## Workshop on The Implications of Using Multiple Data Sources for Major Survey Programs May 16 and 18, 2022 Workshop Presenter Biosketches

Randall Akee is an associate professor in the Department of Public Policy and American Indian Studies at UCLA. Previously, he served as a David M. Rubenstein Fellow in Economic Studies at the Brookings Institution. Dr. Akee completed his doctorate at Harvard University in June 2006. Dr. Akee is an applied microeconomist and has worked in the areas of Labor Economics, Economic Development and Migration. He has conducted research on the determinants of migration and human trafficking; universal basic income programs on educational attainment, voting and obesity; and the impact of the Earned Income Tax Credit on intergenerational mobility across race groups. He has conducted research on several American Indian reservations, Canadian First Nations, and Pacific Island nations in addition to working in various Native Hawaiian communities. Previously, he served on the National Advisory Council on Race, Ethnic, and Other Populations at the US Census Bureau. He is also a Research Associate at the National Bureau of Economic Research.

Anil Arora is an experienced senior public official, having worked at Statistics Canada for over 25 years leading significant programs and transformations. He was appointed Chief Statistician of Canada in September, 2016. He has also served in policy and regulatory roles in the Government of Canada at Natural Resources Canada and Health Canada. Mr. Arora has led substantive international initiatives, working with the United Nations and the OECD, and received numerous prestigious awards for leadership. He serves on a number of Boards and is active in community events and social causes. Mr. Arora received a Bachelor of Science from the University of Alberta, with subsequent studies in computer science. He holds a graduate certificate in public sector management and governance from the University of Ottawa and the Government of Canada's Advanced Leadership Development Program.

**Jean-François Beaumont** is a Senior Statistical Advisor at Statistics Canada. Over his career he has conducted development and research projects on several topics such as statistical data integration, small area estimation, treatment of missing values in surveys, bootstrap variance estimation and other estimation issues for sample surveys. He is currently the editor of the Survey Methodology Journal and the president of the Survey Methods Section of the Statistical Society of Canada. Beaumont has delivered many invited presentations and courses including the opening address of the colloque francophone sur les sondages in 2018. He has also recently been invited to give a Morris Hansen Lecture planned for 2022. Beaumont obtained a master's degree in statistics from Laval University.

Lawrence D. Bobo (NAS) is dean of social science, the W. E. B. Du Bois professor of the social sciences, and holds the title of Harvard College professor (2018-2023) at Harvard University. He has served as chair of the Department of African and African American Studies. He holds appointments in the Department of Sociology and the Department of African and African American Studies. His research focuses on the intersection of social psychology, social inequality, politics, and race. Bobo is an elected member of the National Academy of Science and of the American Philosophical Society. He is also an elected fellow of both the American Academy of Arts and Sciences and of the American Association for the Advancement of Science. He is a member of the Academies' Committee on National Statistics. He is a member of

the board of directors and board vice-chair of the American Institutes for Research. He is a Guggenheim fellow, an Alphonse M. Fletcher Sr. fellow, a fellow of the Center for Advanced Study in the Behavioral Sciences, and a Russell Sage Foundation visiting scholar. He was elected the 2017 W. E. B. Du Bois fellow of the American Academy for Political and Social Science. Bobo has an M.A. and Ph.D. in sociology from the University of Michigan.

**Kreg Steven Brown** is a senior research associate in the Center on Labor, Human Services, and Population and associate director of the Racial Equity Analytics Lab at the Urban Institute. He regularly leads and collaborates on research and policy advising projects that explore sources of and solutions to racial inequalities in economic opportunity. His primary research focuses on employment, particularly career pathways, earnings, and workplace protections; financial wellbeing; and economic mobility. Previous work includes federal evaluation and academic research on segregation and homeownership, access to affordable housing, and educational equity. Brown received his bachelor's from Princeton University and his master's in sociology from Harvard University, where he was also a fellow in the Multidisciplinary Program for the Study of Inequality and Social Policy at Harvard Kennedy School.

**Haoyi Chen** is the Coordinator of the Inter-Secretariat Working Group on Household Surveys. Before she joined the current position in September 2019, she led the programme on international migration statistics at the UN Statistics Division. She has also worked on various statistical areas including gender statistics, population censuses, civil registration and vital statistics. She holds a Ph.D degree in Statistics from the University of Florida.

Mick P. Couper is a research professor at the Survey Research Center in the Institute for Social Research at the University of Michigan. Couper's current research interests include survey non-response, design and implementation of survey data collection, effects of technology on the survey process, and computer-assisted interviewing, including both interviewer-administered (CATI and CAPI) and self-administered (web, audio-CASI, IVR) surveys. Many of his current projects focus on the design of web, smartphone and mixed-mode surveys. Couper is a current member of the National Academies' Committee on National Statistics and has previously served on their Panel on Redesigning the BLS Consumer Expenditures Surveys, Panel on the Research on Future Census Methods, and the Oversight Committee for the Workshop on Survey Automation. He has an M.Soc.Sc. in sociology from the University of Cape Town, South Africa, an M.A. in applied social research from the University of Michigan, and Ph.D. in sociology from Rhodes University in South Africa.

Jessica Faul is a Research Associate Professor in the U of M's Survey Research Center, Co-Investigator of the Health and Retirement Study, and Co-Director of the Biospecimen Lab at the Institute for Social Research. Dr. Faul's work focuses on socioeconomic predictors of health and health inequalities across the life course. Her research integrates biological, genetic, and social science data. Dr. Faul also currently oversees several administrative and contextual data linkages for the HRS, including to data from the Centers for Medicare & Medicaid Services.

**Michael F. Goodchild** is Emeritus Professor of Geography at the University of California, Santa Barbara. His current research interests center on geographic information science, spatial analysis, and uncertainty in geographic data. He was editor of Geographical Analysis between 1987 and

1990 and editor of the Methods, Models, and Geographic Information Sciences section of the Annals of the Association of American Geographers from 2000 to 2006. He serves on the editorial boards of ten other journals and book series, and has published over 15 books and 550 articles. He was Chair of the National Research Council's Mapping Science Committee from 1997 to 1999, and of the National Science Foundation's Advisory Committee on Social, Behavioral, and Economic Sciences from 2008 to 2010. He was elected member of the National Academy of Sciences and Foreign Member of the Royal Society of Canada in 2002, member of the American Academy of Arts and Sciences in 2006, and Foreign Member of the Royal Society and Corresponding Fellow of the British Academy in 2010; and in 2007 he received the Prix Vautrin Lud. He received his PhD in geography from McMaster University in 1969, and has received five honorary doctorates.

**Robert M. Groves** (NAS/NAM) is executive vice president and provost of Georgetown University, where he is also the Gerard J. Campbell professor in the Department of Mathematics and Statistics and a professor in the Department of Sociology. Prior to joining Georgetown as provost, he served as director of the U.S. Census Bureau (2009-2012) after being appointed by President Barack Obama. Previously, he was director of the University of Michigan Survey Research Center and research professor at the Joint Program in Survey Methodology at the University of Maryland. He also served as associate director for research and methodology of the U.S. Census Bureau (1990-1992). His research focuses on the effects of the mode of data collection on responses in sample surveys, the social and political influences on survey participation, the use of adaptive research designs to improve the cost and error properties of statistics, and how public concerns about privacy affect attitudes toward statistical agencies. He is an elected member of the National Academy of Sciences (NAS) and the National Academy of Medicine (NAM). He has been chair of the Academies' Committee on National Statistics since 2017; served as a member of CNSTAT (2000-2006); as a member of DBASSE (2014-2016); and on numerous Academies boards, panels, and committees, including chair of the Panel on Improving Federal Statistics for Policy and Social Science Research Using Multiple Data Sources and State-of-the-Art Estimation Methods. He is an elected fellow of the American Statistical Association and an elected member of the International Statistical Institute and the American Academy of Arts and Sciences. He has an A.B. in sociology from Dartmouth College and an M.A. and Ph.D. in sociology from the University of Michigan.

Hilary Hoynes is professor of public policy and economics and holds the Haas distinguished chair in economic disparities at the University of California Berkeley where she also co-directs the Berkeley Opportunity Lab. Her research focuses on poverty, inequality, food and nutrition programs, and the impacts of government tax and transfer programs on low income families. Current projects include evaluating the effects of access to the social safety net in early life on later life health and human capital outcomes, examining the effects of the Great Recession on poverty, and the role of the safety net in mitigating income losses. Hoynes is a member of the American Academy of Art and Sciences and a fellow of the Society of Labor Economics. She has served as co-editor of the American Economic Review and the American Economic Journal: Economic Policy and is on the editorial board of the American Economic Review: Insights. She currently serves on the National Academies' Committee on National Statistics and previously on the committee on Building an Agenda to Reduce the Number of Children in Poverty by Half in

10 Years. Hoynes received her B.A. in economics and mathematics from Colby College, and her Ph.D. in economics from Stanford University.

Frauke Kreuter is a professor of Survey Methodology at the University of Maryland and Professor of Statistics and Data Science for the Social Sciences and Humanities at the University of Munich (Germany). After finishing her term as director of the Joint Program in Survey Methodology, Frauke Kreuter co-founded and co-directs the Data Science Centers at the University of Maryland (USA) and Mannheim (Germany). Frauke also led for about a decade the statistical methods group at the Institute for Employment Research, which is part of the German Federal Employment Agency, and had research visits with private sector companies such as Meta, formerly known as Facebook. Frauke Kreuter is an elected fellow of the American Statistical Association, recipient of the AAPOR Warren Mitofsky Innovators Award and the ASA Link Lecture Award honoring contributions to the US federal statistical system's ability to meet new data demands. In addition to her academic work Dr. Kreuter is the Founder of the International Program for Survey and Data Science, developed in response to the increasing demand from researchers and practitioners for the appropriate methods and right tools to face a changing data environment, and Co-Founder of the Coleridge Initiative, whose goal is to accelerate data-driven research and policy around human beings and their interactions for program management, policy development, and scholarly purposes by enabling efficient, effective, and secure access to sensitive data about society and the economy.

Janet L. Lauritsen is Curators' Distinguished Professor of Criminology and Criminal Justice at the University of Missouri – St. Louis. Her research focuses on the causes and consequences of victimization, and the social and historical contexts of crime and victimization. Her research has been funded by the National Science Foundation, the Bureau of Justice Statistics, and the National Institute of Justice. Dr. Lauritsen served as Chair of the Panel on Modernizing the Nation's Crime Statistics for the Committee on National Statistics of the National Academies of Sciences, Engineering, and Medicine. She served as Co-Editor of the journal Criminology from 2018-2020, and was named Fellow of the American Society of Criminology in 2013. She is currently President of the American Society of Criminology.

Kimberlyn Leary began her career as a clinical psychologist working as a practitioner to improve access to diverse communities. Her early work on negotiated transactions in psychotherapy expanded to broader research on negotiation, conflict transformation, and change management. She is an associate professor of psychology at the Harvard Medical School/McLean Hospital, an associate professor in the Department of Health Policy and Management at the Harvard T.H. Chan School of Public Health, and a lecturer in public policy at the Harvard Kennedy School, where she is co-faculty director of the Bloomberg Harvard City Leadership Initiative's Research and Curriculum Program. Leary served as an adviser to the Obama White House from 2014-2016, working with the White House Council on Women and Girls to develop the Advancing Equity initiative (which focused on improving life outcomes for women and girls of color). Leary later served on the Biden-Harris transition as a member of the Agency Review Team for the Office of National Drug Control Policy and was recently detailed to the Office of Management and Budget and the Domestic Policy Council through an Intergovernmental Personnel Act. She is also a Senior Vice President at the Urban Institute.

Margaret C. Levenstein, an economist, is the director of the Inter-university Consortium for Political and Social Research (ICPSR) at the University of Michigan, research professor for both the Survey Research Center and the School of Information and adjunct professor of business economics and public policy at the Ross School of Business at the University of Michigan. Levenstein first joined ISR's Survey Research Center (SRC) in 2003 as executive director of the Michigan Census Research Data Center (MCRDC), a joint project with the U.S. Census Bureau. She has taken an active role at ISR, joining the director's advisory committee on diversity in 2009, and serving as chair of ISR's diversity, equity, and inclusion strategic planning committee, and as the liaison to the larger university program. Levenstein's research and teaching interests include industrial organization, competition policy, business history, data confidentiality protection, and the improvement of economic statistics. She is associate chair of the American Economic Association's Committee on the Status of Women in the Economics Profession and past president of the Business History Conference. Levenstein has a B.A. degree from Barnard College, Columbia University, and a Ph.D. in economics from Yale University.

Helen Levy is a research professor at the Institute for Social Research and the School of Public Health, with a courtesy appointment at the Ford School. She is a co-investigator on the Health and Retirement Study, a long-running longitudinal study of health and economic dynamics at older ages. Her research interests include the causes and consequences of lacking health insurance, evaluation of public health insurance programs, and the role of health literacy in explaining disparities in health outcomes. Before coming to the University of Michigan she was an assistant professor at the Harris Graduate School of Public Policy Studies at the University of Chicago. She is a research associate at the National Bureau of Economic Research and served as a senior economist to the President's Council of Economic Advisers in 2010—11. She received a PhD in economics from Princeton.

**Sharon Lohr** is a professor emerita at Arizona State University, where she was Dean's Distinguished Professor of Statistics until 2012. From 2012 to 2017, as a vice president at Westat, she developed survey designs and statistical analysis methods for use in transportation, public health, crime measurement, and education. Her research interests include sample surveys, design of experiments, hierarchical models, and combining multiple sources of data. She is the author of numerous research articles as well as the books Sampling: Design and Analysis and Measuring Crime: Behind the Statistics. She is an elected fellow of the American Statistical Association, an elected member of the International Statistical Institute, and the inaugural recipient of the Gertrude M. Cox Statistics Award for contributions to the practice of statistics. Her invited presentations include selection as the Morris Hansen Lecturer and the Deming Lecturer. Lohr currently serves on the National Academies' Committee on National Statistics. She has also served two previous Academies' committees: the Panel on Improving Federal Statistics for Policy and Social Science Research Using Multiple Data Sources and State-of-the-Art Estimation Methods and the Panel on the Functionality and Usability of Data from the American Community Survey. She earned her B.S. degree in mathematics from Calvin College, and her Ph.D. in statistics from the University of Wisconsin-Madison.

**David Mancuso** is director of the Research and Data Analysis Division of the Washington State Department of Social and Health Services. He leads a team of approximately 100 researchers and

IT professionals performing analytical work across the spectrum of publicly funded social and health services in Washington State. His division developed and maintains the agency's Integrated Client Databases, a powerful federated data environment linking Medicaid medical, behavioral health, and long-term care data with social service, criminal justice, housing, child welfare, education, employment, and vital statistics data. Mancuso has expertise in quasi-experimental program evaluation, performance measurement and the development of predictive modeling technologies to support intervention targeting and care management in Medicaid delivery systems. Mancuso co-developed the Predictive Risk Intelligence System (PRISM), the predictive modeling tool supporting physical and behavioral health interventions for Medicaid and dual Medicare-Medicaid beneficiaries in Washington State. Mancuso received his Ph.D. in economics from Stanford University.

Ramiro Martínez, Jr. is Professor in the School of Criminology and Criminal Justice and the Department of Sociology/Anthropology at Northeastern University in Boston, Massachusetts. His work contributes to violent crime research and focuses on the causes and consequences of lethal violence across ecological settings, and, how, violent deaths vary across racial/ethnic and immigrant groups. He collects violence data directly from police departments and medical examiner offices in cities on or by the U.S./Mexican border and links to local population data. His research has been funded by the National Science Foundation, the Harry Frank Guggenheim Foundation, and the National Institute of Justice. A former National Institute of Justice Du Bois Fellow (2001), he received the American Sociological Association Latin@ Section Founder's Award for contributions to the section, scholarly work, research, mentoring, and path-setting achievements (2015). A native of San Antonio, Texas, he received a Ph.D. in Sociology from The Ohio State University in 1992. He is currently Vice-President of the American Society of Criminology.

**Dr. Mendez-Costabel** holds an agronomy degree (BSc) from the National University of Uruguay, and two Viticulture degrees, one from The University of California at Davis (MSc) and the other from The University of Adelaide in Australia (PhD). He has worked over fifteen years in the agricultural sector covering a wide range of digital farming and precision agriculture-related roles, including data scientist and Geographical Information Systems Manager for E&J Gallo Winery in California. Dr. Mendez-Costabel joined Monsanto (now Bayer) back in 2016 and led the Enterprise Geospatial Data Engineering organization in the Crop Science Division. He worked globally to design and build the enterprise cloud-based geospatial platform, supporting the collection of environmental, field, and sensor-based datasets and the creation of derived insights leveraging ML/AI. He is currently the VP of Vegetables Research & Development leading the Analytics and Pipeline Design group to advance the organizational digital strategy towards better and more sustainable products using data and analytics globally.

Lisa Mirel is the Chief of the Data Linkage Methodology and Analysis Branch in the Division of Analysis and Epidemiology at the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention. Ms. Mirel directs the NCHS Data Linkage program, leading Agency efforts to integrate NCHS data collection systems with external sources of health related administrative data, to both expand the analytic potential of NCHS data and to develop innovative data resources that better inform public health policy and fill critical information gaps. She also oversees the development and implementation of state-of-the-art data linkage

methodologies and data quality assessment tools. Her work has focused primarily on integrating multiple sources of data through data linkage and advising on survey design and estimation techniques for large scale national health surveys. She received her Master of Science degree in Biostatistics from the University of Michigan's School of Public Health.

Herbert Nkwimi Tchahou is currently a senior methodologist at the agriculture section in economic statistical method division at Statistics Canada. After working in a genetics laboratory at the Montreal Heart Institute as biostatistician, he has joined Statistics Canada as a survey methodologist in 2011. He spent most of his career as a methodologist on various programs such as the Environmental survey, Census of the population as well as surveys on energy and transportation. He has a master's degree in statistical and numerical engineering as well as a master's degree in probability and statistics.

**Jonathan Rothbaum** is a research economist in the Social, Economic and Housing Statistics Division of the U.S. Census Bureau. He works on the integration of administrative data into the production of income, resource, and wellbeing statistics. His research has focused on nonresponse, measurement error, and data quality in income surveys and on using surveys to study intergenerational mobility in the United States. Prior to joining the Census Bureau in 2013, Rothbaum received his doctorate in economics from George Washington University.

**Joseph Salvo** is an Institute Fellow within the Biocomplexity Institute and Initiative at the University of Virginia. He has extensive experience in "all things census," making presentations on demographic subjects to a wide range of groups, and the management of major demographic projects involving the analysis of large data sets for local applications related to policy formulation, needs assessments, and program planning and implementation. Dr. Salvo's work has been crucial to the formation of more widespread evidence-based policy, as his expertise in census data history, methods, operations, and products makes him uniquely able to analyze demographic data and explain this information to policymakers, who are in turn able to understand and employ this data during policy formation. For more than 25 years Dr. Salvo was the Chief Demographer for New York City, in the Department of City Planning. He is currently Senior Advisor to the National Conference on Citizenship and serves on the CNSTAT Panel to Evaluate the Quality of the 2020 Census. He was co-chair of the NAS Working Group on Data Confidentiality and 2020 Census data products, and worked on behalf of the American Statistical Association (ASA)'s Task Force conducting an analysis of 2020 Census data quality. He has given testimony before the House Sub-Committee on Oversight and Reform on multiple occasions, and served as an expert witness in litigation involving the census.

Robert L. Santos is the 26th director of the U.S. Census Bureau. Santos specializes in quantitative and qualitative research design, including program evaluation, needs assessments, survey methodology and survey operations. He also has expertise in demographic and administrative data, decennial censuses, social policy research and equity issues in research. Santos' career spans more than 40 years in survey research, statistical design and analysis, and executive-level management. He previously served for 15 years as vice president and chief methodologist at the Urban Institute and directed its Statistical Methods Group. He was executive vice president and partner of NuStats, a social science research firm in Austin, Texas. Santos served as the 2021 president of the American Statistical Association (ASA) and is an

ASA Fellow and recipient of the ASA Founder's Award in 2006. He was the 2014 president of the American Association for Public Opinion Research (AAPOR) and received the 2021 AAPOR Award for Exceptionally Distinguished Achievement. He earned a B.A. in mathematics from Trinity University in San Antonio and an M.A. in statistics from the University of Michigan at Ann Arbor.

**Judith A. Seltzer** is research professor and professor emerita of sociology at the University of California, Los Angeles. She directed the California Center for Population Research at UCLA from 2013-2018. Previously, she was on the faculty of the University of Wisconsin-Madison, where she contributed to the development and implementation of the National Survey of Families and Households. Her research interests include kinship patterns, intergenerational obligations, relationships between nonresident fathers and children, and how legal institutions and other policies affect family change. She is especially interested in kinship institutions that are in flux, such as marriage and cohabitation in the contemporary United States or divorced and non-marital families. She also explores ways to improve the quality of survey data on families, and in 2013, Seltzer and her colleagues added a module with family rosters to the Panel Study of Income Dynamics to provide new data on U.S. family networks. She is a member of the National Academies' Committee on National Statistics, and has severed previously on their Committee on Reengineering Census Operations and on the Panel on Residence Rules in the Decennial Census, the Panel on the Design of the 2010 Census Program of Evaluations and Experiments, and the Panel to Review the 2010 Census. She was president of the Population Association of America in 2016, and she previously served on the Board of Overseers for the General Social Survey. She has a B.A. in sociology from Princeton University and both an M.A. and Ph.D. in sociology from the University of Michigan.

Erica L. Smith is Unit Chief of the Law Enforcement Incident-Based Statistics Unit at the Bureau of Justice Statistics. She has more than 20 years of experience in conducting research and data collection in the field of criminal justice. Ms. Smith directs the National Crime Statistics Exchange Initiative at BJS, a joint effort with the FBI to increase the reporting of incident-based administrative crime data by law enforcement agencies to the FBI's National Incident-Based Reporting System. She oversees the development of estimation methods that will use these administrative data to generate national estimates of crime and arrest. Her recent research interests focus on alternative and novel methods for using administrative data to better understand crime and public safety, including methods to connect calls for service and other police event data to crime incidents.

Elizabeth A. Stuart is Bloomberg Professor of American Health in the Department of Mental Health at the Johns Hopkins Bloomberg School of Public Health, with joint appointments in the Department of Biostatistics and the Department of Health Policy and Management, and serves as Associate Dean for Education at the school. Stuart has extensive experience in methods for estimating causal effects for program and policy evaluation, particularly as applied to mental health, public policy, and education. Her primary research interests include designs for estimating causal effects in non-experimental settings (such as propensity scores), and methods to assess and enhance the generalizability of randomized trials to target populations. She has received research funding from the National Science Foundation, the Institute of Education Sciences, the WT Grant Foundation, and the National Institutes of Health. She is a member of

the National Academies' Committee on National Statistics. Stuart has served on advisory panels for the U.S. Department of Education and the Patient Centered Outcomes Research Institute. She has received the mid-career award from the Health Policy Statistics Section of the American Statistical Association (ASA), the Gertrude Cox Award for applied statistics, Harvard University's Myrto Lefkopoulou Award for excellence in Biostatistics, the Rod Little Lectureship from the University of Michigan's Department of Biostatistics, and the inaugural Society for Epidemiologic Research Marshall Joffe Epidemiologic Methods award. She is a fellow of the ASA and received her Ph.D. in statistics from Harvard University.

Derek Veitenheimer is the Director of the Bureau of Justice Information and Analysis (BJIA) at the Wisconsin Department of Justice. With over fifteen years of experience within Wisconsin criminal justice data collection programs, Derek has thorough knowledge of the operations and functions of the criminal justice system, has extensive data management and analysis experience, and has led the efforts to enhance and improve the functioning of the state's Uniform Crime Reporting program and the state's Statistical Analysis Center. He previously served as the president of the national Association of State Uniform Crime Reporting Programs, and currently serves as the chairperson of the FBI's Uniform Crime Reporting Subcommittee. Derek also assisted with the development of Wisconsin's Traffic Stop Data Collection and Wisconsin Use-of-Force Data Collection programs and has ample knowledge in the collection, research, and analysis of criminal justice information among state and local data systems.

**Shaowen Wang** is a professor and head of the Department of Geography and Geographic Information Science; and an affiliate professor of the Department of Computer Science, Department of Urban and Regional Planning, and School of Information Sciences at the University of Illinois at Urbana-Champaign (UIUC). He has served as founding director of the CyberGIS Center for Advanced Digital and Spatial Studies at UIUC since 2013. His research interests include geographic information science and systems (GIS), advanced cyberinfrastructure and cyberGIS, complex environmental and geospatial problems, computational and data sciences, high-performance and distributed computing, and spatial analysis and modeling. He received the National Science Foundation CAREER Award in 2009. He was named a Helen Corley Petit Scholar for 2011-2012, Centennial Scholar for 2013-2016, and Richard and Margaret Romano Professorial Scholar for 2018-2021 by UIUC's College of Liberal Arts and Sciences. He served as a member of the Committee on Models of the World for the National Geospatial-Intelligence Agency from 2015 to 2016 and as a member of the Board on Earth Sciences and Resources of the National Academies of Sciences, Engineering, and Medicine from 2015 to 2020. He received a B.S. in computer engineering from Tianjin University, an M.S. in geography from Peking University, and a Master of computer science and a Ph.D. in geography from the University of Iowa.

**Dr. Clarence Wardell III** is the Chief Data and Equity Officer with the White House American Rescue Plan Team, and a Senior Advisor for Policy Implementation and Delivery with the Domestic Policy Council. Clarence most recently served on the Biden-Harris Transition leading tech strategy & delivery across the domestic and economic policy team, and prior to working on transition, he was the Vice President of Solutions at Results for America where he supported Bloomberg Philanthropies' What Works Cities Initiative along with other local, state, and federal efforts to scale evidenced-based solutions to address a wide range of challenges. Clarence was

previously a Presidential Innovation Fellow and member of the U.S. Digital Service during the Obama Administration where he co-led the White House Police Data Initiative, and prior to that was a Research Scientist at CNA. He holds a BSE in Computer Engineering from the University of Michigan and a PhD from the Georgia Institute of Technology's School of Industrial and Systems Engineering.

Linda J. Young is chief mathematical statistician and director of Research and Development of USDA's National Agricultural Statistics Service. She oversees efforts to continually improve the methodology underpinning the agency's collection and dissemination of data on every facet of U.S. agriculture. A major component of her work has been collaborative with researchers in the agricultural, ecological, and environmental sciences. Her recent research has focused on linking disparate data sets and the subsequent analysis of these data using spatial statistical methods. Dr. Young has served in a broad range of offices within the professional statistical societies, including president of the Eastern North American Region of the International Biometric Society, vice-president of the American Statistical Association, chair of the Committee of Presidents of Statistical Societies, and member of the National Institute of Statistical Science's Board of Directors. Dr. Young obtained her bachelor's and master's degrees in mathematics from West Texas State University and her Ph.D. in statistics from Oklahoma State University.