

A Roadmap for Disclosure Avoidance in the Survey of Income and Program Participation (SIPP)

Committee

Trivellore Raghunathan

Chair

Trivellore Raghunathan is a Professor of Biostatistics in the School of Public Health and a Research Professor at the Institute for Social Research, both at the University of Michigan. He is also a member of Research faculty at the Joint Program in Survey Methodology at the University of Maryland. He served as Chair of Department of Biostatistics (2010-2014) and Director Survey Research Center (2014-2019). His contributions in biostatistics span a wide area of methodological and collaborative research. In terms of collaborative research, he has served as a primary statistician responsible for design, implementation, analysis, and dissemination. The settings for collaboration have been clinical trials, sample surveys and epidemiologic studies employing case-control and cohort designs. The rich experiences from these collaborative studies have been a backdrop for his methodological research contributions. He has been developing and implementing statistical methods in a variety of contexts including Sample Surveys, Observational Studies and Clinical Trials. His research interests include missing data; multiple imputation; combining information from multiple surveys; Bayesian methods; privacy, confidentiality and disclosure limitation; small area estimation; hierarchical models; longitudinal data analysis; and statistical methods for epidemiology. He also developed a free software (IVEware) for implementing sequential regression approach for multiple imputations which can be downloaded from the website www.iveware.org. He has over 225 publications, is a Fellow of American Statistical Association, and received Remington award from American Heart Association. He received his Ph.D degree from Harvard University and Master's degrees from both Miami University, Oxford, Ohio and, Nagpur University, India. He has served on several NRC panels which are relevant to the current panel.

Scott H. Holan

Member

Dr. Scott H. Holan is a Professor of Statistics at the University of Missouri and has served as a Senior Research Fellow in the Research and Methodology Directorate at the U.S. Census Bureau and as a Senior Research Fellow in the Office of Survey Methods Research at the Bureau of Labor Statistics. His research expertise includes dependent data modeling (spatial, spatio-temporal, functional, and multivariate, among others), Bayesian methods, official statistics, and survey methodology. He is an elected Fellow of the American Statistical Association (2014), an Elected Member of the International Statistical Institute (2017), and an elected Fellow of the Institute of Mathematical Statistics (2021). Prof. Holan was a previous co-awardee of the Statistical Partnerships Among Academe, Industry, and Government (SPAIG) Award (2017) and is currently Co-Editor-in-Chief of the International Statistical Review (2018-2023). Prof. Holan has a PhD in Statistics from Texas A&M University (2004) and has previously served on a National Academy of Science (NAS – CNSTAT) Panel for “Addressing Priority Technical Issues for the Next Decade of the American Community Survey” and a Steering Committee for “Review of Confidentiality Criteria for Survey of Earned Doctorate Data”.

V. Joseph Hotz

Member

V. Joseph Hotz is the Arts and Sciences Distinguished Professor of Economics and Public Policy at Duke University. Prior to his current appointment, Dr. Hotz held faculty positions at UCLA, the University of Chicago and Carnegie Mellon University. Hotz’s research areas include the economics of the family, economic demography, labor economics, population health, and applied econometrics. Hotz is an elected fellow of the Econometric Society, the Society of Labor Economists and the International Association of Applied Econometrics. Hotz received his Ph.D. in Economics from the University of Wisconsin-Madison. Hotz is a former member of the Committee on National Statistics and has served on a number of NAS consensus panels and workshop planning committees, including the Planning Committee for the Workshop on 2020 Census Data Products: Data Needs and Privacy Considerations, which he co-chaired. Hotz also previously served as the Chair of the Population Association of America’s Committee on Population Statistics.

Thomas R. Krenzke

Member

Thomas Krenzke is a statistician and Vice President in Westat's Statistics and Data Science Unit. He has 30 years of experience in survey sampling and estimation techniques. Mr. Krenzke leads research in statistical confidentiality, sample design, non-probability sampling, small area estimation, variance estimation, imputation, and nonresponse bias. He adds new statistical capabilities by developing software for disclosure avoidance; nonresponse bias analysis; area sampling unit formation, stratification, and selection; classification trees; generalized regression estimation; and imputation. Mr. Krenzke is a Fellow of the American Statistical Association (ASA), and he is the Council of Chapters Governing Board District 2 vice chair. In 2019-2020, Mr. Krenzke was chair of the ASA Committee on Privacy and Confidentiality, and in 2018-2019 he was the Washington Statistical Society president. Mr. Krenzke leads Westat's Confidentiality Work Group, and serves on the Westat Institutional Review Board. He has delivered numerous presentations on statistical confidentiality at ASA and other professional meetings in the United States and abroad. He arrived at Westat after 6 years at the U.S. Census Bureau. Mr. Krenzke holds an M.S. in Applied Statistics from Bowling Green State University and a B.A. in Mathematics from Winona State University.

Fang Liu

Member

Dr. Fang Liu is Professor of Applied and Computational Mathematics and Statistics (ACMS) and associate chair of the ACMS department at the University of Notre Dame (ND). At ND, she is also affiliated with the Harper Cancer Research Institute, the Eck Institute of Global Health, the Technology Ethics Center, and the Lucy Family Institute for Data and Society. Dr. Liu holds a bachelor's degree from Peking University, earned her master's at Iowa State, and received her doctorate from the University of Michigan, Ann Arbor. Dr. Liu's research focuses on the development and application of modern approaches in statistical machine learning and data privacy protection. She also develops and applies statistical methodologies, especially Bayesian statistics, to analyze data originating from the medical, biological, and social sciences. Her research is mainly funded by NSF, NIH, the Gates Foundation, and UNITAID. Dr. Liu also collaborates with Facebook to develop methods for protecting privacy with regard to advertisement data. Dr. Liu is an elected fellow of the American Statistical Association. She serves on the Committee of Privacy and Confidentiality of the American Statistical Association from 2019 to 2023. She is the Co-Editor of the 'O Privacy, Where Art Thou' column for CHANCE, and a guest editor for the journal's special issue of 'A New Generation of Statisticians Tackles Data Privacy', and is on the Senior Editorial Board of BMC Medical Research Methodology.

Robert A. Moffitt

Member

Robert Moffitt is an economist and demographer known for his research on social policy, welfare programs, poverty, family structure, labor markets, income volatility, and applied statistical methods. Moffitt was born in Houston, Texas, where he grew up. He graduated from Rice University with a B.A. in Economics in 1970 and from Brown University with a Ph.D. in economics in 1975. He started off at Mathematica Policy Research and then taught at Rutgers University, Brown University, and then at Johns Hopkins University, where he has a joint appointment in Economics and the Bloomberg School of Public Health. He has been President of the Population Association of America and President of the Society of Labor Economists. He is a Fellow of the Econometric Society, a Fellow of the Society of Labor Economists, a member of the National Academy of Sciences, a recipient of a MERIT Award from the National Institutes of Health, a recipient of a Guggenheim Fellowship, and a Fellow of the American Academy of Arts and Sciences. He was Chief Editor of the American Economic Review, Coeditor of the Review of Economics and Statistics, and Chief Editor of the Journal of Human Resources. He currently serves on the Advisory Board for a new synthetic data file of tax information for the Urban Institute and the U.S. Department of Treasury.

Amy Pienta

Member

Dr. Amy Pienta is a Research Scientist and Director of Business and Collection Development at ICPSR. She is also a research/faculty affiliate of the Michigan Center on the Demography of Aging, the Population Studies Center, the Michigan Institute for Data Science, and the Center for Global Health Equity at the University of Michigan. At ICPSR, she directs several largescale federally-funded data infrastructure projects that include the broad dissemination of confidential and/or restricted-use data using various modes of secure access. Dr. Pienta has studied women's retirement behavior, the joint retirement behavior of married couples, and the relationship between various social statuses and health using a wide range of data sources including both the Survey of Income and Program Participation and the Health and Retirement Study. She earned her Ph.D. in Sociology from the SUNY Buffalo and completed a National Institute on Aging postdoctoral fellowship in the Population Research Institute at the Pennsylvania State University. Pienta chairs the research advisory board for the Qualitative Data Repository at Syracuse University, and co-chairs the social sciences subsection of the COVID-19 Working Group within the Research Data Alliance which includes establishing disclosure review practices for COVID-19 data.

Natalie Shlomo

Member

Natalie Shlomo (BSc, Mathematics and Statistics, The Hebrew University; MA, Statistics, The Hebrew University; PhD, Statistics, The Hebrew University) is Professor of Social Statistics at the University of Manchester. Before that, she was Senior Lecturer in the School of Social Sciences at the University of Southampton from 2007 to 2012 and a methodologist at the Israel Central Bureau of Statistics from 1981 to 2007. She is a survey statistician with interests in adaptive survey designs, data linkage and integration, non-probability sampling designs, small area estimation and statistical disclosure control. She is a Fellow of the Academy of Social Sciences in the United Kingdom, an elected member of the International Statistical Institute (ISI) and a Fellow of the Royal Statistical Society. She is currently President-Elect 2021-2023 of the International Association of Survey Statisticians and will serve as President in 2023-2025. Natalie also serves on editorial boards and is a member of scientific methodology advisory boards for National Statistics Institutes in the United Kingdom, Italy and Canada. She was the UK principle investigator for several collaborative grants from the European Union, all involving research on improving survey methods and dissemination. She was also Principal Investigator on grants in the United Kingdom and is currently the Principal Investigator on advancing the use of administrative data in official statistics funded by the Economic and Social Research Council. She has over 65 journal articles and refereed book chapters.

Aleksandra (Sesa) Slavkovic

Member

Aleksandra (Seša) Slavkovic is a Professor of Statistics & Public Health Sciences, and Associate Dean for Graduate Education in Eberly College of Science at Penn State. She held visiting scholar positions at Cornell University, University of California Berkeley, University of Minnesota and Utrecht University. Her research focuses on methodological developments in the area of data privacy and confidentiality in the context of small and large scale surveys, health, genomic, and network data, including differential privacy and broad data access that offers guarantees of accurate statistical inference needed to support reliable science and policy. Slavkovic is associate editor of the *Annals of Applied Statistics* and *Journal of Privacy and Confidentiality*, and editor for the *Statistics and Public Policy*. She served as a chair of the ASA Privacy and Confidentiality committee, and is the current Chair for the ASA Social Statistics Section, and serves on a half dozen advisory committees. She is a fellow of the American Statistical Association, Institute of Mathematical Statistics and the International Statistical Institute. She received her PhD (2004) and M.S. (2001) in Statistics, and a Master of Human-Computer Interaction (1999) from Carnegie Mellon University. She received her B.A. in Psychology from Duquesne University (1996). She served on NAS Committee on National Statistics' Panel on Measuring and Collecting Pay Information from U.S. Employers by Gender, Race, and National Origin, and NRC, Transportation Research Board. Expert Task Group (ETG) on Data Access for Safety Data.

Heeju Sohn

Member

Dr. Heeju Sohn is currently an Assistant Professor of Sociology at Emory University with graduate training in Demography (Ph.D.) and Information Engineering (M.Eng). Dr. Sohn completed her NIH-funded (K99/R00) postdoctoral training at UCLA's Health Policy and Management and California Center for Population Research. Her research examines how unequal safety-nets exacerbates health and social disadvantages among marginalized and vulnerable groups in the United States. Her work directly addresses knowledge gaps stemming from limited data by developing new methods to combine and analyze openly available data sources. An ongoing project quantified key outcomes—health and rates of deportation—among undocumented immigrants living in the United States by leveraging data from the Survey of Income and Program Participation, Los Angeles Family and Neighborhood Survey, and the Survey of Migration at the North Border of Mexico ((EMIF, [Encuesta sobre Migración en la Frontera Norte de México])). Dr. Sohn has also worked as an expert consultant to the United Nations on estimating mortality patterns in data-sparse contexts such as armed conflicts and severe disasters.

Salil Vadhan

Member

Salil Vadhan is the Vicky Joseph Professor of Computer Science and Applied Mathematics in the Harvard School of Engineering and Applied Sciences. His research in theoretical computer science spans computational complexity, cryptography, and data privacy. His work on data privacy includes numerous results delineating the border between what is possible and impossible with differential privacy, with recent work more focused on bringing differential privacy to practice. For the past decade, Vadhan has led the Harvard Privacy Tools Project, a broad effort to advance a multidisciplinary understanding of data privacy issues and build computational, statistical, legal, and policy tools to help address these issues in a variety of contexts. He co-founded and co-directs OpenDP, a community effort to build trustworthy, open-source software tools for statistical analysis of sensitive private data with the strong protections of differential privacy. Vadhan is a Simons Investigator and an ACM Fellow, and has received a Godel Prize, a Guggenheim Fellowship, a Bowden Award for Outstanding Research in Privacy-Enhancing Technologies, and the ACM Doctoral Dissertation Award. He received his PhD in Applied Mathematics from MIT in 1999. He serves without compensation on two advisory boards: the Validation Server Advisory Board at the Urban Institute and for the Abdul Latif Jameel Poverty Action Lab (J-PAL) Innovations in Data and Experiments for Action (IDEA) Initiative.

Jennifer Van Hook

Member

Jennifer Van Hook is Roy C. Buck Professor of Sociology and Demography at the Pennsylvania State University, and non-resident fellow at the Migration Policy Institute. Her research focuses on the demographics of immigrant populations and the socioeconomic integration of immigrants and their children. She received the Clifford C. Clogg Award for Mid-Career Achievement in 2016 and was elected to the Sociological Research Association in 2019. She is currently the Vice President of the Population Association of America. She received her Ph.D. in sociology at the University of Texas-Austin in 1996. She served on the NASS panel "Reengineering the SIPP" from 2007 to 2009.