

# 2023 Joint Statistical Meetings (JSM):

# Presentations/Sessions/Talks among CDC/ATSDR staff (presenter names underlined)

#### Sunday, 8/6/2023

 Session 0170 SPEED 2: Survey Methods and Methods for Health Policy and Government, Part 1

**2:10 PM - 2:15 PM** A Comparison Study of Creating Synthetic Survey Data Using Different Approaches

<u>Bill Cai (NCHS)</u>, Guangyu Zhang (NCHS), Yulei He (NCHS), Anna Oganian (NCHS)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 5202

 Session 0170 SPEED 2: Survey Methods and Methods for Health Policy and Government, Part 1

**3:05 PM - 3:10 PM** Generalized Estimating Equations for Interpretable Coefficients of Trends, Seasonality & Covariates

<u>Harold Gomes (NIOSH)</u>, Kitty Hendricks (NIOSH) Scott Hendricks (NIOSH)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 5207

• Session 0003 Advances in Statistical Machine Learning

**3:20 PM - 3:35 PM** Using a machine learning approach to examine COVID-19 vaccine confidence among children in the U.S.

Yi Mu (NCIRD), Laurie Elam-Evans (NCIRD), Tammy Santibanez (NCIRD), Kushagra Vashist (NCIRD), James Singleton (NCIRD)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 5618

 Session 0021 Machine learning and imputation techniques for survey design and missing data

**4:05 PM - 4:20 PM** A Machine Learning Approach for Imputation of Missing Race and Ethnicity Information in EHRs

Hui Xie (NCCDPHP), Deborah Rolka (NCCDPHP),

Elizabeth Lundeen (NCCDPHP), Yu Chen (NCCDPHP),



### Rachel Rutkowski (NCCDPHP)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev =4276

 Session 0022 Novel Statistical Approaches for the Epidemiology of Infectious Diseases, Epidemics, and the Environment

**4:50 PM - 5:05 PM** Impact of the COVID-19 Pandemic on Health Care Utilization in the Vaccine Safety Datalink

Lei Qian (NCEZID), Lina Sy (Kaiser Permanente Southern California), Vennis Hong (Kaiser Permanente Southern California), Sungching Glenn (Kaiser Permanente Southern California), Denison Ryan (Kaiser Permanente Southern California), Jennifer Nelson (Kaiser Permanente Health Research Institute), Simon Hambidge (Denver Health Ambulatory Care Services), Bradley Crane (Kaiser Permanente Northwest), Ousseny Zerbo (Kaiser Permanente Northern California), Malini DeSilva (HealthPartners Institute), Jason Glanz (Kaiser Permanente Colorado), James Donahue (Marshfield Clinic Research Institute), Elizabeth Liles (Kaiser Permanente Northwest), Jonathan Duffy (NCEZID), Stanley Xu (Kaiser Permanente Southern California)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 3900

 Contributed Posters Session, SPEED 2: Survey Methods and Methods for Health Policy and Government, Part 2

**5:15 PM - 6:00 PM** Generalized Estimating Equations for Interpretable Coefficients of Trends, Seasonality & Covariates

<u>Harold Gomes (NIOSH)</u>, Kitty Hendricks (NIOSH) Scott Hendricks (NIOSH)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 5792

#### Monday, 8/7/2023

 Session 0032 Innovations and Applications in Machine Learning, Deep Learning, Forecasting, and Surveillance

**8:35 AM - 8:50 AM** Addressing health disparities using multiply imputed injury surveillance data

Yang Liu (NCIPC), Mark Stevens (NCIPC), Amy Wolkin (NCIPC)



https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 3959

Session 0055 Evaluating and addressing survey nonresponse

**2:05 PM - 2:20 PM** Measuring Nonresponse Bias in Pregnancy Risk Assessment Monitoring System (PRAMS), 2019

Holly Shulman (NCCDPHP), Philip Hastings (Far Harbor),

Joseph Pirozzolo (Far Harbor), Ruben Smith (NCCDPHP),

Lee Warner (NCCDPHP)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 4307

#### Tuesday, 8/8/2023

• Session 0175 SPEED 7: New Methods for Genomics, the Environment, and Other Scientific Applications, Part 1

**9:30 AM - 9:35 AM** Trend Analysis for the National Health and Nutrition Examination Survey (NHANES) Biomonitoring Data

<u>Po-Yung Cheng</u> (NCEH), Timothy Wong (None), <u>Jeffery Jarrett</u> (NCEH), Robert Jones (None), <u>Cynthia Ward</u> (NCEH)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 5296

 Session 0045 Exploring auxiliary resources at early stages in the sampling process

**Session Chair: Katherine Irimata Chair (NCHS)** 

10:30 AM - 12:20 PM

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 3207

Session 1854 Making the case for data quality

**Session organizer: Lisa Mirel (formerly NCHS)** 

**10:35 AM - 10:55 AM** An assessment of data quality: Linked Mortality Files

Lisa Mirel (formerly NCHS), Jonathan Aram (NCHS),

Christine Cox (NORC)



https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 2443

• Contributed Posters #54 Contributed Poster Presentations: Section on Statistics in Epidemiology

**2:00 PM - 3:50 PM** Considerations for multiple imputation of exposure with missing observations, followed by propensity score and survival analyses

<u>Svetlana Masalovich (NCIRD)</u>, Mark Tenforde (NCIRD), Shikha Garg (NCIRD), Alissa O'Halloran (NCIRD)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 3346

• Session 1438 Advanced Methods of Using Auxiliary Information to Improve Inferences of Population Quantities

**2:55 PM - 3:20 PM** A Multiple Imputation Comparison Analysis Approach to Health Surveys Subject to Selection Bias

Yulei He (NCHS), Yan Li (University of Maryland, College Park),

Guangyu Zhang (NCHS), Katherine Irimata (NCHS)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev =1155

Session 0094 Innovative Bayesian Methods in Epidemiology

**3:05 PM - 3:20 PM** Estimation of Blood Lead Level of Children Using Bayesian Methods

#### **Shailendra Banerjee (NCEH)**

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 3926

 Session 1827 Paving paths forward for governmental data privacy protection, some recent advancements of methods and practice in synthetic data

**Session Organizer: Yulei He (NCHS)** 

**3:25 PM - 3:45 PM** Privacy Preserving Techniques: Case Studies from the National Center for Health Statistics

**Cordell Golden (NCHS)**, Lisa Mirel (formerly NCHS)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 2531



## Wednesday, 8/9/2023

Session 1834 Nowcasting in government/official statistics

**9:15 AM - 9:35 AM** Nowcasting county-level drug overdose death rates due to specific drugs

<u>Diba Khan</u> (NCHS), Priyam Patel (NCHS), Yulei He (NCHS), Guangyu Zhang (NCHS), Lauren Rossen (NCHS)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 2509

Contributed Posters #76 Contributed Poster Presentations:
Survey Research Methods Section

**10:30 AM - 12:20 PM** Estimation of US County-level Average Unhealthy Days by Zero-Inflated Model and Hurdle model

Yan Wang (NCCDPHP), Xingyou Zhang (Bureau of Labor Statistics),

Hua Lu (NCCDPHP), Susan Carlson (NCCDPHP), BENJAMIN LEE (NCCDPHP/Oak Ridge Institute for Science and Education), Magdalena Pankowska (NCCDPHP/Oak Ridge Institute for Science and Education), Kurt Greenlund (NCCDPHP)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 3284

• Contributed Posters #2123 Contributed Poster Presentations: Government Statistics Section

**10:30 AM - 12:20 PM** Sample size and Power Calculations for New HIV Antivirus Pre-Clinical Studies Through a Simulation

#### Yi Pan (NCHHSTP)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 3474

Contributed Posters #2595 Contributed Poster Presentations:
Government Statistics Section

**10:30 AM - 12:20 PM** Identifying and Quantifying vulnerability to pertussis in the United States

Diepreye Ayabina (NCIRD), Gordana Derado (NCIRD),

Tami Skoff (NCIRD), Susan Hariri (NCIRD), Nong Shang (NCIRD)



https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 3475

 Session 0124 Sampling and evaluation strategies to improve coverage and response

10:30 AM - 12:20 PM

**Session Chair: Jieru Chen (NCIPC)** 

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 3208

 Session 1758 Record Linkage Theory and Methods in Applications and Government Statistics

**10:35 AM - 10:55 AM** National Center for Health Statistics: Realizing the Power of Data through Linkages

Jessie Parker (NCHS), Cordell Golden (NCHS)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 2571

 Session 0121 Novel Approaches for Planning and Analyzing Data from Mental Health Clinical Trials and Observational Studies

**11:35 AM - 11:50 AM** Quantile regression approach to examining the association between risk factors and autism severity

<u>Lin Tian (NCBDDD)</u>, April Summers (NCBDDD)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev =4730

 Session 1397 Using Machine Learning & Data Science Methods to Improve Model Assisted Estimation & Survey Design

**Session Organizer: Morgan Earp (NCHS)** 

**11:35 AM - 11:50 AM** Using Machine Learning for Nonresponse Adjustment in the National Health Interview Survey (NHIS)

Morgan Earp (NCHS), Benjamin Zablotsky (NCHS),

Lindsey Black (NCHS), Jonaki Bose (NCHS), Matthew Bramlett (NCHS), James Dahlhamer (NCHS)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 1246

Session 0126 Some New Statistics Methods



**11:50 AM - 12:05 PM** Small area estimation using support vector machine

Guoyi Zhang (University of New Mexico), John Pleis (NCHS)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 3728

 Session 1289 Scientific Freedom and Human Rights Memorial Session for Thomas Jabine

**Session Chair: Jennifer Parker (NCHS)** 

2:00 PM - 3:50 PM

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 1460

Session 0141 Weighting adjustments

**3:35 PM - 3:50 PM** Identifying covariates to adjust for selection bias in national estimates of web-based panel surveys

<u>Katherine Irimata (NCHS)</u>, Yan Li (University of Maryland, College Park), **Yulei He (NCHS)** 

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev =4316

#### Thursday, 8/10/2023

Session 0151 Surveillance data collection: outbreaks and time series

**8:35 AM - 8:50 AM** Aggregate case and death surveillance for COVID-19

Diba Khan (NCHS; CDC COVID-19 Emergency Response Team),

Meeyoung Park (Office of Readiness and Response (formerly CPR); CDC COVID-19 Emergency Response Team),

Peter Grillo (CDC\OD\OCOO\OCIO; CDC COVID-19 Emergency Response Team; Booz Allen Hamilton, Inc.),

Sarah Witter (CDC\OD\OCOO\OCIO; CDC COVID-19 Emergency Response Team; Booz Allen Hamilton, Inc),

Heather Scobie (NCEZID; CDC COVID-19 Emergency Response Team),



Benjamin Silk (NCIRD; CDC COVID-19 Emergency Response Team),

Meredith McMorrow (NCIRD; CDC COVID-19 Emergency Response Team),

A.D. McNaghten (NCHHSTP; CDC COVID-19 Emergency Response Team),

Amitabh Suthar (GHC (formerly CGH); CDC COVID-19 Emergency Response Team),

Adi Gundlapalli (OPHDST (formerly a Division within CSELS); CDC COVID-19 Emergency Response Team),

Matthew Ritchey (OPHDST (formerly a Division within CSELS); CDC COVID-19 Emergency Response Team)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 4290

Session 0151 Surveillance data collection: outbreaks and time series

**9:50 AM - 10:05 AM** Total Survey Error in the National Immunization Survey-Adult COVID Module COVID-19 Vaccination Rates

<u>Elizabeth Allen</u> (NORC at The University of Chicago), **Michael Chen** (NCIRD), Vicki Pineau (NORC at The University of Chicago), Kirk Wolter (NORC at The University of Chicago), Jason Boim, **James Singleton (NCIRD)**, **David Yankey (NCIRD)**, **Yi Mu (NCIRD)** 

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev =4309

Session 0151 Surveillance data collection: outbreaks and time series

**10:05 AM - 10:20 AM** Using identified outbreaks' data to establish a pathogen-specific outbreak vulnerability index

<u>Gordana Derado (NCIRD)</u>, Diepreye Ayabina (NCIRD), Nong Shang (NCIRD)

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev = 4289

Session 1404 Capturing the Diversity of the United States
Through Statistics: The Impact of Coverage

**Session Organizer: Jennifer Parker (NCHS)** 



# **Session Chair: Stephen Blumberg (NCHS)**

**11:00 AM - 11:25 AM** Providing data for timely health information for diverse populations

## **Jennifer Parker (NCHS)**

https://ww2.aievolution.com/JSMAnnual/index.cfm?do=ev.viewEv&ev =1230