# **CURRICULUM VITAE**

# Yue Chu, MSPH, MBBS

#### **PERSONAL DATA**

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# **EDUCATION AND TRAINING**

Columbus, OH 43210 USA

2018~present The Ohio State University, Columbus, USA

Concentration: Demography, Population and Health, Sociology, Applied statistics

Advisor: Dr. Samuel Clark

Thesis: SVD-Bayes: A Singular Value Decomposition-Based Approach Under Bayesian Framework for

Indirect Estimation of Age-Specific Fertility and Mortality

Dissertation: Automated Cause of Death Classification from Verbal Autopsies: Leveraging the

Pretrained Language Models and Machine Learning Techniques

MSPH/2014 Johns Hopkins Bloomberg School of Public Health, Baltimore, USA

Concentration: Population, Family and Reproductive Health

MBBS/2012 Fudan University, Shanghai, China

Specialty: Preventive Medicine

# PROFESSIONAL EXPERIENCE

May.2025-onwards	Post-doctoral fellow, Health and Environment Modeling Laboratory, the Ohio State University, Columbus, OH
May.2023-present	Consultant on Reference Death Archive project for World Health Organization
Aug.2023-Sep.2023	Visiting scholar at Africa Health Research Institute, Somkele, South Africa
May.2022-May.2023	Data Science intern, Nationwide Mutual Insurance Company / Nationwide Center for Advanced Customer Insights, Columbus, OH
Dec.2022-Jan.2023	Consultant on Survey ODK, Ministry of Health, Guinea-Bissau
Apr.2021	Consultant on WHO VARG Workshop for revision of the 2016 WHO VA instrument
Jan.2019-present	Graduate Research Associate, Institute for Population Research, the Ohio State University, Columbus, OH

Jul.2018	Consultant, Maternal, Newborn, Child and Adolescent Health
	Division, World Health Organization, Geneva, Switzerland
Jul.2018	Consultant, KIT Health Royal Tropical Institute, Amsterdam,
	Netherlands
Jan.2015 -Jul.2018	Research Associate, Department of International Health, Johns
	Hopkins Bloomberg School of Public Health
Sep.2014-Jan.2015	Research Assistant, Department of Health Policy and Management,
	Johns Hopkins Bloomberg School of Public Health
Apr. 2013-Sep. 2014	Research assistant, Johns Hopkins Bloomberg School of Public Health
May 2013-Aug. 2013	Research Assistant, Technical Division, United Nations Population
	Fund (UNFPA), New York
Apr. 2012-Jun. 2012	Research Assistant, Department of Health Statistics and Social
	Medicine, School of Public Health, Fudan University, Shanghai, China
Feb. 2012-Mar. 2012	Intern, Division of Vital Statistics, Center of Disease Control and
	Prevention, Shanghai, China
Mar. 2011-Aug. 2011	Clinical Internship, Fifth People's Hospital, Shanghai, China
Dec. 2009-Apr. 2011	Student principal investigator, Department of Maternal and Child
	Health, Fudan University, Shanghai, China

# PROFESSIONAL DEVELOPMENT

2025	PAA workshop: A Primer on Machine Learning and Artificial Intelligence for
	Population Research
2024	Minor in Applied Statistics, Department of Statistics, OSU
2022	Berkeley Workshop in Formal Demography
2021	Graduate Interdisciplinary Specialization in Demography (GISD), OSU
2021	Pedagogical training with The Drake Institute for Teaching and Learning,
	Columbus, USA
2019	Data Carpentry workshop in Social Sciences, Columbus, USA
2018	D4H/WHO workshop on Verbal Autopsy Methods, Columbus, USA
2018	IUSSP Course on Bayesian Small Area Estimation using Complex Survey Data:
	Methods and Applications, Denver, USA
2018	Survey Research Design, Johns Hopkins Bloomberg School of Public Health,
	Baltimore, USA
2017	PAA workshop on Social Media and Demographic Methods, Chicago, USA
2017	Methods and Measures in Population Studies, Johns Hopkins Bloomberg
	School of Public Health, Baltimore, USA
2016	PAA workshop on Bayesian Population Projections: Theory and Practice,
	Washington DC, USA
2015	Analysis of Longitudinal Data, Johns Hopkins Bloomberg School of Public
	Health, Baltimore, USA

# **PROFESSIONAL ACTIVITIES**

# **Society Membership**

Population Association of America (PAA): 2015-present International Union for the Scientific Study of Population (IUSSP): 2019-present

#### **Center Affiliation**

Health and Environment Modeling Laboratory, the Ohio State University: 2024-present Institute for Population Research, the Ohio State University: 2018-present Translational Data Analytics Institute, the Ohio State University: 2018-present Nationwide Center for Advanced Customer Insights, the Ohio State University: 2022-2023 Johns Hopkins Institute for International Programs: 2015-2018 Johns Hopkins Evidence-based Practice Center: 2014

Johns Hopkins Center for Adolescent Health: 2013-2014

# **Conference organization**

Session chair & discussant of Annual Meeting of Population Association of America.(2025) Session chair of Annual Meeting of Population Association of America.(2021) Session chair of Annual Meeting of Applied Linguistics and Professional Practice.(2021) The Sixth Child Survival Forum in China, September 2016, Chengdu, China Technical Advisory Group Annual Meeting on High Impact Practices in Family Planning, UNFPA, June 2013, New York, USA

#### **EDITORIAL ACTIVITIES**

### **Peer Review Activities**

PNAS, Demographic Research, Nature, PLOS Global Health, Preventing Chronic Disease, European Journal of Population, Journal of Global Health, PLOS One, Clinical epidemiology, BMC Public Health, BMC Pediatrics, Journal of Epidemiology and Global Health, Frontiers, Population, Clinical Epidemiology and Global Health, Journal of Human Anatomy

#### **HONORS AND AWARDS**

Distinguished University Fellowship, The Ohio State University (2018,2023) Tuition Scholarship, Johns Hopkins Bloomberg School of Public Health (2013) People's Scholarship of Fudan University (2007-2009,2011-2012)

# **PUBLICATIONS**

#### **Peer-Reviewed Journal Articles**

- \* indicate joint first authorship
- 1. **Chu, Yue**, Milly Marston, Albert Dube, Charles Festo, Eveline Geubbels, Simon Gregson, Kobus Herbst et al. "Temporal changes in cause of death among adolescents and adults in six countries in eastern and southern Africa in 1995–2019: a multi-country surveillance study of verbal autopsy data." *The Lancet Global Health* 12, no. 8 (2024): e1278-e1287.

- 2. Damerow, Sabine M., Diana Yeung, Justiniano SD Martins, Ishaan Pathak, **Yue Chu**, Li Liu, and Ane B. Fisker. "Provider-mother interactions are associated with birth outcome misclassifications in household surveys: A case-control study in Guinea-Bissau." *Journal of Global Health* 13 (2023).
- 3. Liu, Yunnning\*, **Yue Chu**\*, Diana Yeung, Wei Wang, Lijun Wang, Peng Yin, Jiangmei Liu, Maigeng Zhou, Li Liu. "National and subnational levels and causes of mortality among 5-19-year olds in China in 2004-2019 empirical evidence from the Disease Surveillance Points System". *Journal of Global Health* 12 (2022)
- 4. Jamie Perin, **Yue Chu**, Francisco Villaviciencio, Austin Schumacher, Tyler McCormick, Michel Guillot, Li Liu. Adapting and validating the log quadratic model to derive under-five age-and cause-specific mortality (U5ACSM): a preliminary analysis. *Population health metrics*, 20, no.1 (2022): 1-12.
- Abigail Norris Turner, David Kline, Alison Norris, W Gene Phillips, Elisabeth Root, Jonathan Wakefield, Zehang Li, Stanley Lemeshow, Morgan Spahnie, Amanda Luff, Yue Chu, Mary Kate Francis, Maria Gallo, Payal Chakraborty, Megan Lindstrom, Gerard Lozanski, William Miller, Samuel Clark. Prevalence of current and past COVID-19 in Ohio adults. *Annals of epidemiology*, 67, no.1(2022): 50-60.
- 6. Austin E Schumacher, Tyler H McCormick, Jon Wakefield, **Yue Chu**, Jamie Perin, Francisco Villavicencio, Noah Simon, Li Liu. "A flexible Bayesian framework to estimate age-and cause-specific child mortality over time from sample registration data." *The Annals of Applied Statistics*.16(2022):124-143.
- 7. David Kline, Zehang Li, **Yue Chu**, Jon Wakefield, William C Miller, Abigail Norris Turner, Samuel J Clark. Estimating seroprevalence of SARS-CoV-2 in Ohio: A Bayesian multilevel poststratification approach with multiple diagnostic tests. *Proceedings of the National Academy of Sciences*, (2021):118(26).
- 8. **Chu, Yue**. "SVD-Bayes: A Singular Value Decomposition-based Approach Under Bayesian Framework for Indirect Estimation of Age-specific Fertility and Mortality." MS Thesis, The Ohio State University, 2020.
  - https://rave.ohiolink.edu/etdc/view?acc num=osu1609638415015896
- 9. Helleringer, Stéphane, Li Liu, **Yue Chu**, Amabelia Rodrigues, and Ane Barent Fisker. "Biases in Survey Estimates of Neonatal Mortality: Results From a Validation Study in Urban Areas of Guinea-Bissau." *Demography* 57, no. 5(2020): 1705-1726.
- 10. Wahl, Brian, Maria Deloria Knoll, Anita Shet, Madhu Gupta, Rajesh Kumar, Li Liu, **Yue Chu** et al. "National, regional, and state-level pneumonia and severe pneumonia morbidity in children in India: modelled estimates for 2000 and 2015." *The Lancet Child & Adolescent Health* 4, no. 9 (2020): 678-687.
- 11. Liu, Li\*, Yue Chu\*, Shefali Oza, Dan Hogan, Jamie Perin, Diego G. Bassani, Usha Ram et al. "National, regional, and state-level all-cause and cause-specific under-5 mortality in India in 2000–15: a systematic analysis with implications for the Sustainable Development Goals." *The Lancet Global Health* 7, no. 6 (2019): e721-e734.
- 12. Wahl, Brian, Apoorva Sharan, Maria Deloria Knoll, Rajesh Kumar, Li Liu, Yue Chu, David A.

- McAllister et al. "National, regional, and state-level burden of Streptococcus pneumoniae and Haemophilus influenzae type b disease in children in India: modelled estimates for 2000–15." *The Lancet Global Health* 7, no. 6 (2019): e735-e747.
- 13. Choudhary, Tarun Shankar, Bireshwar Sinha, Ajay Khera, Nita Bhandari, **Yue Chu**, Bianca Jackson, Neff Walker, Robert E. Black, Michael Merson, and Maharaj Kishan Bhan. "Factors associated with the decline in under-five diarrhea mortality in India: a LiST analysis." *Journal of global health* 9, no. 2 (2019).
- 14. Black, Robert, Olivier Fontaine, Laura Lamberti, Maharaj Bhan, Luis Huicho, Shams El Arifeen, Honorati Masanja, Christa Fischer Walker, Tigest Ketsela Mengestu, Luwei Pearson, Mark Young, Nosa Orobaton, **Yue Chu**, Bianca Jackson, Massee Bateman, Neff Walker, Michael Merson. "Drivers of the reduction in childhood diarrhea mortality 1980-2015 and interventions to eliminate preventable diarrhea deaths by 2030." *Journal of global health* 9, no. 2 (2019).
- 15. Countdown to 2030 Collaboration. 2018. "Countdown to 2030: tracking progress towards universal coverage for reproductive, maternal, newborn and child health". *The Lancet*, *391*(10129), 1538-1548.
- 16. David A. McAllister, Li Liu, Ting Shi, **Yue Chu**, Craig Reed, John Burrows, Davies Adeloye, Igor Rudan, Robert E Black, Harry Campbell. 2018. "Global, regional, and national estimates of pneumonia morbidity and mortality in children younger than 5 years between 2000 and 2015: a systematic analysis." The Lancet Global Health. 7, no. 1: e47-e57.
- 17. Brian Wahl, Katherine L O'Brien, Adena Greenbaum, Anwesha Majumder, Li Liu, **Yue Chu**, Ivana Lukšić, Harish Nair, David McAllister, Harry Campbell, Igor Rudan, Robert Black, Maria Deloria Knoll. 2018. "Global, regional, and national burden of Streptococcus pneumoniae and Haemophilus influenzae type b in children in the era of conjugate vaccines: updated estimates from 2000-2015". *Lancet Global Health*. 6: e744–57.
- 18. Lisa M. Wilson, Casey M. Rebholz, Ermias Jirru, Marisa Chi Liu, Allen Zhang, Jessica Gayleard, Yue Chu, Karen A. Robinson. 2017. "Benefits and Harms of Osteoporosis Medications in Patients With Chronic Kidney Disease: A Systematic Review and Meta-analysis Effect of Osteoporosis Medications in Patients With CKD." *Annals of Internal Medicine*. 166, no. 9: 649-658.
- 19. Li Liu, Shefali Oza, Dan Hogan, **Yue Chu**, Jamie Perin, Jun Zhu, Joy Lawn, Simon Cousens, Colin Mathers, Robert E. Black. 2016. "Global, regional and national causes of child mortality in 2000-2015 implications for the Sustainable Development Goals" *Lancet*. Published online on November 10, 2016
- 20. Chunhua He, Li Liu, Yue Chu, Jamie Perin, Li Dai, Xiaohong Li, Lei Miao, Leni Kang, Qi Li, Robert Scherpbier, Sufang Guo, Igor Rudan, Peige Song, Kit Yee Chan, Yan Guo, Robert E Black, Yanping Wang, Jun Zhu. 2017. "National and subnational all-cause and cause-specific child mortality in China, 1996–2015: a systematic analysis with implications for the Sustainable Development Goals". *The Lancet Global Health*.5,no.2:e186-e197.
- 21. Li Liu, Henry D. Kalter, **Yue Chu**, Narjis Kazmi, Alain K. Koffi, Agbessi Amouzou, Olga Joos, Melinda Munos, Robert E. Black. 2016. "Understanding misclassification between neonatal

- deaths and stillbirths: empirical evidence from Malawi". PLoS One. 11,no.12: e0168743
- 22. Peige Song, Evropi Theodoratou, Xue Li, Li Liu, **Yue Chu**, Robert E. Black, Harry Campbell, Igor Rudan, Kit Yee Chan. 2016. "Causes of death in children younger than five years in China in 2015: an updated systematic analysis" Journal of Global Health. Dec; 6(2): 020802
- 23. Nisa M. Maruthur, Eva Tseng, Susan Hutfless, Lisa M. Wilson, Catalina Suarez-Cuervo, Zackary Berger, **Yue Chu**, Emmanuel Iyoha, Jodi B. Segal, and Shari Bolen. 2016. "Diabetes Medications as Monotherapy or Metformin-Based Combination Therapy for Type 2 Diabetes." *Annals of internal medicine*. 164(11): 740-751.
- 24. Shari Bolen, Eva Tseng, Susan Hutfless, Jodi B. Segal, Catalina Suarez-Cuervo, Zackary Berger, Lisa M. Wilson, Yue Chu, Emmanuel Iyoha, Nisa M. Maruthur. 2015. "Medications for Adults with Type 2 Diabetes: An Update Focused on Monotherapy and Add-On Therapy to Metformin (EHC-2014-11-0075.R4)". Agency for Healthcare Research and Quality Comparative Effectiveness Review Report No.: 16-EHC013-EF. Rockville Maryland, USA. https://www.ncbi.nlm.nih.gov/books/NBK362863/

# **Book Chapters**

Li Liu, Kenneth Hill, Shefali Oza, Dan Hogan, **Yue Chu,** Simon Cousens, Colin Mathers, Cynthia Stanton, Joy Lawn, Robert E. Black. 2016. "Chapter Four: Levels and Causes of Mortality under Age Five". *Reproductive, Maternal, Newborn and Child Health*. Disease Control Priorities, Third Edition, Vol2, Part 1. The World Bank. Washington DC.

# **CURRICULUM VITAE**

# Yue Chu

#### Part II

# **TEACHING**

#### **Teaching**

SOC 3549 Recitation leader for Statistics in Sociology. 2021 380.603 TA for Demographic Methods in Public Health. 2013-2014 380.651 TA for Methods and Measures in Population Studies. 2016-2017

#### **Advisee**

Elenzie France. Undergraduate RA for SP24, The Ohio State University
Ambre Flowers. Undergraduate. JHSPH 2018 Diversity Summer Internship Program
Jayla Johnson. Undergraduate. JHSPH 2017 Diversity Summer Internship Program

# Workshops

SGSA VP of research committee workshops on R (2022) Verbal Autopsy data analysis workshops (2018, 2019, 2020)

# **PRESENTATIONS**

#### Presentation

\*indicates role as presenter

- 1. Yue Chu, Samuel Clark. Automating cause of death classification from verbal autopsy: using pretrained language models and multi-modal learning. 2025 Annual Meeting of Population Association of America. Apr. 13, 2025.\*
- 2. Yue Chu. Automating cause of death classification. HEALMOD professional seminar. Apr. 1, 2025. (oral)\*
- 3. Yue Chu, Zehang Li, Zhenke Wu, Samuel Clark. Leveraging machine learning techniques for verbal autopsy analysis. Demystifying Machine Learning workshop at Max Planck Institute for Demographic Research. Rostock, Germany. Nov.5,2024 (oral)\*
- 4. Yue Chu, Milly Marston, Albert Dube, Charles Festo, Eveline Geubbels, Simon Gregson, Kobus Herbst, Chodziwadziwa Kabudula, Kathleen Kahn, Tom Lutalo, Louisa Moorhouse, Robert Newton, Constance Nyamukapa, Emma Slaymaker, Mark Urassa, Adbhalah Ziraba, Clara Calvert,\* Samuel Clark\*. Temporal changes in cause of death among adults in six countries in Eastern and Southern Africa: a multi-country cohort study using verbal autopsy data. 2023 Annual Meeting of Population Association of America. Apr. 14, 2023. (oral)\*
- 5. Yue Chu, Samuel Clark. "Indirect estimation of age-specific fertility and mortality: SVD-Bayes

- model". TDAI Fall Forum 2021. (poster)
- 6. **Yue Chu**, Samuel Clark. "Indirect estimation of age-specific fertility and mortality: SVD-Bayes model". 2021 Annual Meeting of Population Association of America. May. 09, 2021. (oral) \*
- 7. Sarah Hayford, John Casterline, **Yue Chu**. "Changes in Age at Last Birth Over the Course of Contemporary Fertility Declines". 2021 Annual Meeting of Population Association of America. May. 09, 2021. (oral)
- 8. **Yue Chu**, Samuel Clark. "Indirect estimation of age-specific fertility and mortality: SVD-Bayes model". 35th Annual Hayes Graduate Research Forum. Apr. 09, 2021. (poster) \*
- 9. Jon Wakefield, et al. "A New Model for Small Area Estimation, with Application to Subnational Under-5 Mortality Risk Estimation in Africa". 2020 Annual Meeting of the Population Association of America (PAA), Apr. 22–25, 2020. (oral)
- 10. Li Liu, **Yue Chu**, Amabelia Rodrigues, Ane Fisker, Stephane Helleringer. "Understanding Reporting Errors of Population Survey-Based Neonatal Mortality: A validation Study From Guinea-Bissau". Apr.10-13, 2019. Austin, TX. (oral)
- 11. Yue Chu, Diana Yeung, Li Liu, Robert Black. "Global Estimates for Meningitis-specific Mortality". Meningitis Disease Burden Evaluation Alignment Meeting of WHO/Bill and Melinda Gates Foundation. Nov.6, 2018. Seattle, WA. (oral)\*
- 12. Jamie Perin, **Yue Chu**, Austin Schumacher, Tyler McCormick, Li Liu. "Cause specific mortality rates for fine age groups among children under five". 2018 Annual Meeting of Population Association of America. Apr.26-28, 2018. Denver, CO (oral)
- 13. Li Liu, **Yue Chu**. "China Maternal and Child Health Surveillance System". "Global Age Patterns of Under-Five Mortality" project kickoff meeting. Dec. 18, 2017. Philadelphia, PA (oral)
- 14. Jamie Perin, Li Liu, **Yue Chu**. "Age-specific child causes of deaths", 2017 International Union for the Scientific Study of Population International seminar on Mortality: Past, Present and Future. Aug. 7-8 2017. Campinas, Brazil (oral)
- 15. Li Liu, Henry D. Kalter, **Yue Chu**, Narjis Kazmi, Alain K. Koffi, Agbessi Amouzou, Olga Joos, Melinda Munos, Robert E. Black. "Understanding misclassification between neonatal deaths and stillbirths: empirical evidence from Malawi". 2017 Annual Meeting of Population Association of America. Apr. 27-29, 2017. Chicago, USA (oral)\*
- 16. Chunhua He, Li Liu, Yue Chu, Jamie Perin, Li Dai, Xiaohong Li, Lei Miao, Leni Kang, Qi Li, Robert Scherpbier, Sufang Guo, Igor Rudan, Peige Song, Kit Yee Chan, Yan Guo, Robert E Black, Yanping Wang, Jun Zhu. "National and subnational levels and causes of child mortality in 1996-2015 in China: implications for the Sustainable Development Goals" 2017 Annual Meeting of Population Association of America. Apr 27-29, 2017. Chicago, USA (oral)
- 17. Chunhua He, Li Liu, **Yue Chu**, Jamie Perin, Juan Liang, Li Dai, Xiaohong Li, Lei Miao, Leni Kang, Qi Li, Robert Scherpbier, Sufang Guo, Igor Rudan, Peige Song, Kit Yee Chan, Yan Guo, Robert E Black, Yanping Wang, Jun Zhu." Estimating National and Subnational Causes of Child Deaths using Data from China Maternal and Child Health Surveillance System". The Sixth China Child Survival Forum. Sep. 8-9, 2016. Chengdu, China. (oral)\*
- 18. Li Liu, Henry Kalter, **Yue Chu**, Narjis Kazmi, Alain Koffi, Agbessi Amouzou, Olga Joos, Melinda Munos, Robert E. Black. "Understanding misclassification between neonatal deaths and

- stillbirths: empirical evidence from Malawi". Informal Technical Consultation on Review of Inputs and Methods for Estimates of Causes of Maternal and Neonatal Deaths and Stillbirths, The World Health Organization. Aug. 9-11, 2016. Geneva, Switzerland. (oral)\*
- 19. Chunhua He, Li Liu, Yue Chu, Jamie Perin, Juan Liang, Li Dai, Xiaohong Li, Lei Miao, Leni Kang, Qi Li, Robert Scherpbier, Sufang Guo, Igor Rudan, Peige Song, Kit Yee Chan, Yan Guo, Robert E Black, Yanping Wang, Jun Zhu. "Estimating National and Subnational Causes of Child Deaths using Data from China Maternal and Child Health Surveillance System". Informal Technical Consultation on Review of Inputs and Methods for Estimates of Causes of Maternal and Neonatal Deaths and Stillbirths, The World Health Organization. Aug. 9-11, 2016. Geneva, Switzerland. (oral)
- 20. Brian Wahl, Katherine L O'Brien, Adena Greenbaum, Li Liu, Yue Chu, Robert E. Black, Anwesha Majumder, Maria Deloria Knoll. "Global burden of Streptococcus pneumoniae in children younger than 5 years in the era of pneumococcal conjugate vaccines (PCV): 2000-2015". 10th International Symposium on Pneumococci and Pneumococcal Disease. Jun. 27-30, 2016. Glasgow, Scotland. (oral)
- 21. Brian Wahl, Narendra Arora, Ambujam Nair Kapoor, Apoorva Sharan, Rajesh Kumar, Li Liu, Yue Chu, Robert Black, Maria Deloria Knoll, Mathuram Santosham, Katherine L O'Brien. "Mortality caused by Streptococcus pneumoniae in children younger than 5 years in India: A state-by-state analysis from 2000 to 2015." 10th International Symposium on Pneumococci and Pneumococcal Disease. Jun. 27-30, 2016. Glasgow, Scotland.
- 22. Li Liu, Shefali Oza, Dan Hogan, Yue Chu, Jamie Perin, Jun Zhu, Colin Mathers, Joy Lawn, Simon Cousens, Robert E. Black. 2016. "Global, regional and national causes of child mortality in 2000-2015 reflecting on the MDG 4 and prioritizing for the SDG 3.2". 2016 Annual Meeting of Population Association of America. Apr. 2, 2016. Washington DC, USA (oral)
- 23. Li Liu, **Yue Chu**, Robert E. Black. 2015. "Subnational child cause of death (COD) estimation in China". Technical Advisory Group of the United Nations' Interagency Group on Child Mortality Estimation Bi-annual Meeting. Dec.9, 2015. Washington DC, USA (oral)
- 24. Robert Black, Li Liu, **Yue Chu**. Causes of child mortality in 2000-2015: the global picture and current state in Nigeria. Nigeria Verbal/Social Autopsy Technical Working Group Meeting. Nov.23, 2015. Abuja, Nigeria. (oral)
- 25. Li Liu, Shefali Oza, **Yue Chu**, Dan Hogan, Colin Mathers, Joy Lawn, Simon Cousens, Robert E. Black. "Progress in Estimating Causes of Child Mortality in 2000-2015". Technical Advisory Group of the United Nations' Interagency Group on Child Mortality Estimation (IGME) Biannual Meeting. May 26, 2015. New York, USA. (oral)
- 26. **Yue Chu**, Li Liu, Robert Black. "Progress in Estimating Causes of Deaths among Children Aged 1-59 months Update for 2000-2015". Maternal and Child Epidemiology Estimation Project Review Meeting. Apr. 20-21, 2015. Geneva, Switzerland. (oral)\*
- 27. **Yue Chu**, Li Liu. "Differences on causes of deaths distribution estimates in China, MCMSS vs MCEE". Maternal and Child Epidemiology Estimation Project Review Meeting. Apr. 20-21, 2015. Geneva, Switzerland. (oral)\*

# **SKILLS**

Statistical software: R, Python, Julia, Stata, SQLite/SQL, RJAGS, RNIMBLE, JMP, SPSS, SAS. Data science toolkits: HuggingFace, Pytorch, Optuna, Azure, Kubeflow, Snowflake, Teradata, DBeaver, Amazon AWS / S3.

# ADDITIONAL INFORMATION

I'm a population health expert, demographer and epidemiologist, with multidisciplinary background in population health, demography, sociology, epidemiology, applied statistics, and clinical medicine. My research mainly focuses on improving estimates and estimation methodologies of demographic and health statistics in low-and-middle-income countries, as well as facilitating the translation of research findings into evidence-based practices.

Currently I'm involved in various projects including: 1) leveraging machine learning and pretrained large language models to improve cause of death classification from verbal autopsies; 2) development of Bayesian model for indirect estimation of mortality and fertility for detailed age groups; 3) development of Reference Death Archive, a centralized archive storing reference deaths, verbal autopsies and all related documents with publicly accessible catalog and trusted research environment; 4) explore the association between cause of death and social determinants of health for children; 5) evaluating data quality in population surveys and demographic surveillance system.

Key words: demography, global health, population health, verbal autopsy, mortality, vital statistics, demographic surveillance, survey methodology, applied statistics, Bayesian modeling, data science, natural language processing, computational social science, data engineering.