s13524-019-00785-3.
- Jha<sup>†</sup>, Prabhat, Dinesh Kumar, Rajesh Dikshit, Atul Budukh, Rehana Begum, Prabha Sati, Patrycja Kolpak, Richard Wen, Shyamsundar J Raithatha, Utkarsh Shah, Zehang R Li, Lukasz Aleksandrowicz, Prakash Shah, Kapila Piyasena, Tyler H MccCormick, Hellen Gelband, and SAMUEL J CLARK. 2019. "Automated Versus Physician Assignment Of Cause Of Death For Verbal Autopsies: Randomized Trial Of 9374 Deaths In 117 Villages In India." BMC Medicine 17 (116). doi:10.1186/s12916-019-1353-2.
- Li\*, Zehang, Yuan Hsiao\*, Jessica Godwin\*, Bryan Martin\*, Jon Wakefield<sup>†</sup>, and SAMUEL J CLARK<sup>†</sup>. 2019. "Changes in the Spatial Distribution of the Under-Five Mortality Rate: Small-area Analysis of 122 DHS Surveys in 262 Subregions of 35 Countries in Africa." *PLoS ONE*. doi:10.1371/journal.pone.0210645.
- Li\*, Zehang (Richard), Tyler H McCormick, and SAMUEL J CLARK<sup>†</sup>. 2019. "Bayesian Joint Spike-and-Slab Graphical Lasso." In *Proceedings of the 36<sup>th</sup> International Conference on Machine Learning*, 97:3877–3885. Proceedings of Machine Learning Research. International Conference on Machine Learning, Long Beach, California, USA, June. http://proceedings.mlr.press/v97/li19h/li19h.pdf.
- Li\*, Zehang (Richard), Tyler H McCormick, and SAMUEL J CLARK $^{\dagger}$ . 2019. "Using Bayesian Latent Gaussian Graphical Models to Infer Symptom Associations in Verbal Autopsies." Bayesian Analysis. doi:10.1214/19-BA1172.
- CLARK<sup>†</sup>, SAMUEL J, Jon Wakefield, Tyler H. McCormick, and Michelle Ross\*. 2018. "Hyak Mortality Monitoring System: Innovative Sampling and Estimation Methods Proof of Concept by Simulation." *Global Health, Epidemiology and Genomics* 3 (e3). doi:10.1017/gheg.2017.15.

- Houle, Brian, Frances Xavier Gómez-Olivé, Nicole Angotti, Jane Menken, and SAMUEL J CLARK. 2018. "Fieldworker Effects on Substance Use Reporting in a Rural South African Setting." *Journal of Alcohol and Drug Research* 7 (1): 29–39. doi:10.7895/ijadr.246.
- Houle, Brian, Sanyu Mojola, Nicole Angotti, Enid Schatz, Frances Xavier Gómez-Olivé, SAMUEL J CLARK, Jill Williams, Chodziwadziwa Kabudula, Stephen Tollman, and Jane Menken<sup>†</sup>. 2018. "Sexual Behavior and HIV Risk across the Life Course in Rural South Africa: Trends and Comparisons." *AIDS Care* 30 (11): 1435–1443. doi:10.1080/09540121.2018.1468008.
- Nichols, Erin K, Peter Byass, Daniel Chandramohan<sup>†</sup>, SAMUEL J CLARK, Abraham D Flaxman, Robert Jakob, Jordana Leitao, Nicolas Maire, Chalapati Rao, Ian Riley, and Philip Setel. 2018. "The WHO 2016 Verbal Autopsy Instrument: An International Standard Suitable for Automated Analysis by InterVA, InsilicoVA, and Tariff 2.0." *PLoS Medicine* 15 (1): e1002486. doi:10.1371/journal.pmed.1002486.
- Pantazis\*, Athena, and SAMUEL J CLARK<sup>†</sup>. 2018. "A Parsimonious Characterization of Change in Global Age-Specific and Total Fertility Rates." *PLoS ONE* 13 (e0190574). doi:10.1371/journal.pone.0190574.
- Sharrow, David J, Jessica Godwin\*, Yanjun He\*, SAMUEL J CLARK, and Adrian E Raftery<sup>†</sup>. 2018. "Probabilistic Population Projections for Countries with Generalized HIV/AIDS Epidemics." *Population Studies* 72 (1): 1–15. doi:10.1080/00324728.2017.1401654.
- Wakefield<sup>†</sup>, Jon, Geir-Arne Fuglstad, Andrea Riebler, Jessica Godwin, Katie Wilson, and SAMUEL J CLARK. 2018. "Estimating Under-Five Mortality in Space and Time in a Developing World Context." Statistical Methods in Medical Research. doi:10.1177/0962280218767988.
- Kabudula\*, Chodziwadziwa W, Brian Houle, Mark A Collinson, Kathleen Kahn, SAMUEL J CLARK<sup>†</sup>, and Stephen Tollman. 2017. "Progression of the Epidemiological Transition in a Rural South African Setting: Findings from Population Surveillance in Agincourt, 1993–2013." *BMC Public Health* 17 (1): 424. doi:10.1186/s12889-017-4312-x.
- Kabudula\*, Chodziwadziwa W, Brian Houle, Mark A Collinson, Kathleen Kahn, F. Xavier Gómez-Olivé, Stephen Tollman, and SAMUEL J CLARK<sup>†</sup>. 2017. "Socioeconomic Differences in Mortality in the Antiretroviral Therapy Era in Agincourt, Rural South Africa, 2001–13: A Population Surveillance Analysis." *Lancet Global Health* 5 (9): e924–e935. doi:10.1016/S2214-109X(17)30297-8.
- Reniers<sup>†</sup>, Georges, Sylvia Blom, Judith Lieber, Abraham J Herbst, Clara Calvert, Jacob Bor, Till Barnighausen, Basia Zaba, Zehang (Richard) Li\*, SAMUEL J CLARK, Alison Grant, Richard Lessells, Jeffrey W Eaton, and Victoria Hosegood. 2017. "Tuberculosis Mortality and the Male Survival Deficit in Rural South Africa: An Observational Community Cohort Study." *PLoS One* 12 (10): e0185692. doi:10.1371/journal.pone.0185692.
- Bawah<sup>†</sup>, Ayaga, Brian Houle, Nurul Alam, Abdur Razzaque, Peter Kim Streatfield, Cornelius Debpuur, Paul Welaga, Abraham Oduro, Abraham Hodgson, Stephen Tollman, Mark

- Collinson, Kathleen Kahn, Toan Ho Dang, Nguyen Thi Im Chuc, Osman Sankoh, and SAMUEL J CLARK<sup>†</sup>. 2016. "The Evolving Demographic and Health Transition in Four Low-and Middle-Income Countries: Evidence from Four Sites in the INDEPTH Network of Longitudinal Health and Demographic Surveillance Systems." *PloS One* 11 (6): e0157281. doi:10.1371/journal.pone.0157281.
- Houle, Brian, Nicole Angotti<sup>†</sup>, SAMUEL J CLARK, Jill Williams, F. Xavier Gómez-Olivé, Jane Menken, Chodziwadziwa Kabudula, Kerstin Klipstein-Grobusch, and Stephen M Tollman. 2016. "Lets Talk about Sex, Maybe Interviewers, Respondents, and Sexual Behavior Reporting in Rural South Africa." *Field Methods* 28 (2): 112–132. doi:10.1177/1525822X15595343.
- Houle, Brian, Athena Pantazis\*, Chodziwadziwa Kabudula\*, Stephen Tollman, and SAMUEL J CLARK†. 2016. "Social Patterns and Differentials in the Fertility Transition Based on Population Surveillance: Rural South Africa, 1993 2013." Population Health Metrics 14 (10). doi:10.1186/s12963-016-0079-z.
- Kabudula\*, Chodziwadziwa W, Brian Houle, Mark A Collinson, Kathleen Kahn, Stephen Tollman, and SAMUEL J CLARK<sup>†</sup>. 2016. "Assessing Changes in Household Socioeconomic Status in Rural South Africa, 2001–2013: A Distributional Analysis Using Household Asset Indicators." Social Indicators Research. doi:10.1007/s11205-016-1397-z.
- McCormick, Tyler H., Zehang (Richard) Li\*, Clara Calvert\*, Amelia C. Crampin, Kathleen Kahn, and SAMUEL J CLARK†. 2016. "Probabilistic Cause-of-Death Assignment using Verbal Autopsies." *Journal of the American Statistical Association* 111 (515): 1036–1049. doi:10.1080/01621459.2016.1152191.
- Reniers, Georges, Marylene Wamukoya, Mark Urassa, Amek Nyaguara, Jessica Nakiyingi-Miiro, Tom Lutalo, Vicky Hosegood, Simon Gregson, Xavier Gomez-Olive, Eveline Geubbels, Amelia C. Crampin, Alison Wringe, Laban Waswa, Stephen Tollman, Jim Todd, Emma Slaymaker, David Serwadda, Alison Price, Samuel Oti, Moffat J. Nyirenda, Dorean Nabukalu, Constance Nyamukapa, Fred Nalugoda, Owen Mugurungi, Baltazar Mtenga, Lisa Mills, Denna Michael, Estelle McLean, Nuala McGrath, Emmanuel Martin, Milly Marston, Sewe Maquins, Francis Levira, Catherine Kyobutungi, Daniel Kwaro, Ivan Kasamba, Chifundo Kanjala, Kathleen Kahn, Chodziwadziwa Kabudula, Kobus Herbst, Dickman Gareta, Jeffrey W. Eaton, SAMUEL J CLARK, Kathryn Church, Menard Chihana, Clara Calvert, Donatien Beguy, Gershim Asiki, Shamte Amri, Ramadhani Abdul, and Basia Zaba†. 2016. "Data Resource Profile: Network for Analysing Longitudinal Population-based HIV/AIDS data on Africa (ALPHA Network)." International Journal of Epidemiology 45 (1): 83–93. doi:10.1093/ije/dyv343.
- Reniers<sup>†</sup>, Georges, Sylvia Blom, Clara Calvert, Alexandra Martin-Onraet, Abraham J Herbst, Jeffrey W Eaton, Jacob Bor, Emma Slaymaker, Zehang R Li, SAMUEL J CLARK, Till Barnighausen, Basia Zaba, and Victoria Hosegood. 2016. "Trends in the Burden of HIV Mortality after Roll-out of Antiretroviral Therapy in KwaZulu-Natal, South Africa: an Observational Community Cohort Study." The Lancet HIV. doi:10.1016/S2352-3018(16)30225-9.

- Wheldon\*, Mark, Adrian E. Raftery<sup>†</sup>, SAMUEL J CLARK, and Patrick Gerland. 2016. "Bayesian Population Reconstruction of Female Populations for Less Developed and Developed Countries." *Population Studies* 70 (1): 21–37. PMCID: PMC4798897. doi:10. 1080/00324728.2016.1139164.
- CLARK<sup>†</sup>, SAMUEL J, F Xavier Gómez-Olivé, Brian Houle, Margaret Thorogood, Kerstin Klipstein-Grobusch, Nicole Angotti, Chodziwadziwa Kabudula\*, Jill Williams, Jane Menken, and Stephen Tollman. 2015. "Cardiometabolic Disease Risk and HIV Status in Rural South Africa: Establishing a Baseline." *BMC Public Health* 15 (135): PMCID: PMC4335669. doi:10.1186/s12889-015-1467-1.
- Houle, Brian, SAMUEL J CLARK<sup>†</sup>, and Alicia Ely Yamin. 2015. "The Impacts of Maternal Mortality and Cause of Death on Children's Risk of Dying in Rural South Africa: Evidence from a Population based Surveillance Study (1992 2013)." BMC Reproductive Health 12 (Suppl 1:S7). doi:10.1186/1742-4755-12-S1-S7.
- Mercer\*, Laina D., Jon Wakefield, Athena Pantazis\*, Angelina M Lutambi, Honorati Masanja, and SAMUEL J CLARK<sup>†</sup>. 2015. "Space-time Smoothing of Complex Survey Data: Small Area Estimation for Child Mortality." *Annals of Applied Statistics*, *The Annals of Applied Statistics* 9 (4): 1889–1905. doi:10.1214/15-AOAS872.
- Wheldon\*, Mark, Adrian E. Raftery<sup>†</sup>, SAMUEL J CLARK, and Patrick Gerland. 2015. "Bayesian Reconstruction of Two-Sex Populations by Age: Estimating Sex Ratios at Birth and Sex Ratios of Mortality." *Journal of the Royal Statistical Association, Series A* 178 (4): 977–1007. PMCID: PMC4657758. doi:10.1111/rssa.12104.
- Zaba<sup>†</sup>, Basia, Georges Reniers, Emma Slaymaker, Jim Todd, Judith Glynn, Amelia Crampin, Mark Urassa, Tom Lutalo, Marie-Louise Newell, Victoria Hosegood, SAMUEL CLARK, and Simon Gregson. 2015. "Understanding Why People Participate in HIV Surveillance." Bulletin of the World Health Organization 93 (5): 356–358.
- Bocquier, Phillipe, Mark A Collinson<sup>†</sup>, SAMUEL J CLARK, Kathleen Kahn, and Stephen M Tollman. 2014. "Ubiquitous Burden: Quantifying the Contribution of Migration to AIDS and Tuberculosis Mortality in Rural South Africa. A Population-Based Surveillance Study." *African Population Studies* 28 (1): 691–701.
- CLARK<sup>†</sup>, SAMUEL J, and Brian Houle. 2014. "Validation, Replication, and Sensitivity Testing of Heckman-type Selection Models to Adjust Estimates of HIV Prevalence." *PloS One* 9 (11): e112563.
- Collinson<sup>†</sup>, Mark A., Michael J. White, Philippe Bocquier, Stephen McGarvey, Sulaimon Afolabi, SAMUEL J CLARK, Kathleen Kahn, and Stephen M. Tollman. 2014. "Migration and the Epidemiological Transition: Insights from the Agincourt Sub-District of Northeast South Africa." Global Health Action 7 (23514). doi:10.3402/gha.v7.23514.
- Houle\*, Brian, SAMUEL J CLARK<sup>†</sup>, F. Xavier Gómez-Olivé, Kathleen Kahn, and Stephen M. Tollman. 2014. "The Unfolding Counter-Transition in Rural South Africa: Mortality by Sex, Age, SES, Time, and Cause of Death, 1994 2009." *PLoS One* 9 (6): e100420.

- McParland\*, Damien, Isobel Claire Gormley, SAMUEL J CLARK<sup>†</sup>, Tyler H. McCormick, Chodziwadziwa Whiteson Kabudula\*, and Mark A. Collinson. 2014. "Clustering South African Households Based on their Asset Status Using Latent Variable Models." *Annals of Applied Statistics* 8 (2): 747–776.
- Pantazis\*, Athena, and SAMUEL J CLARK<sup>†</sup>. 2014. "Male and Female Sterility in Zambia." Demographic Research 30 (14): 413–428. doi:10.4054/DemRes.2014.30.14.
- Sankoh, Osman, David Sharrow\*, Kobus Herbst, Chodziwadziwa Whiteson Kabudula, Nurul Alam, Shashi Kant, Henrik Ravn, Abbas Bhuiya, Le Thi Vui, Timotheus Darikwa, Margaret Gyapong, Momodou Jasseh, Nguyen Chuc Thi Kim, Salim Abdullah, Amelia Crampin, John Ojal, Seth Owusu-Agyei, Frank Odhiambo, Mark Urassa, Kim Streatfield, Masaaki Shimada, Charfudin Sacoor, Donatien Beguy, Karim Derra, George Wak, Valerie Delaunay, Ali Sie, Abdramane Soura, Diadier Diallo, Siswanto Wilopo, Honorati Masanja, Bassirou Bonfoh, Suparat Phuanukoonnon, and SAMUEL J CLARK†. 2014. "The INDEPTH Standard Population for Low- and Middle-Income Countries, 2013." Global Health Action 7 (23286). doi:10.3402/gha.v7.23286.
- Sharrow\*, David J., SAMUEL J CLARK, and Adrian E. Raftery. 2014. "Modeling Age-Specific Mortality for Countries with Generalized HIV Epidemics." *PloS One* 9 (5): e96447. PMCID: PMC4031074.
- CLARK<sup>†</sup>, SAMUEL J, Kathleen Kahn, Brian Houle\*, Adriane Arteche\*, Mark A. Collinson, Stephen M. Tollman, Kathleen Kahn, and Alan Stein. 2013. "Young Children's Probability of Dying Before and After Their Mothers' Death: A Rural Southern African Population-Based Surveillance Study." *PLoS Medicine* 10 (3): e1001409. PMCID: PMC3608552.
- Gómez-Olivé, F. Xavier, Nicole Angotti, Brian Houle\*, Kerstin Klipstein-Grobusch, Chodziwadziwa Kabudula\*, Jane Menken, Jill Williams, Stephen Tollman, and SAMUEL J CLARK<sup>†</sup>. 2013. "Prevalence of HIV among Those 15 and Older in Rural South Africa." *AIDS Care* 25 (9): 1122–1128.
- Houle\*, Brian, Alan Stein, Kathleen Kahn, Sangeetha Madhavan, Mark A. Collinson, Stephen M. Tollman, and SAMUEL J CLARK<sup>†</sup>. 2013. "Household Context and Child Mortality in Rural South Africa: The Effects of Birth Spacing, Shared Mortality, Household Composition, and Socio-Economic Status." *International Journal of Epidemiology* 42 (5): 1444–1454.
- Sharrow\*, David, SAMUEL J CLARK<sup>†</sup>, Mark A. Collinson, Kathleen Kahn, and Stephen M. Tollman. 2013. "The Age-Pattern of Increases in Mortality Affected by HIV: Bayesian Fit of the Heligman-Pollard Model to Data from the Agincourt Health and Demographic Surveillance System Field Site in Rural Northeast South Africa." *Demographic Research* 29 (39): 1039–1096.
- Wheldon\*, Mark C., Adrian E. Raftery<sup>†</sup>, SAMUEL J CLARK, and Patrick Gerland. 2013. "Reconstructing Past Populations with Uncertainty from Fragmentary Data." *Journal of the American Statistical Association* 108 (501): 96–110. doi:10.1080/01621459.2012.737729.

- Alkema\*, Leontine, Adrian E. Raftery<sup>†</sup>, Patrick Gerland, SAMUEL J CLARK, and Francois Pelletier. 2012. "Estimating Trends in the Total Fertility Rate with Uncertainty Using Imperfect Data: Examples from West Africa." *Demographic Research* 26 (15): 331–362.
- Byass<sup>†</sup>, Peter, Daniel Chandramohan, SAMUEL J CLARK, Lucia D'Ambruoso, Edward Fottrell, Wendy J Graham, Abraham J Herbst, Abraham Hodgson, Sennen Hounton, Kathleen Kahn, et al. 2012. "Strengthening Standardised Interpretation of Verbal Autopsy Data: the New InterVA-4 Tool." Global Health Action 5 (19281): PMCID: PMC3433652. doi:10.3402/gha.v5i0.19281.
- CLARK<sup>†</sup>, SAMUEL J, Jason Thomas\*, and Le Bao\*. 2012. "Estimates of Age-Specific Reductions in HIV Prevalence in Uganda: Bayesian Melding Estimation and Probabilistic Population Forecast with an HIV-enabled Cohort Component Projection Model." *Demographic Research* 27 (26): 743–774.
- Kahn<sup>†</sup>, Kathleen, Mark A Collinson, F Xavier Gómez-Olivé, Obed Mokoena, Rhian Twine, Paul Mee, Sulaimon A Afolabi, Benjamin D Clark, Chodziwadziwa W Kabudula, Audrey Khosa, Simon Khoza, Mildred Shabangu, Bernard Silaule, Jeffrey B Tibane, Ryan G Wagner, Michel L Garenne, SAMUEL J CLARK, and Stephen M Tollman. 2012. "Profile: Agincourt Health and Socio-Demographic Surveillance System." *International Journal of Epidemiology* 41 (4): 988–1001.
- Madhavan<sup>†</sup>, Sangeetha, Enid Shatz, SAMUEL J CLARK, and Mark A. Collinson. 2012. "Child Mobility, Maternal Status and Household Composition in Rural South Africa." *Demography* 49 (2): 699–718.
- Alkema\*, Leontine, Adrian E. Raftery†, Patrick Gerland, SAMUEL J CLARK, Francois Pelletier, and Thomas Buettner. 2011. "Probabilistic Projections of the Total Fertility Rate for All Countries." *Demography* 48 (3): 815–839. PMCID: PMC3367999.
- Thomas\*, Jason, and SAMUEL J CLARK<sup>†</sup>. 2011. "More on the Cohort-Component Model of Population Projection in the Context of HIV/AIDS: A Leslie Matrix Representation and New Estimation Methods." *Demographic Research* 25 (2): 39–102.
- Williams<sup>†</sup>, Jill R., Enid J. Schatz, Benjamin D Clark, Mark A. Collinson, SAMUEL J CLARK, Jane Menken, Kathleen Kahn, and Stephen M. Tollman. 2010. "Improving Public Health Training and Research Capacity in Africa: A Replicable Model for Linking Training to Health and Socio-Demographic Surveillance Data." Global Health Action 3 (5287). doi:10.3402/gha.v3i0.5287.
- Cassels<sup>†</sup>, Susan, SAMUEL J CLARK, and Martina Morris. 2008. "Mathematical Models for HIV Transmission Dynamics: Tools for Social and Behavioral Science Research." *Journal of Acquired Immune Deficiency Syndromes (JAIDS)* 47 (Supplement 1): S34–S39.
- Tollman<sup>†</sup>, Stephen Meir, Kathleen Kahn, Benn K. Sartorius, Mark A. Collinson, SAMUEL J CLARK, and Michel L. Garenne. 2008. "Implications of Mortality Transition for Primary Health Care in Rural South Africa: A Population-based Surveillance Study." *Lancet* 372:893–901.

- Alkema\*, Leontine, Adrian E. Raftery<sup>†</sup>, and SAMUEL J CLARK. 2007. "Probabilistic Projections of HIV Prevalence Using Bayesian Melding." *The Annals of Applied Statistics* 1 (1): 229–248.
- CLARK<sup>†</sup>, SAMUEL J. 2007. "An Introduction to the General Temporal Data Model and the Structured Population Event History Register." Scandanavian Journal of Public Health 35 (Suppl 69): 21–25.
- CLARK<sup>†</sup>, SAMUEL J, Mark Collinson, Kathleen Kahn, Stephen Tollman, and Kyle Drullinger\*. 2007. "Returning Home to Die: Circular Labour Migration and Mortality in South Africa." Scandanavian Journal of Public Health 35 (Suppl 69): 35–44.
- Kahn<sup>†</sup>, Kathleen, Stephen Tollman, Mark A. Collinson, SAMUEL J CLARK, Rhian Twine, Benjamin D Clark, Mildred Shabangu, Frances Xavier Gómez-Olivé, Obed Mokoena, and Michel Garenne. 2007. "Research into Health, Population, and Social Transitions in Rural South Africa: Data and Methods of the Agincourt Health and Demographic Surveillance System." Scandinavian Journal of Public Health 35 (Suppl 69): 8–20.
- Adjuik, Martin, Tom Smith, SAM CLARK, Jim Todd, Anu Garrib, Yohannes Kinfu, Kathy Kahn, Mitiki Mola, Ali Ashraf, Honorati Masanja, Ubaje Adazu, Jahit Sacarlal, Nurul Alam, Adama Marra, Adjima Gbangou, Eleuther Mwageni, and Fred Binka<sup>†</sup>. 2006. "Cause-Specific Mortality Rates in Sub-Saharan Africa and Bangladesh." Bulletin of the World Health Organization 84 (3): 181–188. PMCID: PMC2627285.
- CLARK<sup>†</sup>, SAMUEL J. 2006. "A General Temporal Data Model and the Structured Population Event History Register." *Demographic Research* 15 (7): 181–252.
- Benzler<sup>†</sup>, Justus, and SAMUEL J CLARK<sup>†</sup>. 2005. "Toward a Unified Timestamp with Explicit Precision." *Demographic Research* 12 (6): 107–140.
- Hargreaves<sup>†</sup>, James R., Mark A. Collinson, Kathleen Kahn, SAMUEL J CLARK, and Stephen M. Tollman. 2004. "Childhood Mortality among Former Mozambican Refugees and Their Hosts in Rural South Africa." *International Journal of Epidemiology* 33:1271–1278.
- CLARK\*, SAMUEL J, Elizabeth Colson, James Lee<sup>†</sup>, and Thayer Scudder. 1995. "Ten Thousand Tonga: A Longitudinal Anthropological Study from Southern Zambia: 1956–1991." *Population Studies* 49 (1): 91–109.

#### In Submission/Review Process

Houle<sup>†</sup>, Brian, Chodziwadziwa Kabudula, Alan Stein, Dickman Gareta, Kobus Herbst, and SAMUEL J CLARK. 2020 (submitted). "Linking the timing of a mother's and child's death: Comparative evidence from two rural South African population-based surveillance studies, 2000 – 2015."

#### **Drafts**

Manuscripts at an advanced stage with a complete draft that are nearly ready to submit.

- Li, Zehang Richard, Jason Thomas, Tyler H MccCormick, and SAMUEL<sup>†</sup> CLARK. 2020. "The openVA toolkit for Verbal Autopsies." *Journal of Statistical Software.*
- Pantazis\*, Athena, and SAMUEL J CLARK<sup>†</sup>. 2020. "Age-Specifc Fertility and Fertility Change: The Association between Determinants of Fertility Decline and Age-specic Fertility Curves."
- CLARK<sup>†</sup>, SAMUEL J, Martin Bratschi, Philip Setel, Carla Abouzahr, Don de Savigny, Zehang R Li, Tyler H McCormick, Peter Byass, and Daniel Chandramohan. 2019. "Verbal Autopsy in Civil Registration and Vital Statistics: The Symptom-Cause Information Archive." arxiv.org/abs/1910.00405v2. https://arxiv.org/abs/1910.00405v2.
- CLARK<sup>†</sup>, SAMUEL J. 2018. "A Guide to Comparing the Performance of VA Algorithms." arXiv Preprint, no. arXiv:1802.07807. https://arxiv.org/abs/1802.07807.
- CLARK<sup>†</sup>, SAMUEL J, Zehang R Li, and Tyler H McCormick. 2018. "Quantifying the Contributions of Training Data and Algorithm Logic to the Performance of Automated Cause-Assignment Algorithms for Verbal Autopsy." arXiv Preprint, no. arXiv:1803.07141v2. https://arxiv.org/abs/1803.07141.

#### In Preparation

- Fully formed ideas in the process of preparation.
- CLARK, SAMUEL<sup>†</sup>. 2020. "In Preparation Grouped Model Life Tables for Developed Countries Based on the HMD."
- Godwin\*, Jessica, Zehang Richard Li, SAMUEL J CLARK, Jon Wakefield<sup>†</sup>, et al. 2020. "In Preparation Small-area Admin-2 Level U5MR Estimates for Africa using DHS Survey Data."
- Surek-Clark, Clarissa, and SAMUEL J CLARK<sup>†</sup>. 2020. "In Preparation Analysis of 'Real-World' Design and Conduct of Verbal Autopsy Interviews at Four Rural Fieldsites in East and Southern Africa."
- Surek-Clark, Clarissa, and SAMUEL J CLARK<sup>†</sup>. 2020. "In Preparation Review of Physicians' Narratives Concerning Verbal Autopsy."

#### Comments/Notes

- Sankoh, Osman, Peter Byass, INDEPTH Network, et al. 2017. "New INDEPTH strategy for the SDGs using robust population data." *The Lancet Global Health* 5 (7): e647–e648. doi:10.1016/S2214-109X(17)30206-1.
- Sankoh<sup>†</sup>, Osman, Peter Byass, SAMUEL J CLARK, Philippe Bocquier, Alan Lopez, Don de Savigny, Anastasia Gage, Anna Mia Ekstrom, Barbara McPake, Carla Abouzahr, Cheryl Moyer, Harry Campbell, Jocalyn Clark, and Halima Mwenesi. 2017. "Why Population-based Data are Crucial to Achieving the Sustainable Development Goals." *International Journal of Epidemiology:* 4–7. doi:10.1093/ije/dyx010.

- Helleringer<sup>†</sup>, Stephane, Andrew Noymer, SAMUEL J CLARK, and Tyler H. McCormick. 2015. "Did Ebola Relatively 'Spare' Children?" *Lancet* 386 (10002): 1442–1443. doi:10.1016/S0140-6736(15)00415-8.
- Sankoh<sup>†</sup>, Osman, and ... about 80 coauthors. 2015. "CHESS: An Innovative Concept for a New Generation of Population Surveillance." *Lancet Global Health* Correspondance, *Lancet Global Health* 3. doi:10.1016/S2214-109X(15)00180-1.

#### **Book Chapters**

- Surek-Clark, Clarissa. 2020 (in press). "Verbal Autopsy Interview Standardization Study Report from the Field." In *The Anthropological Demography of Health*, edited by Philip Kreager. Oxford University Press.
- Heuveline, Patrick, and SAMUEL J CLARK. 2011. "Model Schedules of Mortality." Chap. 24 in *International Handbook of Adult Mortality*, edited by Richard Rogers and Eileen Crimmins, 511–531. International Handbooks of Population. Heidelberg: Springer.
- Collinson, Mark, Annette A.M. Gerritsen, SAMUEL J CLARK, Kathleen Kahn, and Stephen Tollman. 2009. "Migration and Socio-Economic Change in Rural South Africa, 2000-2007." Chap. 6 in *The Dynamics of Migration, Health and Livelihoods: INDEPTH Network Perspectives*, edited by Mark Collinson, Kubaje Adazu, Michael White, and Sally Findley, 81–108. Farnham: Ashgate.
- CLARK, SAMUEL J. 2006. "Demographic Impacts of the HIV Epidemic and Consequences of Population-wide Treatment of HIV for the Elderly: Results from Microsimulation." Chap. 3 in *Aging in Sub-Sahara Africa: Recommendations for Furthering Research*, edited by Barney Cohen and Jane Menken, 92–117. Washington, DC: The National Academy Press.
- Collinson, Mark A., Stephen M. Tollman, Kathleen Kahn, SAMUEL J CLARK, and Michel Garenne. 2006. "Highly Prevalent Circular Migration: Households, Mobility and Economic Status in Rural South Africa." Chap. 8 in *African Migration in Comparative Perspective*, edited by Marta Tienda, Stephen M. Tollman, Eleanor Preston-Whyte, and S.E. Findlay, 194–216. Johannesburg: University of the Witwatersrand Press.
- Sankoh, Osman A., Pierre Ngom, SAMUEL J CLARK, Don de Savigny, and Fred Binka. 2006. "Levels and Patterns of Mortality at INDEPTH Demographic Surveillance Sites." Chap. 7 in *Disease and Mortality in Sub-Saharan Africa, 2nd Edition*, edited by R. Feachem, D. Jamison, W.M. Makgoba, K. Rogo, K. Hofman, and E. Bos, 75–86. Oxford: Oxford University Press, for the World Bank.
- Kahn, Kathleen, Mark A. Collinson, James Hargreaves, SAMUEL J CLARK, and Stephen M. Tollman. 2005. "Socio-economic Status and Child Mortality in a Rural sub-District of South Africa." Chap. 5 in *Measuring Health Equity in Small Areas: Findings from Demographic Surveillance Systems*, edited by INDEPTH Network, 67–85. Aldershot: Ashgate Publishing Ltd.

- Gwembe Tonga Research Project [Prepared by SAMUEL J. CLARK]. 2002. "Gwembe Demographic Surveillance System, Zambia." Chap. 14 in *Population, Health, and Survival at INDEPTH Sites*, 1:183–188. INDEPTH Network Monograph Series: Demographic Surveillance Systems for Assessing Populations and their Health in Developing Countries. Ottawa: IDRC Press.
- INDEPTH Network [Prepared by SAMUEL J. CLARK and Pierre Ngom]. 2002. "Comparing Mortality Patterns in INDEPTH Sites." Chap. 6 in *Population, Health, and Survival at INDEPTH Sites*, edited by INDEPTH Network, 1:51–82. Population and Health in Developing Countries. Ottawa: IDRC Press.
- INDEPTH Network [Prepared by SAMUEL J. CLARK]. 2002. "INDEPTH Mortality Patterns for Africa." Chap. 7 in *Population, Health, and Survival at INDEPTH Sites*, edited by INDEPTH Network, 1:83–128. Population and Health in Developing Countries. Ottawa: IDRC Press.

#### **Working Papers**

The blue text contains links to download a PDF of the working paper.

- CLARK<sup>†</sup>, SAMUEL J, Martin Bratschi, Philip Setel, Carla Abouzahr, Don de Savigny, Zehang R Li, Tyler H McCormick, Peter Byass, and Daniel Chandramohan. 2019. "Verbal Autopsy in Civil Registration and Vital Statistics: The Symptom-Cause Information Archive." arxiv.org/abs/1910.00405v2. https://arxiv.org/abs/1910.00405v2.
- Li\*, Zehang (Richard), Tyler H McCormick, and SAMUEL J CLARK<sup>†</sup>. 2019. "Bayesian Joint Spike-and-Slab Graphical Lasso." arXiv Preprint, no. arXiv:1805.07051. https://arxiv.org/abs/1805.07051.
- CLARK<sup>†</sup>, SAMUEL J. 2018. "A Guide to Comparing the Performance of VA Algorithms." arXiv Preprint, no. arXiv:1802.07807. https://arxiv.org/abs/1802.07807.
- CLARK<sup>†</sup>, SAMUEL J, Zehang R Li, and Tyler H McCormick. 2018. "Quantifying the Contributions of Training Data and Algorithm Logic to the Performance of Automated Cause-Assignment Algorithms for Verbal Autopsy." arXiv Preprint, no. arXiv:1803.07141v2. https://arxiv.org/abs/1803.07141.
- Kunihama, Tsuyoshi, Zehang R Li, SAMUEL J CLARK<sup>†</sup>, and Tyler H McCormick. 2018. "Bayesian factor models for probabilistic cause of death assessment with verbal autopsies."  $arXiv\ Preprint$ , no. arXiv:1803.01327. https://arxiv.org/abs/1803.01327.
- Li\*, Zehang (Richard), Tyler H McCormick, Tsuyoshi Kunihama, and SAMUEL J CLARK<sup>†</sup>. 2018. "Using Bayesian Latent Gaussian Graphical Models to Infer Symptom Associations in Verbal Autopsies." arXiv Preprint, no. arXiv:1711.00877. https://arxiv.org/abs/1711.00877.
- Wakefield, Jon, Geir-Arne Fuglstad, Andrea Riebler, Jessica Godwin, Katie Wilson, and SAMUEL J CLARK. 2018. "Estimating Under-Five Mortality in Space and Time in a

- Developing World Context." arXiv Preprint, no. arXiv:1711.00800. https://arxiv.org/abs/1711.00800.
- CLARK<sup>†</sup>, SAMUEL J. 2016. "A General Age-Specific Mortality Model with An Example Indexed by Child or Child/Adult Mortality." *arXiv Preprint*, no. arXiv:1612.01408v1. https://arxiv.org/abs/1612.01408.
- Sharrow, David J, Jessica Godwin, Yanjun He, SAMUEL J CLARK, and Adrian E Raftery<sup>†</sup>. 2016. "Probabilistic Population Projections for Countries with Generalized HIV/AIDS Epidemics." arXiv Preprint, no. arXiv:1609.04383. https://arxiv.org/abs/1609.04383.
- CLARK, SAMUEL J. 2015. "A Singular Value Decomposition-based Factorization and Parsimonious Component Model of Demographic Quantities Correlated by Age: Predicting Complete Demographic Age Schedules with Few Parameters." arXiv Preprint, no. arXiv:1504.02057v1. https://arxiv.org/abs/1504.02057.
- McCormick, Tyler H., Zehang Richard Li, Clara Calvert, Amelia C. Crampin, Kathleen Kahn, and SAMUEL J CLARK<sup>†</sup>. 2015. "Probabilistic Cause-of-Death Assignment using Verbal Autopsies." arXiv Preprint, no. arXiv:1411.3042. https://arxiv.org/abs/1411.3042.
- CLARK, SAMUEL J. 2014. "A Singular Value Decomposition-based Factorization and Parsimonious Component Model of Demographic Quantities Correlated by Age: Predicting Complete Demographic Age Schedules with Few Parameters." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 143. http://www.csss.washington.edu/Papers/wp143.pdf.
- Li, Zehang, Tyler McCormick, and SAMUEL J CLARK. 2014. "InterVA4: An R Package to Analyze Verbal Autopsy Data." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 146. http://www.csss.washington.edu/Papers/wp146.pdf.
- McCormick, Tyler, Zehang Li, Clara Calvert, Amelia Crampin, Kathleen Kahn, and SAMUEL J CLARK. 2014. "Probabilistic Cause-of-death Assignment using Verbal Autopsies." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 147. http://www.csss.washington.edu/Papers/wp147.pdf.
- Mercer, Laina, Jon Wakefield, Athena Pantazis, Angelina Lutambi, Honorati Masanja, and SAMUEL J CLARK. 2014. "Small Area Estimation of Child Mortality in the Absence of Vital Registration." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 148. http://www.csss.washington.edu/Papers/wp148.pdf.
- CLARK, SAMUEL J, Tyler McCormick, Zehang Li, and Jon Wakefield. 2013. "InSilicoVA: A Method to Automate Cause of Death Assignment for Verbal Autopsy." *Center for Statistics and the Social Sciences (CSSS) Working Paper Series*, no. 133. http://www.csss.washington.edu/Papers/wp133.pdf.
- Wheldon, Mark, Adrian Raftery, SAMUEL J CLARK, and Patrick Gerland. 2013. "Bayesian Reconstruction of Two-Sex Populations by Age: Estimating Sex Ratios at Birth and Sex

- Ratios of Mortality." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 138. http://www.csss.washington.edu/Papers/wp138.pdf.
- CLARK, SAMUEL J, and Brian Houle. 2012. "An Application of the Biprobit Heckman Selection Model to Correct Estimates of HIV Prevalence from Sample Surveys." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 119: 32. http://www.csss.washington.edu/Papers/wp119.pdf.
- CLARK, SAMUEL J, and Brian Houle. 2012. "Evaluation of Heckman Selection Model Method for Corecting Estimates of HIV Prevalence from Sample Surveys." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 120: 18. http://www.csss.washington.edu/Papers/wp120.pdf.
- CLARK, SAMUEL J, Jon Wakefield, Tyler McCormick, and Michelle Ross. 2012. "HYAK Mortlity Monitoring System: Innovative Sampling and Estimation Methods." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 118: 23. http://www.csss.washington.edu/Papers/wp118.pdf.
- McParland, Damien, Isobel Gormley, SAMUEL J CLARK, Tyler McCormick, Chodziwadziwa Kabudula, and Mark Collinson. 2012. "Clustering South African Households Based on their Asset Status Using Latent Variable Models." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 121: 28. http://www.csss.washington.edu/Papers/wp121.pdf.
- Wheldon, Mark C., Adrian E. Raftery, and SAMUEL J CLARK. 2012. "Bayesian Reconstruction of Past Populations and Vital Rates by Age for Developing and Developed Countries." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 117. http://www.csss.washington.edu/Papers/wp117.pdf.
- CLARK, SAMUEL J, and David J. Sharrow. 2011. "Contemporary Model Life Tables for Developed Countries: An Application of Model-based Clustering." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 107: 38. http://www.csss.washington.edu/Papers/wp107.pdf.
- Wheldon, Mark C., Adrian Raftery, SAMUEL J CLARK, and Patrick Gerland. 2011. "Estimating Demographic Parameters with Uncertainty from Fragmentary Data." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 108: 39. http://www.csss.washington.edu/Papers/wp108.pdf.
- Alkema, Leontine, Adrian E. Raftery, Patrick Gerland, SAMUEL J CLARK, Francois Pelletier, and Thomas Buettner. 2010. "Probabilistic Projections of the Total Fertility Rate for All Countries." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 97: 62. http://www.csss.washington.edu/Papers/wp97.pdf.
- CLARK, SAMUEL J, Jason Thomas, and Le Bao. 2010. "Estimates of Age-Specific Reductions in HIV Prevalence in Uganda: Bayesian Melding Estimation and Probabilistic Population Forecast with an HIV-enabled Cohort Component Projection Model"." Cen-

- ter for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 106: 49. http://www.csss.washington.edu/Papers/wp106.pdf.
- Sharrow, David, SAMUEL J CLARK, Mark A. Collinson, Kathleen Kahn, and Stephen M. Tollman. 2010. "The Age-Pattern of Increases in Mortality Affected by HIV: Bayesian Fit of the Heligman-Pollard Model to Data from the Agincourt Health and Demographic Surveillance System Field Site in Rural Northeast South Africa." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 102: 54. http://www.csss.washington.edu/Papers/wp102.pdf.
- Collinson, Mark A., SAMUEL J CLARK, Annette A.M. Gerritsen, Peter Byass, Kathleen Kahn, and Stephen M. Tollman. 2009. "The Dynamics of Poverty and Migration in a Rural South African Community, 2001-2005." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 92: 38. http://www.csss.washington.edu/Papers/wp92.pdf.
- Alkema, Leontine, Adrian E. Raftery, Patrick Gerland, SAMUEL J CLARK, and Francois Pelletier. 2008. "Estimating the Total Fertility Rate from Multiple Imperfect Data Sources and Assessing its Uncertainty." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 89: 21. http://www.csss.washington.edu/Papers/wp89.pdf.
- CLARK, SAMUEL J, Jeff Eaton, Michelle M. Elmquist, Natalie R. Ottenweiller, and Jenna K. Snavely. 2008. "Demographic Consequences of HIV Epidemics and Effects of Different Male Circumcision Intervention Designs: Suggestive Findings from Microsimulation." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 85: 49. http://www.csss.washington.edu/Papers/wp85.pdf.
- Thomas, Jason, and SAMUEL J CLARK. 2008. "More on the Cohort-Component Model of Population Projection in the Context of HIV/AIDS: A Leslie Matrix Representation and New Estimation Methods." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 88: 38. http://www.csss.washington.edu/Papers/wp88.pdf.
- Alkema, Leontine, Adrian E. Raftery, and SAMUEL J CLARK. 2007. "Probabilistic Projections of HIV Prevalence using Bayesian Melding." Center for Statistics and the Social Sciences (CSSS) Working Paper Series, no. 69: 19. http://www.csss.washington.edu/Papers/wp69.pdf.

### Software

The blue text contains links to publicly available software resulting from my projects. The year corresponds to the most recent update – they are all maintained regularly.

- CLARK, SAM, Zehang Li, Jason Thomas, Choi Eungang, Tyler McCormick, Peter Byass, and Nicolas Maire. 2019. openVA Github Site. http://openva.net.
- CLARK, SAMUEL J. 2019. Download and Parse USA Mortality Data from usa.mortality.org. https://github.com/sinafala/usa-mortality.

- CLARK, SAMUEL J. 2019. Model Verbal Autopsy (VA) Algorithms. https://github.com/sinafala/model-va-algorithms.
- CLARK, SAMUEL J. 2019. Replication Code for "SVD-Component Mortality Model using Child or Child/Adult Mortality as Inputs". https://github.com/sinafala/svd-comp.
- Eungang, Choi, SAM CLARK, Zehang Li, Nicolas Maire, and Jason Thomas. 2019. Cross VA: Verbal Autopsy Data Transform for Use with Various Coding Algorithms. https://cran.r-project.org/package=CrossVA.
- Li, Zehang, Tyler McCormick, and SAM CLARK. 2019. InSilico VA: Probabilistic Verbal Autopsy Coding with 'InSilico VA' Algorithm. https://cran.r-project.org/package=InSilicoVA.
- Li, Zehang, Tyler McCormick, and SAM CLARK. 2019. InterVA4: Replicate and Analyse 'InterVA4' InterVA4: Replicate and Analyse 'InterVA4'. https://cran.r-project.org/package=InterVA4.
- Li, Zehang, Tyler McCormick, and SAM CLARK. 2019. openVA: Automated Method for Verbal Autopsy. https://cran.r-project.org/package=openVA.
- Li, Zehang, Tyler McCormick, and SAM CLARK. 2019. Tariff: Replicate Tariff Method for Verbal Autopsy. https://cran.r-project.org/package=Tariff.
- Martin, Bryan D, Zehang R Li, Yuan Hsiao, Jessica Godwin, Jon Wakefield, and SAMUEL J CLARK. 2019. SUMMER: Spatio-Temporal Under-Five Mortality Methods for Estimation. https://cran.r-project.org/package=SUMMER.
- Thomas, Jason, Choi Eungang, Martin Bratschi, and SAM CLARK. 2019. openVA Pipeline between ODK and DHIS-2. https://github.com/verbal-autopsy-software/openva\_pipeline.
- Thomas, Jason, Zehang Li, Tyler McCormick, and SAM CLARK. 2019. R Shiny App for using open VA. https://github.com/verbal-autopsy-software/shinyVA.
- Thomas, Jason, Zehang Li, Tyler McCormick, SAM CLARK, and Peter Byass. 2019. *InterVA5:*Replicate and Analyse 'InterVA5'. https://cran.r-project.org/package=InterVA5.

#### Recent Invited Contributions

- CLARK, SAMUEL J. 2019. Participant, WHO Verbal Autopsy Reference Group Advisory Meeting. Sponsored by WHO. Geneva: March 2019.
- CLARK, SAMUEL J. 2019. Continuous Advisor on Variety of Topics, WHO Verbal Autopsy Reference Group. Geneva: Ongoing throughout 2019.
- CLARK, SAMUEL J. 2019. A General Mortality Model & Moving Verbal Autopsy from Research to Routine Use. Presentation by CLARK, SAMUEL J at the ANU School of Demography Seminar. Canberra: July 2019.

- CLARK, SAMUEL J. 2019. A General Mortality Model & Moving Verbal Autopsy from Research to Routine Use. Presentation by CLARK, SAMUEL J at the Department of Demography Colloquium, UC Berkeley. Berkeley: September 2019.
- CLARK, SAMUEL J, and Tyler H MccCormick. 2019. Session 2019 'Statistical Advances in High Resolution Modeling for Health and Mortality Outcomes'. CLARK, SAMUEL J Co-organizer and Chair at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). Austin: April 10-13.
- CLARK, SAMUEL J. 2018. Member/Participant, WHO Verbal Autopsy Working Group Meeting. Sponsored by WHO. Washington, D.C.: September 2018.
- CLARK, SAMUEL J. 2018. Presenter, IPR Colloquium. Institute for Population Research (IPR), The Ohio State University, Columbus, Ohio, USA: January 2018.
- CLARK, SAMUEL J. 2017. Participant, WHO Maternal and Child Epidemiology Estimation Meeting. Sponsored by WHO. WHO Headquarters, Geneva, Switzerland: November 2017.
- CLARK, SAMUEL J. 2017. Participant, INDEPTH Founders' Meeting. Accra, Ghana: December 2017.
- CLARK, SAMUEL J. 2017. Presenter, Swiss TPH Colloquium. Sponsored by Swiss TPH. Swiss Tropical and Public Health Institute (Swiss TPH), Basel, Switzerland: June 2017.
- CLARK, SAMUEL J. 2017. Member/Participant, WHO Verbal Autopsy Working Group Meeting. Sponsored by WHO. WHO Headquarters, Geneva, Switzerland: September 2017.
- CLARK, SAMUEL J. 2017. Participant, Swiss TPH Verbal Autopsy and Sampling Meeting. Sponsored by Swiss TPH and D4H. Swiss Tropical and Public Health Institute (Swiss TPH), Basel, Switzerland: August 2017.
- CLARK, SAMUEL J. 2017. Member/Participant, WHO Verbal Autopsy Working Group Meeting. Sponsored by WHO. WHO Regional Office, Accra, Ghana: December 2017.
- CLARK, SAMUEL J. 2017. Participant/Presenter, Human Mortality Database Symposium. Sponsored by the Human Mortality Database (HMD) Project. Berlin, Germany: May 2017.
- CLARK, SAMUEL J. 2017. Scientific Advisory Committee Member, ALPHA Network Scienctific Advisory Committee Meeting. Sponsored by ALPHA Network. Nairobi, Kenya: March 2017.
- CLARK, SAMUEL J. 2017. Participant in Gulf Research Program Opportunity Analysis Meeting *Tracking Coastal Community Resilience to Environmental Disasters* sponsored by the National Academies of Sciences (NAS). NAS, Washington, D.C.: February 2017.
- CLARK, SAMUEL J. 2017. Member/Participant, WHO Reference Group on Health Statistics. Sponsored by WHO. WHO Headquarters, Geneva, Switzerland: March 2017.

- CLARK, SAMUEL J. 2017. Small Area Estimates of Child Mortality. Participant/Presenter at UN Inter-agency Group for Child Mortality Estimation Technical Advisory Group Meeting. Sponsored by UNICEF. UNICEF Headquarters, New York, USA: May 2017 and December 2017.
- CLARK, SAMUEL J. 2016. Member/Participant, WHO Verbal Autopsy Working Group Meeting. Sponsored by WHO. WHO Headquarters, Geneva, Switzerland: March 2016.
- CLARK, SAMUEL J. 2016. Member/Participant, WHO Civil Registration and Vital Statistics Wroking Group Meeting. Sponsored by WHO. WHO Headquarters, Geneva, Switzerland: March 2016.
- CLARK, SAMUEL J. 2016. Member/Participant, WHO Verbal Autopsy Working Group Meeting. Sponsored by WHO. WHO Headquarters, Geneva, Switzerland: July 2016.
- CLARK, SAMUEL J. 2016. Panelist at UN Statistics (UNSD) Meeting Global Preparatory Seminar for the United Nations Data Forum. Sponsored by UNSD. Guilin, China: September 2016.
- CLARK, SAMUEL J. 2016. Small Area Estimation of Child Mortality from DHS Surveys: Discrete- and Continuous-Space Approaches. Participant/Presenter at UN Inter-agency Group for Child Mortality Estimation Technical Advisory Group Meeting. Sponsored by UNICEF. UNICEF Headquarters, New York, USA: October 2016.
- CLARK, SAMUEL J. 2015. Panelist, Official Statistics Track at *The Cartagena Data Festival: Better Data for a Better Tomorrow*. Sponsored by multiple sponsors including: UNDP, UNFPA, International Union for the Scientific Study of Population (IUSSP), ODI, Paris21, Data Pop, Cepel and Africa Gathering. Cartagena, Colombia: April 2015.
- CLARK, SAMUEL J. 2015. Panelist, 'Data Analysis & Use', at *UNICEF Data For Children Forum*. Sponsored by UNICEF. UN Headquarters, New York: September 11, 2015.
- CLARK, SAMUEL J. 2015. IUSSP Roundtable at *The Cartagena Data Festival: Better Data for a Better Tomorrow*. Sponsored by multiple sponsors including: UNDP, UNFPA, International Union for the Scientific Study of Population (IUSSP), ODI, Paris21, Data Pop, Cepel and Africa Gathering. Cartagena, Colombia: April 2015.
- CLARK, SAMUEL J. 2015. Panelist and Presenter, Session 4 'Demographic Evidence from Civil Registration Systems, Health Information Systems and Other Administrative Data Sources, Including Insights Provided by Health and Demographic Surveillance Sites' at Expert Group Meeting on 'Strengthening the Demographic Evidence Base for the Post-2015 Development Agenda'. Sponsored by the Population Division of the Department of Economic and Social Affairs of the United Nations. UN Headquarters, New York: October 5-6, 2015.
- CLARK, SAMUEL J. 2015. Simple, Parameterized Model of Age Patterns: Ideas for Incorporating HIV Prevalence and ART Coverage into Models of Age-Specic Mortality. Presentation by CLARK, SAMUEL J at UNAIDS Reference Group Meeting. Sponsored by UNAIDS. Boston: June 2015.

- CLARK, SAMUEL J. 2014. Participant at *IUSSP Expert Meeting on Demography and the Post-2015 Data Revolution*. Sponsored by International Union for the Scientific Study of Population (IUSSP). Paris: 2014.
- CLARK, SAMUEL J. 2014. Introduction to Discussion on Recent Death Methods. Conference Presentation by CLARK, SAMUEL J at WHO Technical Meeting: Improving Mortality Statistics as part of Strengthening Civil Registration and Vital Statistics Systems. Sponsored by WHO. Geneva: 2014.
- CLARK, SAMUEL J. 2014. Potential Ideas for Age-specific Model: HIV Cohort Component Model: Add ART? Conference Presentation by CLARK, SAMUEL J at Meeting of the UNAIDS Reference Group on Modeling, Estimates and Projections. Sponsored by UNAIDS. Seattle: 2014.
- CLARK, SAMUEL J, Tyler McCormick, and Zehang Li. 2014. InSilico VA: An Evolution of Inter VA. Conference Presentation by CLARK, SAMUEL J at WHO Technical Meeting: Verbal Autopsy. Sponsored by WHO. Geneva: April, 2014.
- CLARK, SAMUEL J, Tyler McCormick, and Zehang Li. 2014. Verbal Autopsy: Observations on Comparability & Cause Assignment Methods. Conference Presentation by CLARK, SAMUEL J at WHO Technical Meeting: Verbal Autopsy. Sponsored by WHO. Geneva: 2014.
- CLARK, SAMUEL J, Tyler McCormick, Jon Wakefield, and Michelle Ross. 2014. HYAK Mortality Monitoring System. Conference Presentation by CLARK, SAMUEL J at WHO Technical Meeting: Improving Mortality Statistics as part of Strengthening Civil Registration and Vital Statistics Systems. Sponsored by WHO. Geneva: 2014.

## Selected Workshops & Conferences Organized

- Legrand, Tom, Romesh Silva, Dennis Feehan, and SAMUEL J CLARK. 2019. Expert Group Meeting on Population Data for the 21st century: Advances in data collection methodologies. Three-Day Expert Group Meeting organized by Legrand, Tom; Silva, Romesh; Feehan, Dennis and CLARK, SAMUEL J. Sponsored by the International Union for the Scientific Study of Population (IUSSP), UNFPA, IDRC, and the Hewlett Foundation. New York: December 4–6, 2019.
- CLARK, SAMUEL J. 2018. Mortality Monitoring in the Era of the SDGs. Three-day training workshop organized by CLARK, SAMUEL J. Sponsored by the International Union for the Scientific Study of Population (IUSSP). Rostock: December 2018.
- CLARK, SAMUEL J, Choi Eungang, Jason Thomas, and Zehang Li. 2018. openVA Training Workshop. One-week training workshop organized by CLARK, SAMUEL J. Sponsored by Vital Strategies and Bloomberg Data 4 Health. Columbus: November 2018.
- CLARK, SAMUEL J, Choi Eungang, Jason Thomas, and Alex Vue. 2018. openVA Pipeline Training Workshop. One-week training workshop organized by CLARK, SAMUEL J. Sponsored by Vital Strategies and Bloomberg Data 4 Health. Singapore: May 2018.

- Li, Zehang, Jon Wakefield, and SAMUEL J CLARK. 2018. Bayesian Small Area Estimation using Complex Survey Data: Methods and Applications. Two-day training workshop organized by CLARK, SAMUEL J at the Meeting of the Asian Population Association. Sponsored by the International Union for the Scientific Study of Population (IUSSP). Shanghai: July 2018.
- Li, Zehang, Jon Wakefield, and SAMUEL J CLARK. 2018. Bayesian Small Area Estimation using Complex Survey Data: Methods and Applications. Two-day training workshop organized by CLARK, SAMUEL J at The Annual Meetings of the Population Association of America. Sponsored by the International Union for the Scientific Study of Population (IUSSP). Denver: April 2018.

## Selected Professional Activities/Service

2019:	Multiple external review for tenure processes
2019:	Organized the production of online (click) training materials for small-area estimation of demographic indicators using complex survey data for International Union for the Scientific Study of Population (IUSSP)
2019:	International Union for the Scientific Study of Population (IUSSP) Annual Council Meeting
2018:	International Union for the Scientific Study of Population (IUSSP) Annual Council Meeting
2018 – 2021:	Elected member of the International Union for the Scientific Study of Population (IUSSP) Council
2015:	External review for tenure processes
2014 – :	Participate in UNAIDS Reference Group on Estimates, Modeling and Projections
2014 – :	Participate in WHO Working Group on Civil Registration and Vital Statistics
2014 - :	Participate in WHO Working Group on Verbal Autopsy
2014:	Serve on the European Union's European Food Safety Authority (EFSA) Board of Experts to advise on population modeling for use in studies to understand the risk of zoonotic transmission of animal pathogens to human populations
2013:	Co-organized four sessions for the annual meeting of the Population Association of America in Boston, 2014
2012 - 2013:	Participation on NIH review panels
2012:	Organized two sessions for the annual meeting of the Population Association of America in New Orleans, $2013$
2012:	External review for tenure process and article reviews for various journals

Participation on two NIH review panels
Participation on a NSF review panel
Scientific Advisory Committee for the INDEPTH Network
Deputy Editor (one of twelve) of the journal Demography
Senior advisor/co-applicant on current round of core funding for Agincourt Health and Demographic Surveillance System site run by the School of Public Health, University of the Witwatersrand, South Africa
Member of Editorial Board for INDEPTH Network Mortality Project
Advisory Group for planned INDEPTH Network Data System initiative
Scientific Advisory Committee for the South African Centre for Epidemiological Modeling and Analysis (SACEMA)
Scientific Advisory Committee for the ALPHA Network of epidemiological field sites in Africa, coordinated at the London School of Hygiene and Tropical Medicine
Participant and sometimes co-Coordinator of Technical Working Group of the INDEPTH Network
Participation on NIH review panels
Reviewed grant applications for Swedish National Science Foundation
Invited participation in Wellcome Trust 'Data Sharing' policy planning workshop
Invited presentation in colloquium series of the Graduate Group in Demography at the University of Pennsylvania
Invited presentation to a Wellcome Trust-organized panel discussing 'North-South Networking' in the context of population and health research
Served on Demography Masters Examination Committee, Commerce Department, University of Cape Town, South Africa
Served on Field Epidemiology Masters Examination Committee, School of Public Health, University of the Witwatersrand, South Africa
Executive Committee of the South African Centre for Epidemiological Modeling and Analysis (SACEMA)

## Honors, Awards & Small Grants

Co-recipient of INDEPTH Network '2013 INDEPTH Prize for Extraordinary Research in Population and Health at INDEPTH Sites', awarded at 2013 INDEPTH International Scientific Conference in Johannesburg, South Africa for article published in PLoS Medicine on Agincourt Health and Demographic Surveillance System Data

2010:	'Graduate Mentorship Award,' Department of Sociology, University of Washington
2009:	Co-recipient of INDEPTH Network '2009 INDEPTH Prize for Extraordinary Research in Population and Health at INDEPTH Sites', awarded at 2009 INDEPTH AGM in Pune, India for article published in Lancet on Agincourt Health and Demographic Surveillance System Data
1996 – 1997:	Fulbright Student Fellowship, University of Pennsylvania and the Institute for African Studies at the University of Zambia, Zambia
1995 – 1998:	National Science Foundation Graduate Research Fellow, University of Pennsylvania
1994 - 2000:	William Penn Fellow, University of Pennsylvania
1991:	Caltech Summer Undergraduate Research Fellowship grant to collect demographic data in Sinafala village, Southern Zambia
1990:	Caltech Summer Undergraduate Research Fellowship grant to study neural cell differentiation and development, Caltech
1989:	Caltech Summer Undergraduate Research Fellowship grant to teach Calculus at the University of Windhoek, Namibia
1988:	National Merit Scholar

## Selected Consulting (alphabetic order)

- Center for Global Health Research for Gates Foundation COMSA project
- Emory University for the Gates Foundation CHAMPS project
- Harvard University School of Public Health
- ICF-International for the Demographic and Health Surveys (DHS) program
- The Bill and Melinda Gates Foundation
- The World Health Organization
- Vital Strategies for the Bloomberg 'Data for Health' initiative

## Selected Recent Talks, Papers & Presentations

CLARK, SAMUEL J. 2019. SVD-derived Life Tables indexed by Child Mortality. Presentation by CLARK, SAMUEL J at International Workshop on Subnational Life Tables. Sponsored by the Australia National University. Canberra: October 15–17, 2019.

- CLARK, SAMUEL J, Zehang Richard Li, and Tyler H MccCormick. 2019. Quantifying the Contributions of Training Data and Algorithm Logic to the Performance of Automated Cause-Assignment Algorithms for Verbal Autopsy. Poster presentation by CLARK, SAMUEL J at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). Austin: April 10-13.
- Gómez-Olivé<sup>†</sup>, F. Xavier, Brian Houle, Molly S Rosenberg, Sanyu Mojola, SAMUEL J CLARK, Chodziwadziwa W. Kabudula, Nicole Angotti, Enid J. Schatz, Kathleen Kahn, Julia Katherine Rohr, Jane Menken, and Till Bärnighausen. 2019. *HIV Incidence Among Older Adults in a Rural South African Setting: 2010–2015.* Presentation by Gómez-Olivé, F. Xavier at *The Annual Meetings of the Population Association of America*. Sponsored by Population Association of America (PAA). Austin: April 10-13.
- Hassan, Anushe, Clara Calvert, Mia Crampin, Abraham Herbst, Mark Urassa, Emma Slaymaker, SAMUEL J CLARK, and Georges Reniers. 2019. The Performance of Verbal Autopsy Tools for Capturing HIV/AIDS-Related Mortality in Sub-Saharan Africa. Poster presentation by Reniers, Georges at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). Austin: April 10-13.
- Houle, Brian, and SAMUEL J CLARK. 2019. Interviewer Effects in Interviews about Health and Epidemiological Risk Factors. Presentation by Houle, Brian and CLARK, SAMUEL J at the International Conference on Communication, Medicine and Ethics (COMET). Sponsored by the University of South Australia. Adelaide: June 26–28, 2019.
- Houle, Brian, Chodiwadziwa Kabudula, Kobus Herbst, and SAMUEL J CLARK. 2019. A Mother's Death and Child Survival: A Comparative Analysis of Two Demographic Surveillance Sites in Rural South Africa. Poster presentation by Houle, Brian at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). Austin: April 10-13.
- Li\*, Zehang (Richard), Tyler H McCormick, and SAMUEL J CLARK<sup>†</sup>. 2019. Bayesian Joint Spike-and-Slab Graphical Lasso. Paper presented by Zehang Li at the International Conference on Machine Learning. (ICML). San Diego: June 10-15 2019.
- CLARK, SAMUEL J. 2018. A Singular Value Decomposition (SVD) Component Model of Mortality Indexed By Child or Both Child and Adult Mortality. Presentation by Clark, Samuel at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). Denver: April 2018.
- CLARK, SAMUEL J. 2018. Data Disaggregation and SDG Monitoring. Presentation by Clark, Samuel at Meeting of the Population Association of Latin America. Sponsored by Population Association of Latin America (ALAP). Puebla, Mexico: October 2018.
- CLARK, SAMUEL J. 2018. The Role of Big Data for Public Policy Monitoring. Presentation by Clark, Samuel at Meeting of the Population Association of Latin America. Sponsored by Population Association of Latin America (ALAP). Puebla, Mexico: October 2018.

- CLARK, SAMUEL J. 2018. Verbal Autopsy: Various Considerations. Presentation by Clark, Samuel at 16th International Conference on Communication, Medicine, and Ethics: COMET. Birmingham, England: June 2018.
- Pantazis, Athena, and SAMUEL J CLARK. 2018. Age-Specific Fertility Regimes and Fertility Transition: Testing African Exceptionalism and the Implicit Relationships Between Determinants of Fertility Decline and Fertility Age Patterns. Poster by Clark, Samuel at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). Denver: April 2018.
- Calvert, Clara, Alison Price, Emma Slaymaker, Georges Reniers, Kobus Herbst, Denna Michael, SAMUEL CLARK, Basia Zaba, and Amelia Crampin. 2017. Beyond AIDS-related deaths: calculating the risk of non-communicable disease mortality attributable to HIV from verbal autopsy data. Presentation by Calvert, Clara at The XXVIII International Population Conference. Sponsored by the International Union for the Scientific Study of Population (IUSSP). Cape Town, South Africa: October–November 2017.
- CLARK, SAMUEL. 2017. A General Age-Specific Mortality Model with An Example Indexed by Child or Child/Adult Mortality. Presentation by CLARK, SAMUEL at The XXVIII International Population Conference. Sponsored by the International Union for the Scientific Study of Population (IUSSP). Cape Town, South Africa: October–November 2017.
- Houle, Brian, Nicole Angotti, Enid Schatz, F. Xavier Gómez-Olivé, SAMUEL CLARK, Jill Williams, Chodziwadziwa Kabudula, Stephen Tollman, and Jane Menken. 2017. Sexual behavior and HIV risk across the life course in rural South Africa: trends and comparisons. Presentation by Houle, Brian at The XXVIII International Population Conference. Sponsored by the International Union for the Scientific Study of Population (IUSSP). Cape Town, South Africa: October-November 2017.
- Houle, Brian, Chodziwadziwa Kabudula, Kobus Herbst, and SAMUEL CLARK. 2017. A mother's death and child survival: Comparisons between two demographic surveillance sites in rural South Africa. Poster presentation by Houle, Brian at The XXVIII International Population Conference. Sponsored by the International Union for the Scientific Study of Population (IUSSP). Cape Town, South Africa: October–November 2017.
- Houle, Brian, Sanyu A. Mojola, Nicole Angotti, Enid Schatz, F. Xavier Gómez-Olivé, SAM CLARK, Jill Williams, Chodziwadziwa Kabudula, Stephen Tollman, Kathleen Kahn, and Jane Menken. 2017. Sexual Behavior and HIV Risk Across the Life Course in Rural South Africa: Trends and Comparisons. Poster presented by Houle, Brian at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). Chicago: April 2017.
- Kabudula, Chodziwadziwa, Brian Houle, Mark Collinson, Kathleen Kahn, F. Xavier Gómez-Olivé, Stephen Tollman, and SAM CLARK. 2017. Social Patterns and Differentials in the Mortality Transition in Rural South Africa: Findings From Population Surveillance in Agincourt, 1993–2013. Presentation by Kabudula, Chodziwadziwa at The Annual

- Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). Chicago: April 2017.
- Kabudula, Chodziwadziwa, Brian Houle, Mark Collinson, Kathleen Kahn, F. Xavier Gómez-Olivé, Stephen Tollman, and SAMUEL CLARK. 2017. Persistent socioeconomic gradient in HIV/AIDS mortality in the era of antiretroviral therapy in rural South Africa: Findings from population surveillance in Agincourt, 2001- 2013. Poster presentation by Kabudula, Chodziwadziwa at The XXVIII International Population Conference. Sponsored by the International Union for the Scientific Study of Population (IUSSP). Cape Town, South Africa: October-November 2017.
- Pantazis, Athena, and SAMUEL CLARK. 2017. Age-Specific Fertility Regimes and Fertility Transition: Testing African Exceptionalism and the Implicit Relationships between Determinants of Fertility Decline and Fertility Age Patterns. Poster presentation by CLARK, SAMUEL at The XXVIII International Population Conference. Sponsored by the International Union for the Scientific Study of Population (IUSSP). Cape Town, South Africa: October–November 2017.
- Sharrow, David, Jessica Godwin, Yanjun He, SAMUEL CLARK, and Adrian Raftery. 2017. Probabilistic Population Projections for Countries with Generalized HIV/AIDS Epidemics. Presentation by Rafter, Adrian at The XXVIII International Population Conference. Sponsored by the International Union for the Scientific Study of Population (IUSSP). Cape Town, South Africa: October–November 2017.
- Sharrow, David J, Jessica Godwin, Yanjun He, SAM CLARK, and Adrian Raftery. 2017. Probabilistic Population Projections for Countries With Generalized HIV/AIDS Epidemics. Presentation by Godwin, Jessica at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). Chicago: April 2017.
- CLARK, SAMUEL J. 2016. Statistical Demography: Innovative Approaches to Life Expectancy and Mortality. Session Discussion by CLARK, SAMUEL J at Annual Meeting of the Population Association of America. Sponsored by Population Association of America (PAA). Washington, D.C.: March-April 2016.
- CLARK, SAMUEL J. 2016. HIV Mortality Trends in Africa in the Treatment Era: New Evidence from the ALPHA Network of Community-based HIV Surveillance Studies Verbal Autopsy: ALPHA Network Contributions. Conference Presentation by CLARK, SAMUEL J at 21st International AIDS Conference (AIDS 2016). Durban, South Africa: July 2016.
- Houle, Brian, Athena Pantazis, Chodziwadziwa Kabudula, Stephen Tollman, and SAMUEL J CLARK. 2016. Social Patterns and Differentials in the Fertility Transition Based on Population Surveillance: Rural South Africa, 1993 2013. Presentation by Houle, Brian at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). Washington, D.C.: March-April 2016.
- McCormick, Tyler, Li Zehang, Clara Calvert, Amelia Crampin, Kathleen Kahn, and SAMUEL J CLARK. 2016. Probabilistic Cause-of-death Assignment using Verbal Autopsies. Poster

- presented by McCormick, Tyler at *The Annual Meetings of the Population Association of America*. Sponsored by Population Association of America (PAA). Washington, D.C.: March–April 2016.
- CLARK, SAMUEL J, F. Xavier Gómez-Olivé, Brian Houle, Margaret Thorogood, Kerstin Klipstein-Grobusch, Chodziwadziwa Kabudula, Jill Williams, Jane Menken, and Stephen Tollman. 2015. Cardiometabolic Disease Risk and HIV Status in Rural South Africa: Establishing a Baseline. Conference Poster by CLARK, SAMUEL J at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). San Diego: May 2015.
- CLARK, SAMUEL J, Jon Wakefield, Tyler Mccormick, and Michelle Ross. 2015. HYAK Mortality Monitoring System: Innovative Sampling and Estimation Methods. Conference Presentation by CLARK, SAMUEL J at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). San Diego: May 2015.
- Houle, Brian, SAMUEL J CLARK, Kathleen Kahn, Stephen M. Tollman, and Alicia Ely Yemin. 2015. The Impact of Maternal Mortality on Children's Risk of Dying in Rural South Africa: Evidence from a Population-Based Surveillance Study (1992-2013). Conference Presentation by Houle, Brian at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). San Diego: May 2015.
- Pantazis, Athena, and SAMUEL J CLARK. 2015. Modeling Age-Specific Fertility Curves to Understand Demographic Transition. Conference Presentation by Pantazis, Athena at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). San Diego: May 2015.
- Sennott, Christie, Benn Sartorius, Jane Menken, SAMUEL J CLARK, Nicole Angotti, Kerstin Klipstein-Grobusch, and Stephen Tollman. 2015. Births and HIV Status in Agincourt, Rural South Africa, 2010. Conference Poster by Sennott, Christie at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). San Diego: May 2015.
- Sharrow, David, Yanjun He, SAMUEL J CLARK, and Adrian E. Raftery. 2015. Probabilistic Projections of Mortality in Countries with Generalized HIV Epidemics for Use in Total Population Projection. Conference Presentation by Sharrow, David at The Annual Meetings of the Population Association of America. Sponsored by Population Association of America (PAA). San Diego: May 2015.

### Students

A  $\star$  indicates completed degree. A  $\odot$  indicates currently on leave or not enrolled.

Ph.D.

2019 - :	Yue Chu (Sociology): Advisor
2018 - :	Eungang (Peter) Choi (Sociology): Advisor
2017:	* External Examiner for Chao Fengqing, PhD in Public Health, National University of Singapore
2015 - 2018:	$\star$ Zehang (Richard) Li (Statistics): committee member
2014 - :	Jonathan Muir (Sociology): committee chair
2013 - :	$\odot$ William Brown (Anthropology): graduate school representative
2012 - 2016:	$\star$ Athena Pantazis (Sociology): committee chair
2012 - :	⊙ Benjamin Hanowell (Anthropology): committee member
2010 - 2015:	⋆ Cara Margherio (Sociology): committee chair
2010 - 2011:	$\star$ Brian Houle (Sociology): <b>committee chair</b>
2010:	$\star$ External Examiner for Charles Kimpolo, PhD in Computational and Applied Mathematics, University of the Witwatersrand
2010 – 2017:	* Chodziwadziwa Kabudula (School of Public Health, University of the Witwatersrand, Johannesburg, South Africa): acting <b>committee chair</b>
2009 - 2012:	$\star$ Romesh Silva (Demography, UC Berkeley): committee member
2009 – 2011:	$\star$ Ting Li (Quantitative Ecology and Resource Management): committee member
2009 - 2011:	$\star$ Le Bao (Statistics): committee member
2008 - 2013:	$\star$ Mark Wheldon (Statistics): committee member
2008 - 2011:	⊙ Greg Matthews (Sociology): committee chair
2008 - 2013:	$\star$ David Sharrow (Sociology): <b>committee chair</b>
2007 - :	⊙ Eric Gleave (Sociology): committee member
2007 - 2013:	$\star$ Devon Hamilton (Sociology): committee member
2006 - 2009:	$\star$ Jason Thomas (Sociology): committee chair
2005 - 2008:	$\star$ Leontine Alkema (Statistics): committee member
Masters	
2019:	$\star$ Eungang (Peter) Choi: committee chair
2019:	$\star$ Chenyao Zhang: committee member
2012 - 2014:	$\star$ Janjun He (Statistics): committee member
2011 - 2012:	$\star$ Athena Pantazis (Sociology): committee chair
2010:	$\star$ External Examiner for William Msemburi, Masters of Philosophy in Demography, University of Cape Town
2010 – 2010:	$\star$ Ryoko Takahashi (Department of Health Services, School of Public Health): committee member

```
2009 – 2010: 

* Jennifer Chunn (Statistics): committee member
2007 – 2009: 

* Kerry MacQuarrie (Sociology): committee chair
2007 – 2009: 

* Cara Margherio (Sociology): committee chair
2007 – 2009: 

* Jongjit Rittirong (Sociology): committee chair
2007 – 2008: 

* Jodi Kurtz (Sociology): committee member
```

### Research & Professional Interests

I am a formal demographer who works on the demography and epidemiology of Africa and developing new methods for population sciences. Right now I am working on:

- improving the 'verbal autopsy' method used to quantify the burden of disease for populations without full coverage vital statistics systems work with colleagues at The Ohio State University, the University of Washington, the London School of Hygiene and Tropical Medicine, the CDC, the Swiss Tropical and Public Health Institute, the WHO, and the 'Data for Health' Initiative;
- mapping child mortality at the subnational level through time using household survey data in countries without full coverage vital statistics systems work with colleagues at the University of Washington and UNICEF;
- developing new population indicator measurement strategies and statistical methods to implement them work with colleagues at the University of Washington; and
- fertility and mortality: a variety of projects investigating levels and trends in fertility and mortality, mostly in Africa, and sometimes building models of age schedules of fertility and mortality that can be used widely as inputs to other analyses.

## Recent Teaching & Instruction

2019:	Sociology 8802: Institute for Population Research (IPR) $Demography$ $Prosem$
2018:	Sociology 7753: Introduction to Demographic Analysis
2017:	Sociology 7753: Introduction to Demographic Analysis
2017:	(twice) Sociology 5450: Surviving in South Africa: Contemporary Health and Population Issues
2016:	Sociology 5450: Surviving in South Africa: Contemporary Health and Population Issues
2014:	Sociology Study Abroad, Summer B, Agincourt Health and Demographic Surveillance System Site, Acornhoek, South Africa: Measuring and Understanding Health and Population in South Africa

2014 – 2016:	Sociology 201: Surviving in South Africa: Contemporary Health and Population Issues
2010 – 2012:	Sociology/CSSS/Statistics 221: Statistical Concepts and Methods for the Social Sciences. A course joint listed by Sociology, CSSS and Statistics that presents an introduction to statistical concepts and methods for social scientists
2005 – 2016:	Sociology 433/533: Introduction to Demographic Methods. A course taught in the Sociology Department at the University of Washington that presents an introduction to core demographic methods and techniques
2005 – 2009:	Sociology 220: Introduction to Sociological Methods. A course taught in the Sociology Department at the University of Washington that presents an introduction to experimental design and statistical methods for undergraduates majoring in Sociology
2005 – 2007:	During summer: Three one-week modules covering the theory and practice of data management in the context of Demographic Surveillance Systems. These modules form the Data Management component of the INDEPTH Network-sponsored M.Sc. degree program at the School of Public Health, University of the Witwatersrand, South Africa
2006 – 2007:	Sociology 401: Population and Africa. A course taught in the Sociology Department at the University of Washington that presents historical and contemporary topics concerning population in Africa, with an emphasis on the current impacts of HIV/AIDS on African populations
2007:	CSDE 555: Health Metrics. A course taught through the Center for Studies in Demography and Ecology at the University of Washington introducing the basic methods of Health Metrics

# Recent Field Work

2015:	Co-organized and led conference of African physicians to provide data on symptom-cause relationship for use with automated methods to assign cause of death from verbal autopsy data
2015:	Several weeks in South Africa working with the Agincourt and Africa Centre demographic surveillance system (DSS) field sites on a number of ongoing projects and attending and contributing to the International Scientific Advisory Committee meeting for the Agincourt site
2014:	Several weeks in South Africa working with the Agincourt demographic surveillance system (DSS) field site on a number of ongoing projects [See 2006, below]
2013:	Two weeks in South Africa working with the Agincourt demographic surveillance system (DSS) field site on a number of ongoing projects [See 2006, below]

Three weeks in South Africa working with the Agincourt demographic 2012: surveillance system (DSS) field site on a number of ongoing projects [See 2006, below]