

April 2022 • Issue #538

AMSTATNEWS

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CHALLENGES LOOM for Chief Statistician of the US

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Former CSOTUS, Discuss the Challenges and Opportunities Ahead

ALSO:

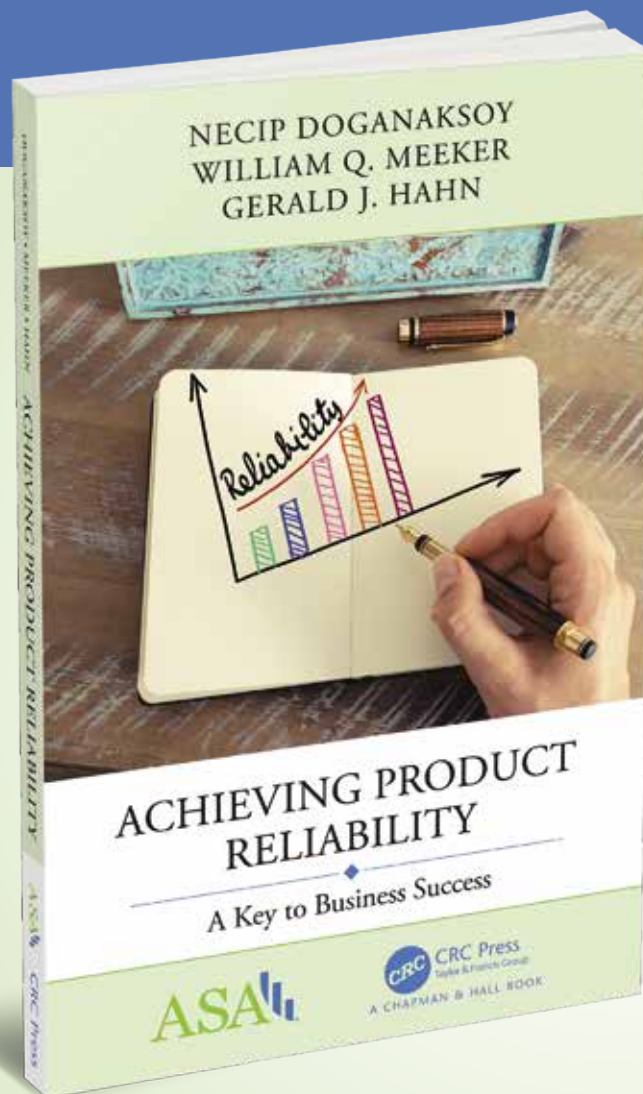
JEDI Corner: Infusing DEI
Learning Into an Elementary
Statistics Class

ICHPS Organizers Share Hopes,
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Arizona

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– Carolyn Morgan,
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American Statistical Association



The American Statistical Association is the world's largest community of statisticians. The ASA supports excellence in the development, application, and dissemination of statistical science through meetings, publications, membership services, education, accreditation, and advocacy. Our members serve in industry, government, and academia in more than 90 countries, advancing research and promoting sound statistical practice to inform public policy and improve human welfare.

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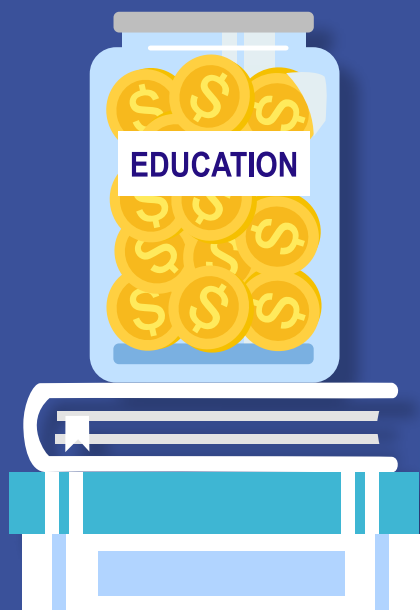
- 34 **STATtr@k**
Postdocs Share Experiences at NISS Graduate Student Networking Event

STATtr@k is a column in *Amstat News* and a website geared toward people who are in a statistics program, recently graduated from a statistics program, or recently entered the job world. To read more articles like this one, visit the website at <http://stattrak.amstat.org>. If you have suggestions for future articles, or would like to submit an article, please email Megan Murphy, *Amstat News* managing editor, at megan@amstat.org.

- 36 **STATS4GOOD**
Earth Day Activities to Make an Impact Using Data for Good

This column is written for those interested in learning about the world of Data for Good, where statistical analysis is dedicated to good causes that benefit our lives, our communities, and our world. If you would like to know more or have ideas for articles, contact David Corliss at davidjcorliss@peace-work.org.





Hey, Teachers!

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Apply for National Council of Teachers of Mathematics Education Trust grants, scholarships, and awards. Funding ranges from \$1,500 to \$24,000 and is available to help math teachers, prospective teachers, and other math educators improve the teaching and learning of mathematics. The deadline to apply is May 1. www.nctm.org/Grants



Celebrate Statistics This Month

April is Mathematics and Statistics Awareness Month (MSAM)! Enjoy the poster inside this issue and visit the MSAM website at www2.amstat.org/mathstatmonth to get ideas about ways to celebrate. Also, follow @AmstatNews on Twitter during April and share your favorite math books, games, T-shirt designs, posters, news stories, and videos using #MathStatMonth.

departments

31 meetings

CSP 2022: The Art and Science of Statistical Practice

ICHPS Organizers Share Hopes, Plans for 2023 Conference in Arizona



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Big Tent for Statistics and Data Science

“**C**ertainly, data science intersects with numerous other disciplines and areas of research. Indeed, it is difficult to think of an area of science, industry, commerce, or government that is not in some way involved in the data revolution.”

This thought was true in 2015 when it was included in an ASA Board statement on the role of statistics and data science, and it remains true today. When the statement was issued, the ASA promised to be the “Big Tent for Statistics and Data Science.” I would like to share the work we are doing to fulfill this promise and extend our leadership by highlighting three important initiatives: the formation of the Committee on Data Science and Artificial Intelligence; our ongoing efforts to participate in data science program accreditation; and the NSF-funded National Data Mine Network project.

Data Science and Artificial Intelligence

I had the pleasure of working with **Mark Glickman** on the ad hoc Data Science Advisory Committee Task Force. The committee specifically focused on generating ideas for the ASA to consider that fell into two main categories. The first category consisted of ideas related to providing greater data science exposure and initiatives to ASA members. The second consisted of ways in which the ASA could become more of a home for data scientists who were not already ASA members. As the board discussed the committee’s recommendations, we recognized it was important to draw upon individuals who could advise us on opportunities and strategic moves.

I am delighted to announce that Mark has agreed to chair the newly approved Committee on Data Science and Artificial Intelligence. The committee’s charge is the following:

Recognizing the importance of statistics to data science and artificial intelligence and recognizing that these domains are an integral component of our society that will continue to grow in their contributions and influence, the committee will advise the board of directors and the ASA in general in this arena.

ASA Committee on Data Science and AI Members

Mark Glickman (Chair), Senior Lecturer on Statistics, Harvard University

Ashley Antonides, Chief AI Officer, Anno.AI

Mine Çetinkaya-Rundel, Professor of the Practice and Director of Undergraduate Studies, Duke University

Barbara Engelhardt, Professor, Princeton University

Lada Kyj, Head of Investment Management Fintech Quant Strategies, Vanguard Group

Eric Laber, Professor of Statistical Science and Biostatistics & Bioinformatics/Research Professor of Global Health, Duke University

Juan Lavista Ferres, Chief Scientist and Lab Director, Microsoft AI for Good Research Lab

Wendy Martinez, Director of the Mathematical Statistics Research Center, Bureau of Labor Statistics

Susan Paddock, Chief Statistician and Executive Vice President, NORC at the University of Chicago

Jun Yan, Professor, University of Connecticut



Katherine Ensor

“I am thrilled to have the opportunity to chair the ASA Committee on Data Science and AI,” said Mark. “Our committee is a diverse group of experts from academia, industry, and government who are enthusiastic about making a real impact. I am looking forward to meeting with the committee on a regular basis to develop ways to improve data science and AI resources for ASA members and to attract the involvement of non-ASA data scientists in ASA-led activities.”

This committee will fill an important role, ensuring statisticians are at the data science and artificial intelligence leadership table in all sectors.

CSAB Update

On April 21, 2021, the American Statistical Association became a full member of the CSAB (<https://csab.org>), joining the world's two largest professional and technical societies for computing—the Association for Computing Machinery (ACM) and the IEEE Computer Society (IEEE-CS). As the lead ABET member society for computing, CSAB is responsible for developing accreditation criteria and selecting, training, and assigning program evaluators in computer science, cybersecurity, data science, information systems, information technology, and software engineering. I am privileged to represent the ASA on the CSAB board of directors. Our participation has been enthusiastically welcomed by the other CSAB members.

Programs in data science and data analytics, which have previously not fallen under ABET's accreditation umbrella, are now eligible for ABET accreditation. There are two distinct ABET groups working on data science program accreditation criteria: the Applied and Natural Sciences Accreditation Commission (ANSAC) and Computing Accreditation Commission (CAC).

Representing our community as a member of the curriculum committees of both ANSAC and CAC is **Dave Hunter**, professor and former chair of the statistics department at Penn State. Guided by input from many of you, Dave has been able to contribute the perspective of our community. Our efforts led to the criteria reflecting the essential contributions of statistics, and we will continue to advocate for our profession. I encourage you to review and share comments on the draft criteria at <https://bit.ly/3qckaJW>.

The accreditation process requires a self-study, which is submitted by the department seeking accreditation. A review team is assigned to review the self-study and, ultimately, a site visit is scheduled. As part of our involvement, we will identify individuals to serve as program evaluators. This is an important role, and I am deeply grateful to **Ben Baumer** of Smith College and **Mine Çetinkaya-Rundel** of Duke University, who are serving as program evaluators. We are planning an information session at JSM 2022. To stay informed about our efforts, sign up to receive periodic updates at <https://bit.ly/3KJ0TI6>.

National Data Mine Network

In an effort to continue our work in data science, we have won a three-year, \$1.5 million grant from the National Science Foundation to ensure students from historically underrepresented groups have access to cutting-edge data science courses, research opportunities, and industry partnerships. **Mark Daniel Ward** (Purdue University) is the principal investigator (PI) for the project, with support from co-PIs Monica Jackson (American University), Donna LaLonde (American Statistical Association), Talitha Washington (Atlanta University Center Data Science Initiative), and me (Rice University).

Our goal is to create an educational ecosystem that makes data science knowledge and skills accessible and attractive to students. As Mark [Ward] shared, "Data science is exceedingly interdisciplinary, and this gives us a great opportunity both to engage students and also address the need for diversity in the workforce."

Students in the National Data Mine Network will use high-performance computing to solve data-driven challenges that arise in every sector of industry, including biomedical engineering, health care engineering, image processing, manufacturing, supply chain management, and transportation. A hallmark aspect of this program is the ability to work on real-world projects with mentors from industry.

The network will directly fund 300 undergraduate students at a cross-section of minority-serving institutions with 100 research stipends per year. To learn more about the project and ways you might contribute, sign up for updates at <https://bit.ly/3MXZq2m>.

I am immensely excited about the future of all three of the AI and data science undertakings. These initiatives reinforce and strengthen the contributions of statisticians to these important areas. A heartfelt thank you to our leaders committing their valuable time, energy, and insight to advance our community's perspective.

Sending well wishes for a wonderful April. I look forward to hearing from you.



Recognizing the ASA's Longtime Members

Each year, the ASA recognizes all members reaching a milestone of 35, 40, 45, or 50 years of membership. All members who joined 35 years or more ago are also extended an invitation to a reception at the annual JSM. If you believe you should appear in the list below, send an email to asainfo@amstat.org or call (703) 684-1221 to correct your record.

50+ Years

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Syed N.U.A. Kirmani	LeRoy T. Mattson	Ralph G. O'Brien	William J. Raynor	Arvind K. Shah	Alan R. Tupek
Kenneth J. Koehler	Scott E. Maxwell	Michael W. O'Donnell Jr.	Domenic J. Reda	Mohammed A. Shayib	David L. Turner
Abba M. Krieger	Fred M. Mayes Jr.	Judith Rich O'Fallon	Paula K. Roberson	Patrick E. Shrout	Gregory W. Ulferts
Pieter M. Kroonenberg	Michael J. Mazu	Walter W. Offen	Rosemary A. Roberts	Stanley A. Shulman	Jessica M. Utts
Naoto Kunitomo	Donna K. McClish	Patrick D. O'Meara	Edwin L. Robison	Andrew F. Siegel	Esa Ilkka Uusipaikka
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Kanti V. Mardia	David Oakes	Volker W. Rahlfs	William L. Seaver	David C. Trindade	Farroll T. Wright
Mary A. Marion	Kevin F. O'Brien	Gopa Ray	Joseph Sedransk	Claire Tsao	Tommy Wright
		Rose M. Ray		Kam-Wah Tsui	Marvin Yablon

40-44 Years

Michael A. Adena	Mohammad Ahsanullah	Jeanne M. Aldred	Yasuo Amemiya	Thomas Arbutiski	John Bailer
Joseph Adwere-Boamah	Christian M. Alaouze	Melvin T. Alexander	John Angle	Stephan Arndt	David L. Banks
Sung K. Ahn	Adelin I. Albert	Paul D. Allison	John E. Angus	Jenny A. Baglivo	Chris M. Barker

Moraye B. Bear	Ronald Christensen	David Fairley	Susan G. Hilsenbeck	Bertram Krumm	Ruth M. Mickey
Mark P. Becker	Christy Chuang-Stein	Frederick W. Faltin	Joseph G. Hirschberg	Katherine B. Krystinik	Steven P. Millard
Edward J. Bedrick	Constance F. Citro	Dean H. Fearn	Edward C. Hirschland	Lynn Kuo	Eva R. Miller
Alexander E. Belinfante	Murray K. Clayton	Michael B. Feil	Doug A. Hlavacek	Jurate M. Landwehr	Michael F. Miller
Michael E. Bellow	Daren B. H. Cline	Luisa T. Fernholz	Myron Hlynka	Thomas Lane	Renee H. Miller
Charles C. Berry	Paul E. Coffman Jr.	Eric Jeffrey Feuer	Lorrie L. Hoffman	Linda B. Lannom	Margaret A. Minkwitz
James Calvin Berry	Stephen H. Cohen	Dianne M. Finkelstein	David B. Holiday	Purushottam W. Laud	David H. Moen
Jonas V. Bilenas	Richard D. Cohn	Patrick E. Flanagan	Paul S. Horn	Lisa M. LaVange	Leyla K. Mohadjer
Bruce Steven Binkowitz	Michael Christopher Conlon	Dean A. Follmann	Carol C. House	Brian T. Leahy	Brian C. Monsell
Thomas R. Birkett	Richard S. Conway Jr.	T.A. Foster	Norma Faris Hubele	David J. LeBlond	Leslie M. (Lisa) Moore
David K. Blough	Nancy R. Cook	Arthur Fries	Esther Sid Hudes	Barbara A. Leczynski	Christopher H. Morrell
Carol Joyce Blumberg	Peyton J. Cook	Shayne C. Gad	Shelley Hurwitz	Lawrence M. Leemis	Linda L. C. Moss
David E. Booth, PSTAT	James A. Creiman	Michael A. Gates	Patricia A. Jacobs	John J. Lefante Jr.	Ronald P. Mowers
Richard C. Borden	Noel A. Cressie	Constantine Gatsonis	Debra J. Jacobson	Greg M. Lepak	Daniel H. Mowrey
Robert D. Bowser	Douglas E. Critchlow	Jeffrey J. Gaynor	Denis George Janky	Hans Levenbach	Robert A. Muenchen
Michael N. Boyd	Leonard A. Cupingood	Joseph C. Gfroerer	Guillermina Jasso	Wai K. Li	Nitis Mukhopadhyay
James E. Breneman	Subir Ghosh	Daniel R. Jeske	Daniel R. Jeske	Lillian S. Lin	Keith E. Muller
Pamela W. Broene	Michael E. Ginevan	B. Alan Johnson	B. Alan Johnson	Ernst Linder	Jay Munson
Thomas W. Broene	William J. Glynn	Gary R. Johnson	Gary R. Johnson	Barbara A. Lingg	Bengt Muthen
Roger L. Brown	A. Blanton Godfrey	Robert E. Johnson	Robert E. Johnson	Charles L. Liss	Haikady N. Nagaraja
William J. Browning	Alfred D. Godfrey	Wesley Orin Johnson	Wesley Orin Johnson	Joseph J. Locascio	Daniel Najjar
Judith A. Buchino	Miguel A. Gomez-Villegas	Albyn C. Jones	Albyn C. Jones	Wei-Yin Loh	Jayalakshmi Natarajan
Shelley B. Bull	Bradley A. Jones	Stephen W. Looney	Stephen W. Looney	James T. Love	William Navidi
Christine M. Bunck	Michael P. Jones	James T. Love	James T. Love	Joseph F. Lucke	Barry L. Nelson
Thomas E. Burk	Tzu-Cheg Kao	Joseph F. Lucke	Joseph F. Lucke	Helmut Luetkepohl	Larry Alan Nelson
Richard J. Caplan	John M. Karon	Michael J. LuValle	Michael J. LuValle	Michael J. LuValle	Dean V. Neubauer
Lynda T. Carlson	Richard L. Kasul	Donald Macnaughton	Donald Macnaughton	Donald Macnaughton	Michael A. Nolte
Richard Raymond Carlson	Charles R. Katholi	Laurentius Marais	Laurentius Marais	Laurentius Marais	Phillip N. Norton
John V. Castellana	Darryl Katz	James C. March	James C. March	James C. March	William I. Notz
Deborah A. Cernauskas	Sallie Keller	David A. Marker	David A. Marker	David A. Marker	Douglas W. Nychka
N. Rao Chaganty	Elizabeth J. Kelly	Paul J. Marovich	Paul J. Marovich	Paul J. Marovich	Yoshimichi Ochi
Subhabrata Chakraborti	Arthur J. Kendall	Adam T. Martinsek	Adam T. Martinsek	Adam T. Martinsek	Thomas W. O'Gorman
Raymond L. Chambers	Harry J. Khamis	Carl A. Mauro	Carl A. Mauro	Carl A. Mauro	William P. O'Hare
Charles W. Champ	Meena Khare	Charles Maynard	Charles Maynard	Charles Maynard	Akinori Ohashi
Promod K. Chandhok	KyungMann Kim	Kenneth F. McCue	Kenneth F. McCue	Kenneth F. McCue	Thomas H. Oliphant
Douglass S. Chapman	Robin Laurence Kirby	Peter McCullagh	Peter McCullagh	Peter McCullagh	George Ostrouchov
Ching-Shui Cheng	Genshiro Kitagawa	Allen A. McIntosh	Allen A. McIntosh	Allen A. McIntosh	Soo Peter Ouyang
Richard P. Chiacchierini	John C. Klensin	Raymond E. McIntyre	Raymond E. McIntyre	Raymond E. McIntyre	Albert Palachek
Yu-Kun Chiang	George J. Knafl	Gregory C. McLaughlin	Gregory C. McLaughlin	Gregory C. McLaughlin	Alberto Palloni
Vernon M. Chinchilli	John Miller Koester	Kenneth B. McRae	Kenneth B. McRae	Kenneth B. McRae	Franz Christian Palm
	Henryka K. Komanska	Shailendra S. Menjoge	Shailendra S. Menjoge	Shailendra S. Menjoge	J. Lynn Palmer
	Kallappa M. Koti	R. Daniel Meyer	R. Daniel Meyer	R. Daniel Meyer	Sastry G. Pantula
	Ken G. Kowalski				Robert A. Parker
	Lawrence Krasnoff				Robert J. Pavur
	Jeffrey P. Krischer				
	David H. Henry				

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Jane F. Pendergast	Javier Rojo	Paul R. Schneeman	Elizabeth C. Smith	Deborah L. Tasky	Alan H. Welsh
Elgin S. Perry	Jorge Luis Romeu	John R. Schoenfelder	Eric P. Smith	Jeffrey D. Tew	James G. Wendelberger
Kimberly T. Perry	Elvezio Ronchetti	Loren T. Schoof	Richard L. Smith	Brian J. Thelen	Joanne R. Wendelberger
John D. Pesek Jr.	Robin L. Rose	John D. Schoolfield	Richard J. Smith	Neal Thomas	Glenn Dean White Jr.
Gerald L. Phillips	Mitchell J. Rosen	Donald E. Schreiner Jr.	Steven M. Snapinn	David J. Thomson	David A. Whitney
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Gregory F. Piepel	Peter J. Rousseeuw	David W. Scott	Karen L. Snowdon-Way	Naitee Ting	John L. Wieting
Chester H. Ponikowski	Keith F. Rust	Gilg U.H. Seeber	Eric R. Sowe	Ruey-Shiong Tsay	William E. Wilkinson
Dudley L. Poston	Roland T. Rust	Bahman Shafii	Refk Soyer	Clyde Tucker	Thomas Reed Willemain
Paul N. Powell III	Jim Rutherford	Ramalingam Shanmugam	Gene D. Sprechini	Thomas P. Turiel	Christopher J. Williams
J. Michael Price	Pedro J. Saavedra	Steven J. Shapiro	Kadaba P. Srinath	David M. Umbach	Rupert R. Wilson
Louis H. Primavera	William H. Sachs	Simon J. Sheather	Paul G. Staneski	Leo T. Upchurch	William E. Winkler
Jamie K. Pugh	Jerome Sacks	Mack C. Shelley II	Joel H. Steckel	Thomas J. Uryniak	Jeffrey A. Witmer
William M. Pugh	Ulderico Santarelli	Mark R. Shenkman	Leonard A. Stefanski	Leslie A. Van Alstine	Marty J. Witt
James O. Ramsay	Michael J. Santulli	Irwin J. Shiffer	David M. Steinberg	Robert L. Vogel	Luke G. Wolfe
Richard F. Raubertas	Sanat K. Sarkar	Weichung J. Shih	Seth M. Steinberg	Stanley Von Hagen	F. Lennie Wong
Howard L. Rauch	Rama Sastry	Gary L. Shoop	Lorraine C. Steiner	Edward F. Vonesh	John R. Woods
Nancy Reid	Miles M. Sato	Holly B. Shulman	Barbara Stevens	William Dennis Wacker	Emmanuel Yashchin
William K. Rice Jr.	Stephen M. Scariano	Arthur R. Silverberg	Maura E. Stokes	Paul G. Wakim	K.F. Yee
Wasima N. Rida	Nathaniel Schenker	Stephen D. Simon	Mark Lionel Suda	Ann E. Watkins	Linda J. Young
William J. Riley	Mark J. Schervish	Joan H. Skurnick	Shumei Sun	Carol Weideman	Elizabeth R. Zell
James S. Roberts	Mark F. Schilling	Richard A. Smiley	James J. Swain	David L. Weimer	Dale L. Zimmerman
David M. Rocke	Brian R. Schlain	Charles Eugene	Winson Taam	Clarice R. Weinberg	
Richard A. Rode	David C. Schlotzhauer		Yoshio Takane	William J. Welch	

35–39 Years

Robert B. Abel	Robert J. Belloto Jr.	Craig C. Brandt	James J. Cochran	Mariza de Andrade	Kiya Famoye
Chul W. Ahn	Jonathan Berkowitz	Nancy E. Brucken	Michele J. Connolly	Richard D. De Veaux	Charles M. Farmer
I. Elaine Allen	Teresa Tykodi Berliner	Janet P. Buckingham	Margaret Conomos	Paul N. DeLand	Denzil G. Fiebig
Kathryn H. Anderson	Julia L. Bienias	Carolee Bush	Germaine Cornelissen-Guillaume	Thomas A. Delehanty	Ben F. Fort Jr.
Gerhard Armingier	Luigi Biggeri	Carol Veum Caldwell	Stephen R. Cosslett	Sherry L. Dixon	Jean-Louis Felix Foulley
Gerald K. Arnold	Paul K. Black	Charles A. Calhoun	David A. Crabtree	Ken Grant Dodds	Floyd J. Fowler Jr.
Anthony J. Babinec	Mary Ellen Bock	Michael L. Carniello	William S. Croson	Curt D. Doetkott	David J. Francis
Donald E. Bamber	Barry A. Bodt	Ngai-Hang Chan	John L. Czajka	Naihua Duan	Christine A. Franklin
Anna E. Baron	Jane M. Booker	Theodore C. Chang	Steven J. Czarniak	Susan L. Durham	Spencer M. Free III
Indrani Basak	James E. Bost	Robert L. Chastain	Mark Y. Czarnolewski	Lisa D. Edwards	Stephen H. Friedberg
Mary K. Batchner	Marc L. Bourdeau	Jean Chesson	Anthony C. Davison	Jimmy Thomas Efir	Jerome Frieman
David F. Bauer	Leonard E. Braitman	Sandra Pryor Clarkson	Jeffrey D. Dawson	James T. Fagan	Peter P. Gaccione
Stephen S. Bell					

Lionel A. Galway	J. Rodney Jee	Andrew W. Lo	Mark C. Otto	Pali Sen	Michael W. Trosset
Joseph C. Gardiner	George R. Jerdack	A. Russell Localio	Dennis K. Pearl	Thomas A. Severini	Chih-Ling Tsai
James Connell Gear	Roger W. Johnson	Robin H. Lock	Edsel A. Pena	Stephanie S. Shipp	Kao-Tai Tsai
Steven K. Gelb	Ross J. Johnson	Sharon L. Lohr	Darryl Neil Penenberg	Thomas S. Shively	Scott A. Vander Wiel
Nancy L. Geller	Wendell D. Jones	Anthony J. Lonardo	Gene Anthony Pennello	Douglas G. Simpson	Raja P. Velu
James E. Gentle	John J. Judge	Nicholas T. Longford	Richard N. Penny	Karan P. Singh	Kimberly Vukovinsky
Edward I. George	Robert I. Kabacoff	Jeffrey A. Longmate	Richard K. Perline	Krishan Pal Singh	Chih-Ming Wang
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Antonio F. Gualtierotti	Thian S. Kheoh	Susan M. Mayo	Trivellore E. Raghunathan	Michael L. Stein	George G. Woodworth
Olivier J. M. Guilbaud	Choongrak Kim	Daniel F. McCaffrey	David C. Randall	Hal S. Stern	Samuel W. Woolford
Sat N. Gupta	Seock-Ho Kim	James Anthony McGuire	David M. Reboussin	Susan LeRoy Stewart	Werner Wothke
Wilbur C. Hadden	Ingo Klein	Gerald W. McLaughlin	Ray Redd	Marilyn J. Stolar	Elizabeth C. Wright
Alastair Hall	James R. Knaub Jr.	Mr. Paul B. McMahon Jr.	John Reynolds	John Stufken	S. Paul Wright
Stephen J. Haslett	Mark D. Knowles	Mark S. McNulty	Robert J. Reynolds	Therese A. Stukel	Chien-Fu Jeff Wu
Donald R. Hedeker	Sarah Hurwicz Kogut	Robert W. Mee	Martin G. Ribe	Agus Sukmana	Jeremy Wu
Dennis R. Helsel	G. Paul Kolm	David W. Meek	Harry M. Rosenberg	Brajendra C. Sutradhar	Lap-Ming Wun
Tim Hesterberg	Mitchell C. Krask	Amitava Mitra	Francis J. Rossi	Tim B. Swartz	William J. Wunderlin
Keith Heyen	Mitchell C. Krask	Clinton T. Moore	Jon Todd Sahlroot	Kathryn A. Szabat	Theodore R. Yachik
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Brian Hochrein	William M. Lebow	Jeri Metzger Mulrow	Albert Satorra	Fisseha Tesfaye	Donald Ylvisaker
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Robert Michael Hoekstra	Peter E. Leone	James D. Neaton	Michael J. Schell	Terry M. Therneau	Russell S. Yost
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Welling C. Howell Jr.	Burton B. Lieberman	John M. Neuhaus	Paul L. Schmidbauer	Lori A. Thombs	Walter R. Young
Pao-sheng Hsu	Charles A. Liedtke	Sarah M. Nusser	Helmut Schneider	James C. Thompson	Sandy L. Zabell
Clive A. Hunt	Bo Henry Lindqvist	Steve J. Oakley	John Weldon Seaman Jr.	Michael H. Thomson	Paul L. Zador
Gerardo I. Hurtado	Amanda F. Linnell Nemec	Ann W. Olmsted		Camlin Tierney	Jerrold H. Zar
Clifford M. Hurvich	Yuhlong Lio	Robert Alan Oster		Barbara C. Tilley	Judith E. Zeh
Linda S. Hynan	Mark R. Little			Ram C. Tiwari	Cun-Hui Zhang
Satish Iyengar	Roderick Joseph Little			Walter S. Tletski	Georgia Ziembra Morgan
Laura E. James	Regina Y. Liu			Margot H. Tollefson	David M. Zucker ■

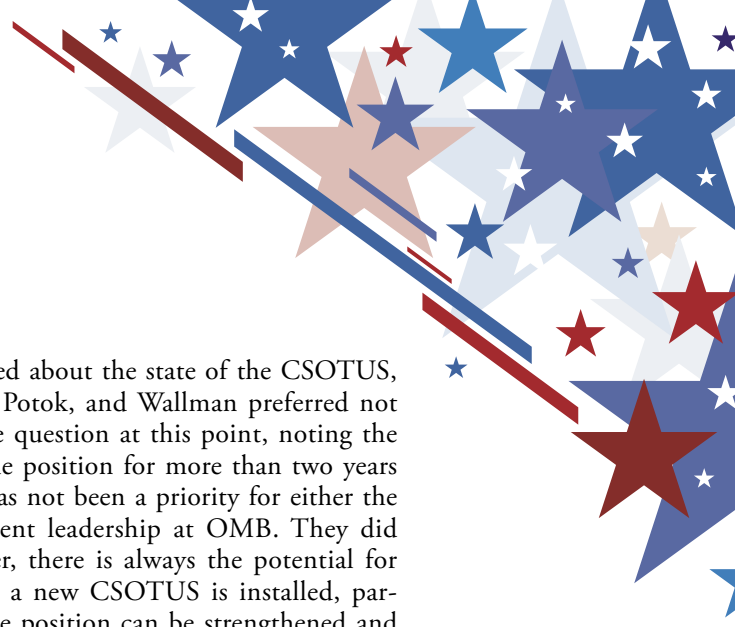
INFRASTRUCTURE SERIES

CHALLENGES LOOM

for Chief Statistician of the US



For this installment of the Count on Stats State of the Data Infrastructure Series, we spoke with former Chief Statisticians of the United States (CSOTUS) Hermann Habermann, Katherine Wallman, and Nancy Potok.



Positioned in the White House Office of Management and Budget (OMB), the CSOTUS plays a critical role for the US decentralized statistical system—13 principal federal statistical agencies and scores of statistical units across the federal government—ensuring the system operates smoothly and efficiently, is seen as a coherent unit with a strong voice, and takes advantage of synergies to address shared challenges. Foremost among the chief statistician’s congressionally mandated responsibilities is overseeing the production and accessibility of objective, reliable, and timely statistics.

The CSOTUS also promulgates government-wide standards that foster comparability and utility of the data, coordinates US participation in international statistical activities, and reviews and approves statistical agency information collection requests.

As of the date of this publication, 27 months since Potok’s retirement from the post, no one has been named as CSOTUS.

The challenges the CSOTUS faces are high in the minds of Hermann Habermann, Nancy Potok, and Katherine Wallman. The three think the organizational positioning of the CSOTUS within OMB does not adequately provide the holder of the position the access or leverage needed to exert its many authorities provided by law. They recommend strengthening the position and discuss two options. They also note how strengthening the CSOTUS position is especially needed now, with the recent creation of new roles and offices in OMB on evidence, information, and data and the proliferation of private sector and intergovernmental data sources and providers.

The chief statistician’s small staff size is another major challenge for fulfilling the maximum potential of OMB in evidence-based policymaking across the federal government and beyond, including collaborating with state and local governments and the private sector.

To aid the understanding of the current challenges, Wallman assembled a brief historical timeline of the position, which is shown on the bottom of the next few pages. With its responsibilities originating in the 1930s, the chief statistician steadily accumulated responsibilities, most recently with the Evidence Act of 2018. Its organizational positioning has bounced around a bit, including a brief stint in the Department of Commerce, before settling in its current umbrella organization, the OMB Office of Information and Regulatory Affairs.

When asked about the state of the CSOTUS, Habermann, Potok, and Wallman preferred not to answer the question at this point, noting the vacancy in the position for more than two years indicates it has not been a priority for either the prior or current leadership at OMB. They did note, however, there is always the potential for change when a new CSOTUS is installed, particularly if the position can be strengthened and adequate staff is provided to carry out the statutory responsibilities of the job.

For the next CSOTUS, Habermann, Potok, and Wallman offered sage advice for how to be effective in the role.

The State of the Data Infrastructure Series frames the federal statistical agencies as the backbone of the US data infrastructure. Just as our transportation infrastructure supports the US economy, governance, and society, so too do the federal statistical agencies. Other installments can be found at www.amstat.org/policy-and-advocacy/US-Data-Infrastructure under the bar labeled “What the statistical experts say.”

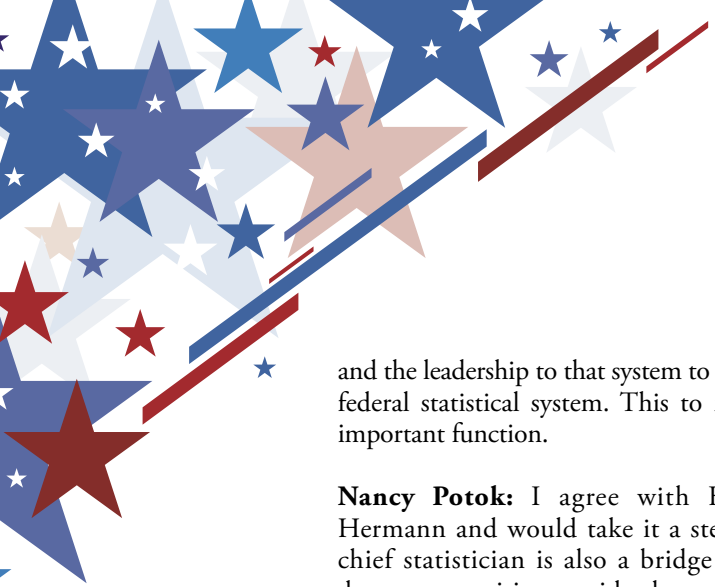
Please describe the most prominent or important roles of the chief statistician and why they are important.

Katherine Wallman: First among the responsibilities of the chief statistician is overseeing the production and accessibility of objective, reliable, and timely statistics that garner the trust of our nation to inform discussions ranging from health and economy to education and security.

While much of the collection, processing, and dissemination of statistics produced by the federal government takes place in the dispersed US statistical agencies, establishing priorities and securing budgets for these activities rest in large measure on the chief statistician. Likewise, it is the responsibility of OMB and the chief statistician to promulgate government-wide standards that foster comparability and utility of the data. These range from standards that safeguard the autonomy and objectivity of statistics to those that facilitate the use of common classifications to others that ensure equitable access to information.

Hermann Habermann: As a believer that official statistics are critical to the lifeblood of democracy and because we have a decentralized statistical system, the chief statistician provides both the vision

MORE ONLINE
View the OMB
organization chart at
<https://bit.ly/3JlrJWq>.



and the leadership to that system to ensure a healthy federal statistical system. This to me is the most important function.

Nancy Potok: I agree with Katherine and Hermann and would take it a step further: The chief statistician is also a bridge builder to the data communities outside the statistical system. In today's information and evidence-building world, many statistical and information-related activities are taking place outside the federal statistical agencies. Many of these players would benefit from the decades of experience the statistical agencies have acquired and learned on such topics as standards, quality, ethics, confidentiality, and applications of data. So, in addition to looking inward at the federal statistical system, the chief statistician should also be externally facing and making sure the federal statistical

viewpoint is fully represented in the evidence building and data science ecosystem.

Conversely, the chief statistician also needs to be doing everything possible to provide the resources and enable an environment in which the statistical agencies move with alacrity to keep up with advances being made outside the system, stay relevant, and meet the expectations of policymakers.

Hermann Habermann: That's an important point. Thirty years ago, the federal government controlled most of the information about people. Now, the private sector controls it and dominates where the nation is going with respect to privacy and technology. I agree with Nancy about the need for the chief statistician to provide the vision for the federal statistical system and to be a major voice in the national debate about the use of official statistics, including privacy and confidentiality of individual information.

A BRIEF HISTORICAL TIMELINE OF THE CHIEF STATISTICIAN OF THE US

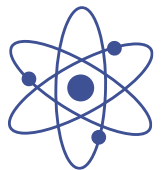
Timeline compiled by Katherine Wallman



Stuart Rice

1939: CSB functions are transferred to the Bureau of the Budget (predecessor to OMB) and CSB chair **Stuart Rice** is appointed assistant director for statistical standards and *de facto* becomes the first CSOTUS.

1946: Rice chairs the nuclear session of the UN Statistical Commission, beginning the international role of CSOTUS.



1930s: Chief Statistician of the US (CSOTUS) role established

1930

1933: The independent Central Statistical Board (CSB) is created to review and coordinate statistical activities related to the National Industrial Recovery Act; scope is broadened in 1934 to plan and promote "the improvement, coordination, and development of statistical services."

1940s–1950s: Functions of the chief statistician

1940



1942: The Federal Reports Act includes provisions to minimize the burdens of providing information to federal agencies. The Office of Statistical Standards carries out this review and approval process for (virtually all) agency requests.

Please share an example of the key role of the chief statistician.

Katherine Wallman: Parallel with the growth of technology and data sources came the establishment of chief data officer, chief information officer, and chief technology officer roles. There was also the generally sensible movement to centralize IT across a department for efficiency and cost savings. Such centralization, however, is a concern for federal statistical agencies, which store data that has been collected under pledges of confidentiality. When the National Center for Health Statistics (NCHS) was wrapped into the IT centralization efforts of the Department of Health and Human Services (DHHS), I worked alongside the NCHS to maintain the reality and perception of the care that's taken with the data the public provides in the particularly sensitive area of health. We fostered what we referred to as a "two-key solution"; IT people in DHHS couldn't get access—albeit only for system maintenance—without having someone from NCHS

present. Our solution also opened the door for similar approaches in other statistical agencies faced with centralization of their departments' IT systems.

Hermann Habermann: An example I hope helped not just one agency, but the entire federal statistical system, is the creation of the Joint Program in Survey Methodology. While the academic statistical community in the United States is rich, several of us thought there was a need for a program focused on survey methodology for official statistics when I was chief statistician. OMB, due to its unique position in the executive branch, afforded us the opportunity to create this program.

Nancy Potok: In the work to legislate the recommendations of the Commission on Evidence-Based Policymaking in the Foundations of Evidence-Based Policymaking Act, evaluation and building evaluation capacity for evidence building were

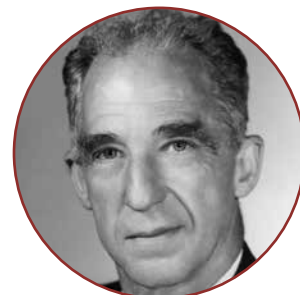
In **1953**, it is implemented through Executive Order 10253, "Providing for the improvement of the work of Federal executive agencies with respect to statistical information," which stipulated the maintenance of "a continuing study for the improvement of the statistical work" in the federal government and numerous objectives assuring the cohesive, efficient production of reliable statistics.



and the Statistical Standards Office expanded

The **1950** Budget and Accounting Procedures Act includes a two-sentence section that explicitly instructs the president, through the director of the Bureau of the Budget, to "develop programs and issue regulations and orders for the improved gathering, compiling, analyzing, publishing, and disseminating of statistical information for any purpose by the various agencies in the executive branch of the Government."

1955: Under **Raymond Bowman's** tenure (1955–1969), coordinating instruments such as review of statistical agency budgets, approval of information collection requests, and the use of interagency committees continue. In addition, advisory groups, technical consultants, and other means to assess user needs are given prominence.



Raymond Bowman



an early focus. So, during the drafting of the legislation, we were able to achieve three important advances for federal statistics. The enacted bill, now generally referred to as the Evidence Act, put into statute a key section of OMB Statistical Policy Directive #1: the need for independence of the statistical agencies for them to ensure the objectivity and integrity of their products.

In addition, to complement the creation of chief data officers and chief evaluation officers, the Evidence Act created a senior statistical official in all the cabinet agencies, even those without a designated statistical agency.

Finally, the bill really strengthened and updated the Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA), a crucial element strengthening the federal statistical agencies that was first enacted under Katherine's watch. The 2018 reinforcement and update, along with additional key roles for the statistical agencies in evidence building,

is crucial to enabling the federal statistical system to modernize if the bill's provisions are implemented in an inclusive way for the wider evidence-building community. That wider implementation would benefit the public good with a synergy that is hard to achieve in our decentralized and fragmented system. This statutory strengthening of the federal statistical system probably would not have been achieved without the chief statistician in OMB being at the table, as Katherine puts it, for those discussions on the bill.

What are the primary challenges to the position of chief statistician and staff?

Katherine Wallman: I will start where Nancy left off. A fundamental challenge for the success of any chief statistician is getting a seat at the table, especially in the emerging forums Nancy mentioned earlier. To be effective, the chief statistician has to get into the right rooms and conversations and cochair the right groups. Among other things,

A BRIEF HISTORICAL TIMELINE OF THE CHIEF STATISTICIAN OF THE US

1969: Chief Statistician of the United States **Julius Shiskin** (1969–1973) views the role of the Office of Statistical Standards more broadly, and thus argues successfully for renaming it first the Office of Statistical Policy and subsequently the Statistical Policy Division.

1977: In its report *Statistics*, the Commission on Federal Paperwork recommends the OMB director revise the staffing and other resources for statistical coordination and assign coordination for specific subject-matter areas to focal agencies.



1960s–1970s: Functions continued to expand; reorganizations marked the end of this period

1960

1970

1964: The Office of Statistical Standards staff level decreases to fewer than 40 from its 1947 level of 69, even as its activities expand.

The "focal agency" concept (a lead agency coordinating with the support of the Office of Statistical Standards) becomes an effective mechanism for using various agencies to enhance coordination and encourage interaction.

1974: Under **Joseph Duncan** (1974–1981), the chief statistician is the deputy director associate director for statistical policy, reporting to the OMB director through the associate director for management and operations. Through gradual attrition and reductions in overall staffing coupled with redeployments of positions within OMB, the number of Statistical Policy Division staff continue to decline during the tenures of Shiskin and Duncan (to 33 in 1977).



Joseph Duncan

such positioning takes support from OMB and the community, but personality and persona also go a long way.

I also think the chief statistician is challenged to take advantage of the wealth of expertise across the federal statistical system. Based on my experience sitting at the agency heads' table, the heads understandably prioritized the work in their respective host departments. Whatever they did on an inter-agency basis was beyond their "regular duties."

I believe responsibilities for interagency work should be part and parcel of agencies' personnel portfolios. In our decentralized system, we have to get that valuable expertise into the room. With the chief statistician's relatively small staff, that expertise, frankly, is often greater in the agencies than in the staff at OMB. There are advantages to using that expertise that go beyond "just" the person power, but I'm not sure that's perceived equally by the agencies providing that expertise.

Hermann Habermann: With one major exception, I think the Chief Statistician of the United States has a powerful set of tools. If the chief statistician is able to leverage the development of the federal budget and the Paperwork Reduction Act (PRA) process, they have an incredible amount of influence. Let me give an example of the importance of being a part of OMB.

When I created the Interagency Council on Statistical Policy (ICSP), everybody I invited came. This was partly because it was OMB doing the invitation. The heads of the statistical agencies also recognized the good that could be accomplished through creation of the ICSP. What I think is missing is that the chief statistician—a civil service position—doesn't have a recognized place at the political table, despite the position's responsibility both internationally and nationally.

OMB policy decisions are made at the level of the director and associate director. If the chief

1979: The President's Reorganization Project for the Federal Statistical System (aka the Bonnen Commission) concludes, "Increasing the relevance of Federal data for national-level policy purposes,

protecting integrity, improving the quality of data, achieving more efficient utilization of data already produced, and reducing the burden of paperwork on the public all require greater coordination of statistical work."

It recommends, among other things, the return of Statistical Policy to the Executive Office of the President (EOP) as a separate agency within the EOP and the strengthening of the office to approximately 30 staff.

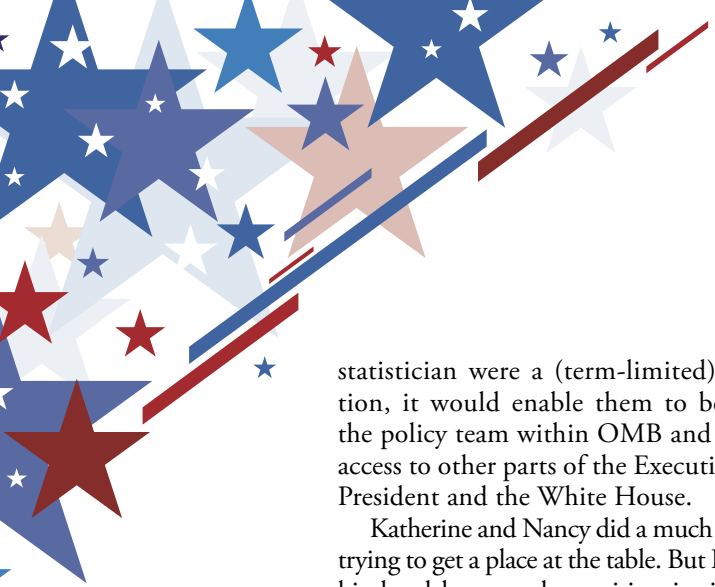


The White House

1977: Under President Jimmy Carter's reorganization plan to streamline the Executive Office of the President, the statistical policy responsibilities of the Office of Management and Budget—including the CSOTUS and 14 staff—are reassigned to the

Department of Commerce. Essentially, this order transfers the authorities of Section 103 of the Budget and Accounting Procedures Act of 1950; the office retains its advisory role with respect to statistical budgets and clearance responsibility for statistical information

collection requests. Fourteen members of the statistical policy staff remain at OMB to carry out information collection reviews and related responsibilities. Commerce Secretary Juanita Kreps subsequently enlarges the staff complement for statistical policy to 25.



statistician were a (term-limited) political position, it would enable them to be a member of the policy team within OMB and provide greater access to other parts of the Executive Office of the President and the White House.

Katherine and Nancy did a much better job than I trying to get a place at the table. But I think they were hindered because the position is civil service. And no matter how much you try, if you're not a political appointee, it's not the same thing. That's a big hindrance. I believe the chief statistician should be a political appointee with a fixed term to have a political place at the table. That to me is the biggest challenge.

Nancy Potok: I agree the chief statistician potentially has many powerful tools. I also agree that where the chief statistician is situated is a hindrance to maximizing the use of those tools and the chief

statistician is often shut out of policymaking due to being a civil servant.

As for whether the chief statistician position should be a political appointment, I think there's a great danger in that because political appointees in OMB are taking their orders directly from the president. And presidents have demonstrated they are susceptible to the temptation of skewing statistics to support their political agendas. If the chief statistician could not hold that line on independence and objectivity, the credibility of US statistics would be at stake. This would have far-reaching repercussions on international and domestic investment in the US, the stock market, and a whole range of decisions being made that depend on federal statistics being considered the "gold standard."

We've seen other countries where official statistics can be manipulated with bad intent, and it leads to

A BRIEF HISTORICAL TIMELINE OF THE CHIEF STATISTICIAN OF THE US

1981–1983: No chief statistician. The reinstatement of the CSOTUS and staff is unresolved for a year and a half, causing House Committee on Government Operations Chair Jack Brooks to state in 1982, "The Statistical Policy Branch of OMB has been abolished through

a reorganization of the Office of Information and Regulatory Affairs. For the first time in 40 years, the nation is without a chief statistician and a distinct governmental unit with the primary responsibility of overseeing Federal Government Statistics and Statistical

Policy." A subsequent House Report 97-901 conveys a request for OMB to consider adequate staffing for statistical policy, appointment of a qualified individual to supervise statistical policy, and reconsideration of the decision to eliminate the Statistical Policy Branch.



1980–2000: Legislative and administrative actions present ever-increasing challenges and opportunities

1990

1980: The Paperwork Reduction Act (PRA) requires the return of the statistical policy function to OMB. This transfer is effected in 1981; however, although all authorities and responsibilities were returned to OMB, only 15 staff positions (the number that had been transferred to Commerce), including the chief statistician, are returned.

1982: The separate statistical policy unit is abolished and members of the staff are reassigned to other roles in the Office of Information and Regulatory Affairs.



1983: Dorothy Tella (1983–1988) is appointed chief statistician and the Statistical Policy Branch is reinstated in the Office of Information and Regulatory Affairs with five staff. Primary responsibility for determining the budget levels of statistical agencies is moved to the program divisions at OMB, and there are three levels of management between the chief statistician and the director of OMB.

corrupt governments and lack of credibility on the world stage. The challenge to me is finding ways to ensure you get somebody who is not going to have political motivation into a political appointment. Even if that can be achieved four out of five times, you could have a real problem when you get the fifth. The whole system could be dismantled and discredited with an administration that doesn't want to observe norms. So, you would have to have some statutory protections, such as strong qualifications, a fixed term that crosses election dates, and so forth. Maybe a Senate-confirmed, nonrenewable 10-year term like that of the FBI director would provide a measure of independence where needed while still respecting the power of the president over the executive branch.

Elevating the career chief statistician position within OMB is another possibility. I point to the September 2020 report of the National

Academy of Public Administration task force, which consisted of bipartisan former OMB political appointees and career executives who worked in different functional areas at OMB. I cochaired the task force with Nick Hart and we came to a consensus that OMB's information policy work should be restructured and reprioritized by bringing together statistics, evidence building, and IT under a new senior position we called assistant director for information policy. We also concluded the position of chief statistician should be elevated from a career branch chief position wherever it landed in OMB. The chief statistician could easily be dual-hatted as the assistant director for information policy.

The task force was formed out of a recognition for how much has changed since the enactment of the Paperwork Reduction Act in 1995, including the

1988: Hermann Habermann (1988–1992) succeeds Tella. Under Habermann's leadership, the Joint Program in Survey Methodology, Interagency Council on Statistical Policy (ICSP), and arrangements to have statistical agency employees detailed to the office of CSOTUS are initiated. Staff level and reporting hierarchy remains unchanged.



Hermann Habermann

2000

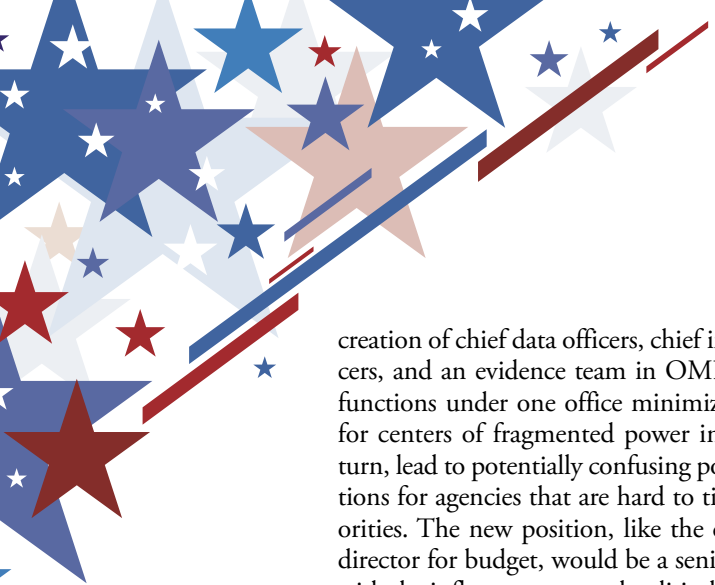
1992: During the tenure of Chief Statistician of the United States **Katherine Wallman** (1992–2017), the Paperwork Reduction Act is reaffirmed (1995), strengthening the authorities of OMB and the chief statistician vis a vis statistical policy and codifying the role of the chief statistician in representing the US in international

statistical bodies, as well as in coordinating the provision of US data to international organizations. It also requires the appointment of a qualified chief statistician (note this is the first time the term "chief statistician" appears in legislation); legislates the ICSP; and further supports opportunities for training in statistical policy functions for employees of other

agencies. Culminating decades of development and negotiation, the Confidential Information Protection and Statistical Efficiency Act becomes law in 2002, adding further to the chief statistician's responsibilities. However, staffing is not increased and the chief statistician remains three levels down from the director in the management hierarchy.



Katherine Wallman



creation of chief data officers, chief information officers, and an evidence team in OMB. Putting these functions under one office minimizes the potential for centers of fragmented power in OMB that, in turn, lead to potentially confusing policies and directions for agencies that are hard to tie to budget priorities. The new position, like the current assistant director for budget, would be a senior career person with the influence to attend political appointee-level meetings, thereby representing and injecting federal statistical information and evidence into public policy decisions and helping represent an intergovernmental perspective on data collection and use. The chief statistician could either be the assistant director position or report directly to that position.

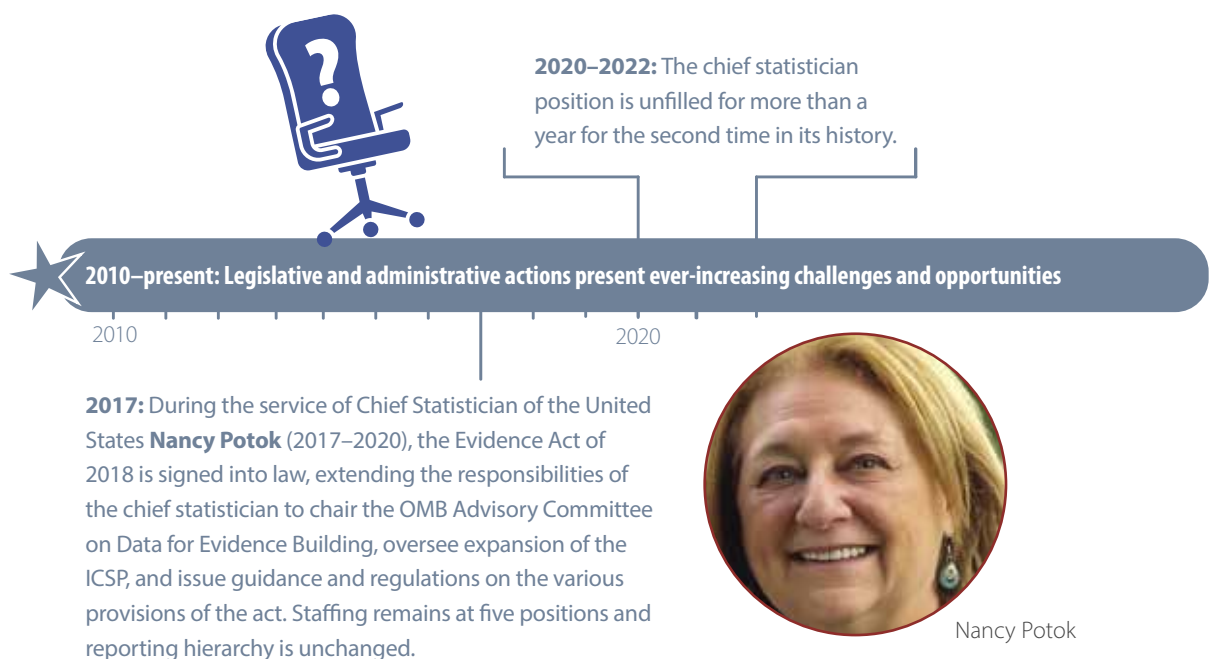
What's most important is elevating the status of the chief statistician. The current location in the OMB management hierarchy is inadequate in terms of achieving that seat at the table and the influence needed to be effective for all its many roles. The new positioning within information policy would be a higher-level, more visible position for the chief statistician. Although a restructuring within OMB would mean moving the chief statistician out of the Office of Information and

Regulatory Affairs, some thought would need to be given as to how the transactional aspects of PRA, especially the reviews of information collections, would be handled and coordinated.

Another challenge is there's not nearly enough staff to do the work. The competition for resources in OMB is intense, but the chief statistician's current staff size is having a negative effect on the ability to accomplish important work. For example, regulations required by the Evidence Act are years late in being issued. Having the position in an elevated information function may help with gaining the staff needed to meet the statutory responsibilities of the job.

Katherine Wallman: On Nancy's point for how much OMB has changed over the decades, I'll note that—before the PRA—the statistical policy office had two broad responsibilities: developing and promulgating statistical standards and reviewing all information collections, the latter of which started with the 1942 Federal Reports Act.

When the regulatory review function was created and assigned to OMB, it was all consuming. Due to artifacts of history that took place in the late 70s, regulatory review was coupled with statistical



policy—a rather clunky placement in my view. I agree it was detrimental to statistical policy work and that separating them would be advantageous for statistical and information policy.

With respect to staffing in the office of the chief statistician, the small number made it all the more critical to have people at the top of the civil service who had a lot of experience in statistical agencies in particular. With such backgrounds, statistical policy staff members were both knowledgeable and generally known across the system and thus could accomplish the responsibilities of the office effectively. Over the years, because such hiring practices contrasted with those in other parts of OMB, justifying replacement hires at relatively senior levels could be a challenge.

What are the consequences of these challenges not being addressed (both in terms of what couldn't be done in the past and what potentially will not be prioritized going forward)?

Nancy Potok: Many opportunities are being missed. I already mentioned the ability of the chief statistician to be a bridge to the broader data community. I would also point to holding together the disparate efforts across the federal government that are data science-oriented and need input from the statistical community to optimize how they're being researched, developed, and implemented across agencies. The federal government tends to have a siloed viewpoint. For example, for IT modernization several years ago, it was all about hardware and software and missed the mark when it came to thinking about the content of the data residing on that infrastructure.

The second area is intergovernmental relations, because OMB traditionally doesn't have the functions that reach out to state and local governments. But through a data lens, some of the most valuable data resides in state and local government. Federal data collections also have their problems in that they overlap, are redundant, and don't really collect the most meaningful data (e.g., programmatic data from state and local agencies that are the beneficiaries of federal funds). Such opportunities are all the more valuable with administrative program data becoming more important in creating statistical data sets. Currently, there's no ability for the chief statistician to influence those in a meaningful way.

What's most important is elevating the status of the chief statistician.

— *Nancy Potok, CSOTUS 2017–2020*

Thinking about the data landscape as an ecosystem is important as one considers the many parties creating, disseminating, and using statistical data. Besides technology, there are data collections coming from state and local governments that are beneficiaries of federal funding and administrative program data coming from individuals, such as tax and social security data. The private sector has amassed huge amounts of data on both individuals and businesses. All those factors need to be thought about more holistically to do a better job of creating relevant, timely, objective, high-quality, and ethically sourced and used statistical data. That's an opportunity we're losing out on by limiting the utility of the chief statistician position.

Hermann Habermann: I agree with Nancy that we're missing opportunities. For example, many universities are moving away from just statistics and toward the integration of data science and statistics. The traditional role of the federal statistical system in being the sole or primary producer of the nation's seminal statistics is being challenged. The private sector is not only producing data that was once the sole province of the federal statistical system, but it is offering timely and small area data in many cases.

Along with much more private sector data, many more people are analyzing data and producing statistics. OMB leadership is needed, for example, to understand what partnership with the private sector means and to what extent federal agencies should also become brokers—to inform the political leadership about how to interpret the data coming out of the private sector. These are the kinds of questions that are not being addressed by not having a chief statistician



The chief statistician frequently plays a role in fostering communication so agencies aren't reinventing the wheel and can learn and benefit from one another's work—but many opportunities ... are being foregone.

— *Katherine Wallman, CSOTUS 1992–2017*

at OMB for two years now, resulting in a vacuum at OMB in terms of addressing solutions to these kinds of problems.

Katherine Wallman: I agree with Nancy and Hermann—particularly as they have noted the silos that unfortunately seem to increasingly characterize the federal roles in statistics, data, and information policy and the crying need for effective partnerships with other levels of government and the private sector.

As a specific example of the seeming failure to coordinate among federal agencies, a recent announcement called for comments concerning an agency's desire to do data linkage between data sources. It wasn't clear to me to what extent the requesting agency was aware of and connected to the extensive data-linking efforts underway by the federal statistical agencies. The chief statistician frequently plays a role in fostering communication so agencies aren't reinventing the wheel and can learn and benefit from one another's work—but many opportunities to facilitate communication and collaboration are being foregone. Similarly, work to measure and standardize the quality of combined data isn't being pursued with as much speed and energy as it would with a chief statistician in place.

A new CSOTUS may soon be named. What recommendations do you have for this person for carrying out their responsibilities, given the state of the CSOTUS position?

Nancy Potok: First, educate yourself about how we got to where we are today and understand the evolution of the system. Learn about why the standards are there, not just that they exist. Learn about and understand the landscape in terms of what's available to you to leverage. Then, set your priorities and stick to them. It's easy at OMB to react to the crisis of the day and lose the focus needed to accomplish your own goals.

Second, rather than acting like an OMB branch chief, which doesn't have much say in OMB, act like you're the Chief Statistician of the United States. That is, take advantage of your significant and important external presence. You can accomplish a lot if you don't limit yourself—put yourself at the table to the extent that you can. Even if you aren't invited to the meeting, find a way to make sure you're there. Assert your authority as the chief statistician.

There were a lot of people I met who were new appointees in the administration. I just said, "I'm the Chief Statistician of the United States, and I started in January 2017." They assumed I was a political appointee and acted accordingly, and I never corrected them.

Third, make sure you keep all your channels of external communication open with the stakeholders in the broader community—including local government, state government, and data users—and use them extensively. Then, of course, take seriously what people are telling you outside the system. Build relationships with your colleagues in other parts of the Executive Office of the President, such as the Office of Science and Technology Policy and Domestic Policy Council. Finally, to the extent you can, keep your lines open with Congress either directly or indirectly.

Hermann Habermann: I think that's very good advice, Nancy.

Katherine Wallman: I'd subscribe to your recommendations wholeheartedly, Nancy. There are challenges, to be sure. But there are boundless opportunities. Taking us back for a brief reprise, there are many authorities and responsibilities that can fully command the chief statistician's attention; keep the vision.

Stakeholder Perspective: Nick Hart

*We invited **Nick Hart**, president of the Data Foundation and a leading champion in the evidence-based policymaking community, to give the stakeholder perspective for this month's State of the Data Infrastructure Q&A. He was previously director of the Bipartisan Policy Center's Evidence Project and the policy and research director for the US Commission on Evidence-Based Policymaking.*

The role of the Chief Statistician of the United States has grown substantially in significance over just the last few years and is one of just a handful of positions at the White House Office of Management and Budget (OMB) explicitly established in federal law. The leaders who held this role over the past several decades set the stage for the position to serve as a steward of the statistical system. Congress codified this role with specific duties that were strengthened and expanded in 2019 with the passage of the Foundations of Evidence-Based Policymaking Act, or the Evidence Act.

Today, it is the responsibility of the chief statistician to be a key leader for the federal government and the country—not just the statistical agencies—in promoting effective implementation of that law. The chief statistician also has a responsibility to support evidence building for the whole of government, with statistical agencies providing a critical function and infrastructure that bolsters the capabilities for program evaluation, analysis, research performance management, and much more. It is also no accident that, in October 2021, the Federal Advisory Committee on Data for Evidence Building recognized the vitality of the chief statistician and even recommended that OMB elevate the level of seniority of the position, given the extensive duties and responsibilities in supporting evidence-building activities in government.

Clearly the amount and type of support staff at OMB for the chief statistician is a major limitation and should be reviewed by the OMB director and Congress, particularly given the substantial new responsibilities imposed by the Evidence Act. The fact that such incredible work has been accomplished over the years from such a small staff given such tremendous responsibilities is also a testament to the skill and expertise of those talented individuals. Limited capacity at OMB to support implementation of new expectations for information management, data collection, information quality,

evidence-building activities, and other collaboration considerations must be addressed in coming years.

Simply put, the consequences of under-resourcing the chief statistician and federal statistical system cannot be overstated. For example, three years after enactment of the Evidence Act, OMB has not yet published draft regulations to enable the rules on public trust that Nancy Potok described [in the Q&A] or to enable new data-sharing authorities authorized in the Evidence Act for the statistical system. These important capabilities require expertise and staff at OMB to navigate the complexities of federal laws and regulations, the nuances of processes in statistical agencies and units, and realities of research activities in collaboration with experts across multiple disciplines.

Even more, the expert staff at OMB must work across agency silos and coordinate with emerging evidence-building leaders such as chief data officers and evaluation officers in formulating learning agendas and open data plans and publishing data inventories.

The gaps in staffing at OMB—and in the statistical agencies, themselves—can prove challenging when providing the leadership, coordination, and execution of these important tasks. This is not all to say that activities cannot be reprioritized in annual budgeting, but when it comes to the chief statistician's office, it is clear more capacity is needed, given the growing system and demands placed on the infrastructure. A relatively small investment in these important priorities would pay dividends for the country's ability to engage in improved data sharing, risk assessment, and sensitive data protection.

Allow me to add to the recommendations of Habermann, Potok, and Wallman for the newest chief statistician. When it comes to the Evidence Act's success, collaboration is key. Reach out to the chief data officer and evaluation community to coordinate, help, seek feedback, and engage in dialogues about how to build a stronger evidence culture across government, leveraging joint resources and capabilities with other leaders. ■



Nick Hart



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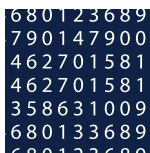
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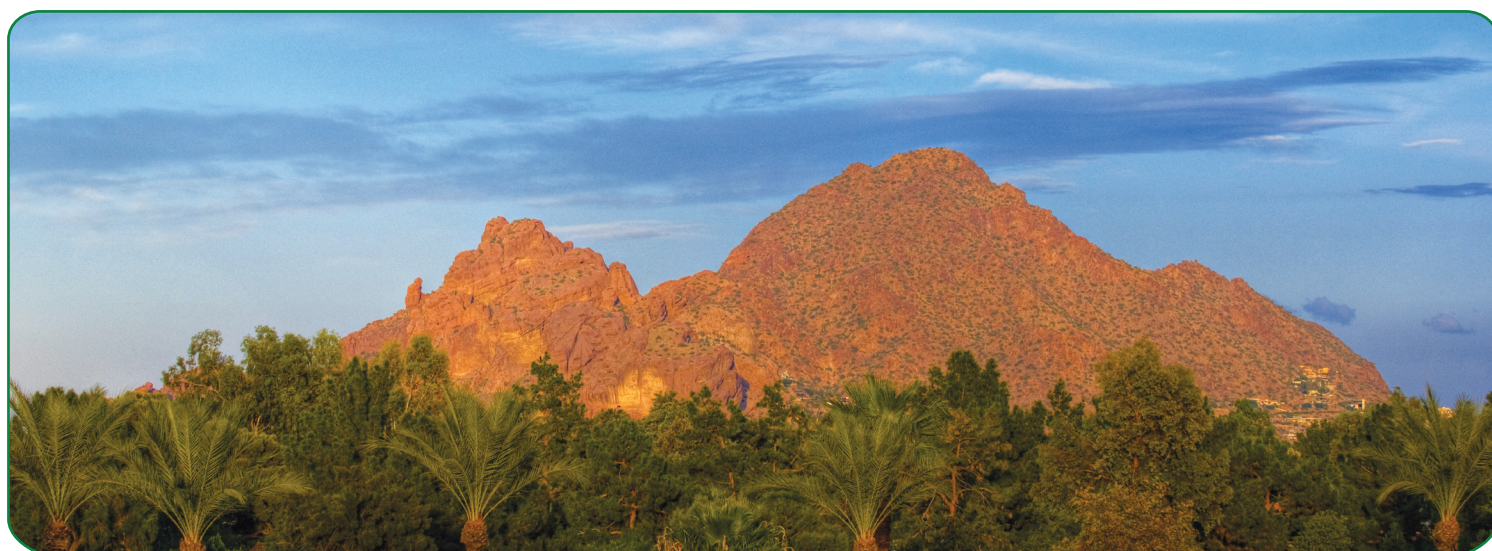


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New Developments in Synthetic Data Generation: Privacy Day Webinar Summary

Leah von der Heyde

On January 28, the ASA Committee on Privacy and Confidentiality hosted a webinar, “New Developments in Synthetic Data Generation,” in observance of International Privacy Day. The webinar was moderated by committee chair, Saki Kinney.

As the world grapples with how best to share confidential data, there is a rising interest in synthetic data methods. Synthetic data methods are used to protect the confidentiality of microdata units by replacing observed values with simulated ones. The webinar featured three perspectives and examples of ways in which synthetic data can be leveraged to increase public access to information from sensitive data, such as clinical data and official statistics.

First, Brett Beaulieu-Jones, instructor of biomedical informatics at Harvard Medical School, gave a talk titled, “The Potential of Privacy-Preserving Generative Deep Neural Networks to Support Clinical Data Sharing.”

Putting forward the example of clinical trials data, Beaulieu-Jones highlighted the challenge faced by researchers when sharing medical microdata for accelerating scientific progress while at the same time preserving privacy.

He explained how using pairs of deep neural networks, called generative adversarial networks (GANs), as an auxiliary classifier (AC) for creating synthetic data

Synthetic data methods are used to protect the confidentiality of microdata units by replacing observed values with simulated ones.

could overcome this challenge. However, as he pointed out, the usefulness of synthetic data hinges on its privacy-preserving properties: GANs are not automatically immune to privacy issues, as membership inference attacks can be trained with only blackbox access to the target model. Therefore, Beaulieu-Jones trained the AC-GANs under differential privacy to generate simulated, synthetic data that closely resembles the trial data of the patients.

As a result, when presented with the synthetic data created by the AC-GANs, human experts had trouble differentiating synthetic blood pressure data from real data, pointing to the potential of synthetic data for sharing individual-level patient data while preserving privacy.

Next, Monika Hu, assistant professor of statistics at Vassar College, gave a talk titled, “Incorporating Disclosure Risk in Designing Data Synthesis Models.”

Hu first explained the tradeoff between utility and disclosure risk of synthetic data. To avoid designing new synthetic models every time the disclosure risk becomes too high, Hu presented a novel approach: incorporating disclosure risk as a weight in the likelihood function for an already existing synthesis model. As any record with high risk needs more privacy protection, the likelihood contribution of such a record can be reduced by adding a low weight that provides more protection in the resulting synthetic data.

Illustrating the method with a model for family income data from the Bureau of Labor Statistics’ Consumer Expenditure Survey, Hu explained this weight could be applied to any Bayesian synthesis model with high utility, presenting a framework to achieve the desired tradeoff balance.

In presenting results, she pointed out that while using unweighted synthetic data already significantly reduces the average and top

risk when compared to real data, weighting synthetic data in such a way further reduces the risk.

Finally, Aaron R. Williams, senior data scientist in the Income and Benefits Policy Center at the Urban Institute, presented “Fully Synthetic Microdata for Public Policy Analysis.” Williams elaborated on the advantages of tree-based methods, specifically classification and regression trees (CART), for generating synthetic tax data, which does not fit common distributions and contains complex nonlinear relationships between variables. He went on to explain how to add more noise for values from percentiles with greater variation, which are therefore potentially more sensitive than values from percentiles with lower variation, by not drawing directly from the confidential data.

Applying these methods to two IRS data sets of different size and complexity, Williams showed that the large majority of the original and synthetic variables match rather closely when looking at correlation matrices and tax-microsimulations. He pointed out more work is needed to optimize the synthetic data’s accuracy for large and complex data sets.

Closing his talk, Williams spoke about ongoing work on a formally private validation server, highlighting its usefulness for extending access to government data when combined with fully synthetic data.

After their presentations, the authors answered questions from the audience. A recording of the presentations, as well as the questions answered, can be found at <https://community.amstat.org/cpci/resources/webinars>. ■

JOURNAL OF STATISTICS AND DATA SCIENCE EDUCATION HIGHLIGHTS

JSDSE March Issue Offers 10 Features

Nicholas Horton, Incoming JSDSE Editor

The March 2022 issue of the *Journal of Statistics and Data Science Education* (JSDSE) features 10 articles, plus an editorial. JSDSE is an open-access publication of the American Statistical Association and Taylor & Francis.

The editorial, titled “30 Years of the *Journal of Statistics and Data Science Education*,” looks back to 1993 and the founding of what was then the *Journal of Statistics Education* as an open-access electronic journal.

Dennis Tay’s paper, “Metaphor Types as Strategies for Teaching Regression to Novice Learners” explores ways of deepening student understanding of data ethics through repeated exposure.

In “Data Detectives: A Data Science Program for Middle Grade Students,” JaCoya Thompson and Golnaz Arastoopour Irgens describe an introductory curriculum for an out-of-school enrichment program.

Jacqueline Herman and April Kerby-Helm share results from their study in “Question of the Week: Can a Low-Stakes Assignment Improve Students’ Attitudes?”

In her paper, “Statistical Skills Gaps of Professors of Education at US Universities and HBCUs,” Kimberlee Everson reports about statistical skills and software abilities for education professors.

Eric Vance, Jessica Alzen, and Heather Smith write about a way to increase the impact of statisticians and data scientists in “Creating Shared Understanding in Statistics and Data Science Collaborations.”

In their Teaching Statistics and Data Sciences in the Health Sciences paper, “A Model for an Undergraduate Research Experience Program in Quantitative Sciences,” Kay See Tan, Elena Elkin, and Jaya Satagopan describe an innovative undergraduate summer research program focused on oncology.

In the Interviews with Statistics Editors Section, Allan Rossman writes “Interview with Felicia Simpson: Statistics at an HBCU.”

The issue includes a Brief Communications paper by Roger Johnson titled, “Alternate Forms of the One-Way ANOVA F and Kruskal-Wallis Test Statistics,” and a Datasets and Stories article, “A Fresh Shot at Statistics in the Classroom: Three Perspectives Using World Cup Soccer Player Data,” by Brenna Curley and Anna Peterson.

To read this issue of JSDSE, visit www.tandfonline.com/journals/ujse21. ■



CHANCE HIGHLIGHTS

April Issue Features Gerrymandering, COVID-19, and the ‘Gambler’s Fallacy’



Amanda Peterson-Plunkett, Executive Editor, *CHANCE* magazine

MORE ONLINE

View the latest issue of *CHANCE* at <https://chance.amstat.org>.

Maryland, the state I live in, is known for blue crabs and the birthplace of the national anthem. It also has the distinction of being one of the most gerrymandered states in the USA. In fact, in 2014, *The Washington Post* called the congressional district where I live the nation’s second-most gerrymandered district. The state is currently redrawing its congressional and state legislative maps. Candidate maps have been proposed, with grades by the Princeton Gerrymandering Project ranging from A to F. In the latest issue of *CHANCE*, authors Arnold Barnett, Pengchen Han, and Gege Zhang propose a solution in “A Simple Fix for Gerrymandering?”

We recently received three article submissions about the “gambler’s fallacy”—the irrational belief that the likelihood of an (independent random) event occurring in the future depends on its recent historical frequency. Our editors selected “The Mathematical Anatomy of the Gambler’s Fallacy” by Steven Tijms. Along with mathematical discourse, he provides examples of individuals oblivious to the fallacy and the peril they faced.

Some events, such as COVID-19 deaths, occur in waves. In “Contrary Currents,” Moinak Bhaduri concretely defines a wave structure beyond simple visual identification in a graph.

During the COVID-19 pandemic, decision-makers faced the challenge of balancing public health with economic health. Is it preferable to solve one issue at a time or address both together? Steven Kim and Joonghak Lee analyze this tradeoff in “Approaches to the Dilemma During the Pandemic: Sequential Successes and Simultaneous Successes.”

In “Probit and Wealth Inequality: How Random Events and the Laws of Probability Are Partially Responsible for Wealth Inequality,” Randy Schutt demonstrates how uncontrollable events—such as earthquakes, floods, illness, or ‘lucky breaks’—can

affect wealth distribution. You may find the level of variation surprising when education, talent, and work ethic are held constant.

In the Taking a Chance in the Classroom column, Hollylynne Lee, Zachary Vaskalis, David Stokes, and Taylor Harrison uncover trends in AP Statistics classrooms through a survey of AP Statistics teachers. The Big Picture column features a discussion by Nairanjana Dasgupta calling attention to demographic characteristics of data scientists. And in the Teaching Statistics in the Health Sciences column, Sujata Patil and Jaya Satagopan describe a new statistics curriculum for early-career preclinical cancer researchers with the goal of translating laboratory cancer research into clinical success.

Turning now to a bit of sad news: Alan Paller, the original editor of the Visual Revelations column (1988–1990), died this past November. We are remembering him by re-printing an excerpt from an article he wrote for the 1988 inaugural issue of *CHANCE* magazine. Bill Eddy, co-founder of *CHANCE* with Steve Fienberg, remembered Alan, saying “he really was a ball of fire.”

Paller was the author of *Choosing the Right Chart: A Comprehensive Guide for Computer Graphics Users* (1981) and director of ISSCo, a graphics software firm, before transitioning into a successful career in cybersecurity. You can read more about him on *The New York Times* and National Cyber Scholarship Foundation websites (<https://tinyurl.com/2p98uupz>, <https://tinyurl.com/5yvem9ff>).

Finally, I’d like to bring your attention to the *Stats + Stories* podcast (<https://statsandstories.net>), which explores the statistics behind the stories and the stories behind the statistics. You may recognize several *CHANCE* authors as guests, including Mike Orkin who wrote “Games of Chance and Games of Skill” in issue 34, volume 4. ■





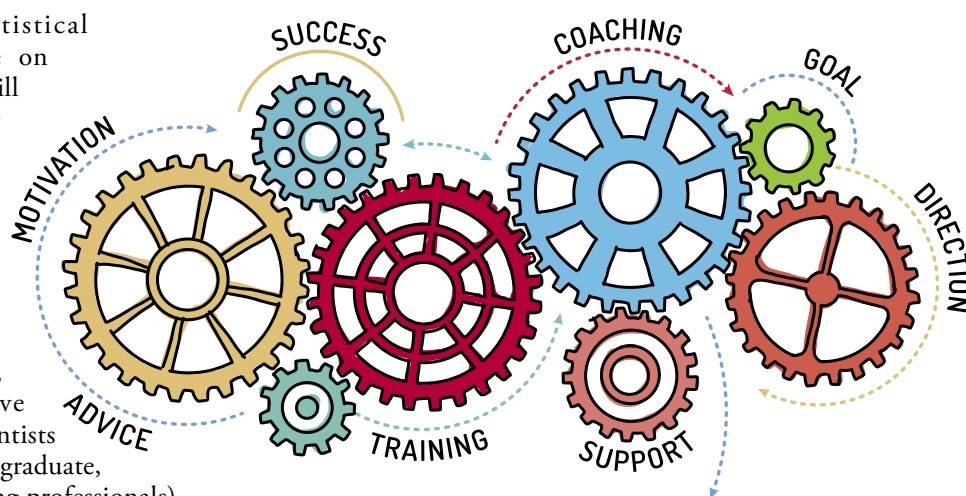
2019 Diversity Mentoring and Workshop Program Participants, Denver, CO

Diversity Mentoring Workshop Returns to JSM 2022 in DC

The American Statistical Association's Committee on Minorities in Statistics will host the 2022 JSM Diversity Workshop and Mentoring Program during the Joint Statistical Meetings, August 6–11 in Washington, DC.

This hallmark program brings together historically underrepresented minority (African/African-American, Hispanic/Latino, and Native American) statisticians/data scientists at early- to mid-career levels (i.e., graduate, postdoctoral scholars, and working professionals) with senior-level statisticians/data scientists from academia, government, and the private sector. The program features one-on-one mentoring and professional development such as engaging small group discussions and networking.

Interested students and professionals are encouraged to apply on or before May 31. Limited student travel funding support is available. Full consideration for travel funding will be given to applications received by May 31. Applications received after May 31 will be considered as space allows.



Mentoring

For more information and the mentee application link, visit <https://community.amstat.org/cmis/events/dwmp/dwmp2022> or contact Emily Butler at emily.lynn.butler@gmail.com. ■

JEDI CORNER

Infusing DEI Learning Into an Elementary Statistics Class

The Justice, Equality, Diversity, and Inclusion Outreach Group (JEDI) Corner is a regular component of Amstat News in which statisticians write about and educate our community about JEDI-related matters. If you have an idea or article for the column, email JEDI Outreach Group member Cathy Furlong at communicate@datascijedi.org.



Jana Asher is an assistant professor and the director of statistics education at Slippery Rock University. She has been an academic for a relatively short time; previously, her work focused on the collection and analysis of human rights violations data.

For many years, a small group of dedicated faculty members at Slippery Rock University, in Pennsylvania, have been lobbying for a diversity education requirement for undergraduate students. This diversity requirement would be fulfilled through completion of one of several specially designated courses to ground student learning in principles related to equity and inclusion. I joined this faculty group just as success was on the horizon, and I helped structure an online training for the faculty that would be creating and teaching the new “diversity designated” courses.

I was included in this effort because I represented two marginalized groups that weren’t yet part of the dialogue. However, my status as a statistician made me more of an “outsider” than my Judaism or neurodivergence. In a group of experts on social science, gender studies, and modern languages, I was the person teaching the course who didn’t seem to match the objectives for the diversity requirement. And, at first, I thought maybe everyone else was right. How could I include all the topics they wanted to see in these courses and still cover the many learning outcomes already required in an elementary statistics class?

The pilot training occurred during the summer of 2021. It went well, and the group prepared for a second trial over the winter break (December 2021 to January 2022). This time, a larger cohort of faculty needed to be trained if the diversity requirement was to go live during the 2022–2023 academic year. And the group was finally willing to take a chance on a faculty member who teaches statistics. After three exhausting weeks, I had developed my new curriculum and added the following four DEI learning outcomes to the goals for the course:

- Students will articulate the connection between the statistical concepts of

demographics, independence, assumptions, bias, causation, correlation, data visualization, and hypothesis testing and the DEI concepts of social identity, diversity, intersectionality, marginalization, discrimination, implicit bias, structural privilege, structural oppression, cultural competence, and social justice.

- Students will cite examples of how an individual’s social and cultural identity can lead to biased scientific conclusions that exacerbate structural oppression.
- Students will analyze examples of poorly designed/unethical and well-designed/ethical methods for data collection and analysis in the context of structural oppression and/or privilege.
- Students will articulate the connections between demographic data collection and human diversity and how statistics can create or exacerbate structural oppression of demographic groups.

So, how does one use critical pedagogy to restructure a course defined by problem sets and hypothesis testing? It helped that I’ve spent most of my career working with human rights violations data, so I had some idea of where to find connections between the statistics field and JEDI principles. But I still spent many days looking for course material that would solidify those connections.

I started with this column—using the first articles written after the JEDI Corner’s October 2021 debut. From there, I found the transcript of a JSM panel on implicit bias. This was a good start, but I wanted to pair readings related to JEDI with

the statistical topics we covered. Statistical study design naturally paired with information about the Japanese internment and articles about how test subjects in randomized experiments have been white men primarily. Graphical summaries of data paired nicely with blogs from the *Journal of Data Visualization* and a recent publication by the Urban Institute on equity in data displays. Bit by bit, I built 11 sets of readings that would roughly map to the existing course structure and cover the DEI learning outcomes listed above.

Then came the toughest part: figuring out how to fit all this additional material into an already-full course. Something would have to give. Since the schedule for the course is based on three 50-minute periods, I decided to devote Mondays to the readings. Students would be assigned a reading module each week. Each reading module would be accompanied by a set of discussion questions for the students to consider as they read and prepared for Monday's class period. On Monday, they would participate in group discussions led by undergraduate course assistants. Then, the students would be given reflection questions to guide a written response that would be due at the start of Wednesday's class period. I would lecture on Wednesday about that week's topics, and the students would complete an in-class laboratory on Friday.

I have just finished the fifth week of teaching this restructured course and am floored by just how different the course dynamic has been this semester. I have opened a floodgate; my students are desperate to talk to someone, anyone, about issues related to race, LGBT [lesbian, gay, bisexual, and transexual] experiences, and what is going on in the world around them. But they haven't had a safe space to do so.

I read the first few sets of reflections and learned just what my students have been through over the past few years. Some have heart-wrenching stories of being sexually harassed, bullied, or otherwise mistreated. To those students, I am providing a vocabulary and structure for framing their traumas, and they are learning they are not alone in what has happened to them. Other students are seeing the inequities in society for the first time and are shocked by how little they understood about what life is like for people who aren't their religion, race, or gender.

But what about statistics? Although I spend less time lecturing, my students are still learning the material, completing the homework, and coming

... My students are desperate to talk to someone, anyone, about issues related to race, LGBT [lesbian, gay, bisexual, and transexual] experiences, and what is going on in the world around them.

to class. They are engaged in a way I never imagined was possible. I won't know if or how their learning of the statistics material has been affected by the additional reading and discussion until the semester is over, but so far, the readings have been enhancing their statistical learning rather than detracting from it.

In the past, I would have several students who weren't sure how to distinguish a census from a survey. After reading about the differential undercount, my students have a much more sophisticated understanding of that difference. The course now engages their emotions and their intellect, and that can be a powerful learning cocktail.

I plan on administering a mid-semester survey in a few weeks, but I have already gotten some indirect feedback. Mustafa Casson, one of the faculty members who facilitated the winter break training recently wrote to me and reported the following:

I have a student in my upper division research methods course now, Jana, that is in your stats currently and LOVING IT! They've expressed how thorough and well-integrated DEI concepts, case studies, and outcomes are. We then spent about 10 minutes, as a group, talking about how other stats courses were weaker in comparison in many ways.

This initial feedback leaves me hopeful that this course might become a form of statistics education that works for a broad range of students.

If you are interested in learning more about DEI-infused statistics education, I will be presenting during the Joint Statistical Meetings in August about how my elementary statistics curriculum has evolved over the past five years. My sincere hope is I will be able to report back that this first semester teaching a DEI-designated elementary statistics course was a success. ■

MY ASA STORY

Claire Kelling, PhD Candidate

This series features ASA members who share their ASA stories. Our mission is to collect authentic and meaningful accounts of member experiences. If you have a story you would like to share, email the ASA's marketing and communications coordinator, Kim Gilliam, at kim@amstat.org.



Claire Kelling attends the Women in Statistics and Data Science conference in 2017, which spurs her to be more active in the ASA.



Claire Kelling is a dual PhD candidate in statistics and social data analytics at Penn State.

I am a dual PhD candidate in statistics and social data analytics at Penn State. I joined the American Statistical Association to learn from experienced statisticians and mentor younger students in statistics. I also hoped to learn more about different applications and methodological tools in statistics, introduce statisticians to the use of statistics in problems involving criminology, and increase interest in this area. My main substantive areas of research are criminology and policing, and I always encourage more conversation and dialogue in the statistics community in these areas.

I became involved with the ASA in graduate school, and I chose to become more active due to the Women in Statistics and Data Science (WSDS) conference and community. My first semester in graduate school was difficult for personal and professional reasons. I was fortunate to have an opportunity to present my research early in my graduate school career, after only a couple of months, at the WSDS conference. I presented a poster on my preliminary research and received great feedback and valuable encouragement from other conference attendees.

I attended many of the workshops at the conference and learned about different strategies for success as a woman in statistics and data science.

[At WSDS] ... the atmosphere is always electric, and the passion for statistics is contagious.

Unlike at other conferences, I noticed people at WSDS are always invited openly and enthusiastically to join tables at meals and conversations between sessions. The atmosphere is always electric, and the passion for statistics is contagious.

This experience at WSDS in 2017 was invaluable to me, after a discouraging experience during my first semester in graduate school. When I returned to my first semester, I had a new set of tools to tackle the next months and years. I have attended the WSDS conference every year since and have received incredibly valuable experience both as a mentee and mentor. I look forward to this opportunity to recharge and reflect every year!

During the WSDS conference in 2019, the faculty and students from Penn State met for dinner. We talked about our experiences at the conference and the invigorating environment. From this dinner, a few of us decided we wanted to bring part of this community back to Penn State, so we formed the Women+ in Statistics and Data Science group.

Although it has been difficult to find momentum thus far because of COVID-19, we look forward to the opportunity to continue organizing a mentorship program and hosting inspirational speakers to talk about their journeys in statistics and data science. We are just getting started, but there is so much energy around this group, and this community has been such a rewarding part of my experience at Penn State and in the ASA community. ■

CSP 2022: The Art and Science of Statistical Practice

David J. Corliss, Director of Peace-Work and Chair of the 2022 CSP Steering Committee



Kathy Ensor kicks off CSP 2022 with a keynote titled “Urban Analytics and the Leadership Role of Statisticians.”

The 2022 Conference on Statistical Practice (CSP) was held virtually February 1–3. With dozens of presentations, speaker panels, posters, and networking events in addition to a keynote by ASA President Kathy Ensor, the 11th CSP continued its tradition of presenting the state of the art in statistical practices and in-depth discussions about many of the challenges faced by practitioners today.

The focus of CSP are practical applications, and its aim is to bring together practitioners in all areas of work to present, learn, and discuss statistical methods and best practices. Attendees from academia, industry, government, and NGOs share content in four themes: Career, Professional, and Leadership Development; Study Design and Data Management, Implementation and Analysis; and Effective Communication. The three-day conference starts with a day of short courses from leading speakers on a variety of statistical methods. This is followed by a day and a half of contributed presentations and a half day of tutorials. The conference also includes a series of poster sessions, which are great for meeting people and seeing new research. They often provide less-experienced presenters an opportunity to develop their presentation skills without writing a full paper.

This year, CSP kicked off with a keynote by Ensor, Noah G. Harding Professor of Statistics at Rice University, where her research includes development of the Kinder Institute Urban Data Platform. Ensor’s talk, “Urban Analytics and the

Leadership Role of Statisticians,” combined her team’s research in urban analytics with a broader message about how statisticians can and should play a leading role in advocacy and policy development to serve the public interest.

A key aspect of CSP that makes it distinctive are presentations about the ‘new normal’ in statistical practice: emerging analytic methods going mainstream. While conferences such as the Joint Statistical Meetings focus on new research—often in niche areas—CSP centers on developing and communicating best practices. Each year brings a new wave of technology making waves in practical applications. Another dimension is addressing challenges statisticians and data scientists all share, such as questions of causality and maximizing the learning gained from statistical models.

The event is also a lot of fun. Networking remains one of the most important and enjoyable activities at CSP. Virtual rooms provided a chance to meet and interact. Colleagues and old friends discussed emerging analytic methods and planned their next projects. Another favorite conference activity is Trivia Night. Attendees were put into groups and channeled into breakout rooms where they answered questions about history, science, fun and games, and—of course—statistics. It was great fun for all.

In 2023, CSP will return to an in-person conference. Led by conference chair, Mac Turner, CSP will take place in San Francisco February 2–4. For details, visit www2.amstat.org/meetings/csp/2023. ■

ICHPS Organizers Share Hopes, Plans for 2023 Conference in Arizona

Planning is ongoing for the 2023 International Conference on Health Policy Statistics (ICHPS), a forum for discussing research needs and solutions to the methodological challenges in the design of studies and analysis of data for health policy research. The goal of the conference is to connect statisticians, methodologists, researchers, economists, data scientists, and others to share ideas with the broader health policy community.

The conference theme is “Upgrading the Pipeline from Health Data to Health Policy. Submitting an invited abstract (by April 29) or contributed or poster abstract (by June 30) is one opportunity for you to be part of this forum.

Meet ICHPS 2023 Cochair Ruth Etzioni, Fred Hutchinson Cancer Center

Q: What was the inspiration for the theme of the 2023 Conference, “Upgrading the Pipeline from Health Data to Health Policy”?

A: Pipeline is a modern concept that reflects what we do as health policy statisticians—we translate data and measurement into algorithms and models designed to support medical and policy decisions.

We want ICHPS 2023 to be as inclusive as possible; no matter where your research falls on this pretty vast pipeline, we want you! Upgrading is about innovating and advancing the field—and this is what our ICHPS is all about.

Meet ICHPS 2023 Cochair Mike Baiocchi, Stanford University

Q: How long have you been attending ICHPS, and what is

one memorable but unexpected experience you can share?

A: I’ve been attending ICHPS since 2008. It’s always been my favorite conference because it’s so easy to connect with the others who attend. The projects are interesting and the people are friendly.

One of my clearest memories (because it was mortifying) is when, at an ICHPS happy hour, I got to talk with a *prominent researcher**, who was an absolute legend to me for his work on residual inclusion models. I was nervous and trying to do my best to impress him, and I immediately spilled red wine on his shoes. He was kind, and we started up a bit of a connection. I even had the opportunity to write a commentary on one of his papers recently! Please note the takeaway here is not to spill wine on people. The takeaway is ICHPS is the conference where you can get close enough to your heroes to ruthlessly embarrass yourself.

*Curious about who this mystery prominent researcher is? Connect with me at ICHPS 2023 to find out!

Meet ICHPS 2023 Cochair of the Scientific Organizing Committee Jose Zubizarreta, Harvard University

Q: What is the vision and goals of the Scientific Organizing Committee for ICHPS 2023? Why did you want to be part of this committee?

A: We wish to gather and display key developments across areas of statistics to improve health policy and decisions. These advances span from the collection of health data to the design and analysis of health studies and, ultimately, to effective communication of study results. As

the events of recent years have shown, statistics and data science can play a crucial role in making improvements to health policy and decisions, as well as to population well-being.

Meet ICHPS 2023 Cochair of the Scientific Organizing Committee Evan Carey, Seattle/Denver Center of Innovation and Colorado School of Public Health

Q: How are current events in the world affecting the topics for ICHPS 2023? What have you taken away from past conferences to affect your work?

A: The pandemic has caused biostatisticians (including me) to critically examine the impact of their work—are we providing actionable information to the right people? The overall theme at ICHPS 2023 and the planned content reflects this focus and will help attendees plan and execute impactful work.

Past ICHPS conferences have been exceptionally helpful to me by providing exposure to cutting-edge methods useful for causal inference in the context of complex observational data.

Meet ICHPS 2023 Cochair of the Scientific Organizing Committee Hui Xie, Simon Fraser University

Q: What are some of the key themes we may hear about at ICHPS 2023? How will the variety of topics be selected?

A: As the first ICHPS conference since the COVID pandemic, one timely and key theme of ICHPS 2023 is upgrading data and methodology pipelines to inform optimal health policy decisions regarding COVID control, including vaccination; surveillance; and societal, behavioral, and pharmaceutical

interventions. Attendees will also learn about innovations in causal inference, artificial intelligence, machine learning, and construction and use of rich and secure databases for health care and policy research.

The topics at the conference will be selected based on their timeliness and significance, relevance to the theme of ICHPS 2023, and their overall impact on the health policy community and improving our health care systems.

Meet ICHPS 2023 Student Committee Chair, Yuan Chen, Memorial Sloan Kettering Cancer Center

Q: How can students expect to benefit by attending ICHPS 2023? How can students make the most of their ICHPS experience?

A: Many aspects of the program at ICHPS 2023 will specifically target students. These include workshops, roundtable discussions on career/mentoring, and student paper awards and presentations. To make the most of ICHPS, students are encouraged to explore all the above programs and other exciting sessions at ICHPS 2023, submit abstracts for oral and poster presentations, and meet and connect with people at the conference.

Meet ICHPS 2023 Local Organizing Committee Chair, Melissa Kovacs, FirstEval

Q: What is special about the local Arizona community that conference attendees can explore when attending ICHPS 2023? What are you looking forward to at ICHPS 2023?

A: Winter in the desert is a special time, with chilly nights (perfect for stargazing) and sunny days (perfect for long walks, trail running, cactus-ogling, birding, and working on patios). I'm looking forward to Old Town Scottsdale showing off its amazing restaurants, bars,

shopping, and spas a short walk from the conference resort.

Meet ICHPS 2023 Chair of the Fundraising Committee, Jason Brinkley, Abt Associates

Q: What is the goal of the Fundraising Committee? Can you share an example of how fundraising had a positive impact on past conferences?

A: The fundraising committee works to help bring in additional money to expand the ICHPS program and help keep costs low for attendees. Conferences usually need additional funds to deliver a high-quality program with diverse speakers and topics.

Our goal is to provide a special session, cover travel for unique speakers, and allow more support for student attendees (especially those not located in the United States). We do this in several ways. First, we submit grant proposals to US federal agencies for add-ons to our program. We did this successfully in 2018 and 2020 to add special sessions or workshops focused on rural data and tele-health. Second, we reach out to private companies who work in the health policy space to provide sponsorship opportunities. Sponsors are critical for us to provide those unique add-ons that make the conference more convenient, accessible, and fun.

Meet ICHPS 2023 Outreach Committee Cochair Beth Ann Griffin, RAND Corporation

Q: What is the goal of the Outreach Committee? What was a memorable moment from a past ICHPS?

A: The goal of the Outreach Committee is to coordinate efforts to recruit and raise awareness about the next ICHPS meeting theme and location. We want to increase engagement and excitement about the meeting.

A favorite memory for me is participating in an invited opioid policy session for ICHPS

2020 that drew together leading researchers to discuss and brainstorm best practices for ensuring optimal policy research. The engagement from the audience was great, and I am still using the lessons learned from that session today in my own work.

Meet ICHPS 2023 Outreach Committee Cochair Victoria Gamerman, Boehringer Ingelheim Pharmaceuticals

Q: Why were you interested in joining the Outreach Committee? How can others help spread the word?

A: We are so excited to reconnect with the broader statistics and data science health policy community. This is a chance to spread the word, highlight key themes of importance to our communities, and connect people who may or may not yet be networking with each other. While we will do much of this during ICHPS, the key efforts can start now. If you see a post about ICHPS in any of the social channels or emails, we encourage you to spread the word by passing it on to friends and colleagues.

Meet ICHPS 2023 ASA Representative, Christina Link, American Statistical Association

Q: What sets ICHPS 2023 apart from other ASA conferences?

A: This is a unique ASA conference because it occurs every 2–3 years, rather than annually, and brings together individuals from all aspects of health policy statistics. ICHPS's aim is to create interfaces between practitioners, methodologists, health service researchers, health economists, and policy analysts so they can exchange and build on ideas they will disseminate to the broader health policy community.

Learn more about ICHPS 2023 at ww2.amstat.org/meetings/ichps/2023. ■

STATtr@k

Postdocs Share Experiences at NISS Graduate Student Networking Event

Panelists discuss pros and cons of fellowships

Megan Glenn, Administration Assistant, National Institute of Statistical Sciences

The NISS Graduate Student Network (GSN) hosted a panel discussion January 27 for those wanting to learn about postdoctoral positions in statistics. The panel of current and former postdoctoral fellows shared their reasons for considering a postdoctoral position after graduation.

Panelists included Whitney Huang (former postdoc), assistant professor in the Clemson University Department of Mathematics and Statistics; Dayu Sun, postdoctoral fellow in the Emory University Department of Biostatistics; Yibo Xu, postdoctoral fellow in the Clemson University Department of Mathematics and Statistics; and Guillermo Basulto-Elias of the Center for Transportation Research and Education at Iowa State University. Hannah Waddel, biostatistics and bioinformatics graduate student at Emory University and NISS Graduate Student Network Executive Committee member, moderated the discussion.

When asked why the panelists decided to take a postdoc position, Huang mentioned he wanted to go into academia and needed more experience after graduating. Huang's postdoc experience was different from a typical postdoc, however. In his position at the Statistical and Applied Mathematical Sciences Institute, he helped organize and run the program he worked for, including organizing working groups and reporting back to the National Science Foundation.

Sun, like Huang, wanted to go into academia after graduating but took an internship in industry, where he realized he didn't fit. He was assigned projects but wanted to work independently as a researcher. Sun went for a postdoc position to broaden his research horizon, which later benefitted his career.

Basulto-Elias saw his postdoc position as a good opportunity to test whether applied statistics was his calling, because he thinks it's interesting. Answering questions with data science is something he enjoys.

Xu took a postdoc position thinking that—to have success on the academic track—one is expected to take a postdoc position before obtaining a tenure-track position. He took the opportunity and planned to enhance his research expertise.

The panelists also offered advice about what a student should know before applying for a postdoc position. One benefit is that—in the 2–3-year position supported by a principal investigator (PI)—a supervisor will check on your research progress, tell you whether your performance is satisfactory, and let you know how you can improve.

“In preparing yourself to be successful in the true tenure-track positions, you need to balance both research and teaching aspects,” Xu said.

Each of the panelists discussed some of the pros and cons of postdoc positions and the qualities needed or that are useful.

Xu spoke about the expectations of postdoc positions, not only research expectations but also production and teaching expectations. His advice to prospective postdocs is to put more effort into networking, communicating, and research proposals.

Sun added that independent research abilities are also important. Postdoctoral positions require solving many problems independently, and the supervisor will not hold the researcher's hand at every step.

Huang expressed the value of networking. “You want to be very active and let people see you,” he said. “Besides the research, you need to let people know that you are active in events.”

MORE ONLINE

Watch the full panel at <https://bit.ly/3InXCwp>.

Learn more about NISS at www.niss.org.

NISS Graduate Student Network Postdoc Panelists



Hannah Waddel



Whitney Huang



Dayu Sun



Guillermo
Basulto-Elias



Yibo Xu

Questions and Answers

Will there be any more postdoc sessions?

The NISS Graduate Student Network is not holding anymore postdoctoral panel sessions, but we have other upcoming events that will be of interest to graduate students. To stay in touch, fill out the form at <https://bit.ly/3tW3AiD>.

Is there a good season to find a postdoc?

Postdoctoral positions are posted year-round. The panelists recommended beginning your postdoc search as soon as you are able and consider varying factors such as your anticipated graduation time, immigration and visa, and research interests.

What other sources exist to find a position?

Our panelists recommended the University of Florida's statistics jobs website (<https://bit.ly/3JeNNlp>), MathJobs.org, and the ASA forums. They also recommended keeping an eye on postings through social media such as LinkedIn and Twitter. The National Institute of Statistical Sciences careers page (www.niss.org/careers-niss) lists current postdoc positions and offers postdoc positions (www.niss.org/careers/niss-postdoctoral-fellows-early-career-statisticians-and-data-scientists%C2%A0).

There is a big jump from being a student to becoming a postdoc.

There is a big jump from being a student to becoming a postdoc. One needs to learn how to submit to institutional review boards and meet specific, hard deadlines.

The panelists also spoke about whether postdoc positions would sponsor visas. Basulto-Elias is from Mexico and earned his PhD from the US. He was given a student visa with permission to work here for three years, and then he was able to switch to an H-1B visa with no major obstacles. In nonacademic positions, applicants have to go through a lottery for a visa.

Panelists also noted that a postdoc position is not the right choice for everyone. For instance, depending on the field, postdoc positions may not benefit long-term career goals. The pay might be too low for those who need more financial support. And a postdoc position would not be a good fit for someone who does not like doing heavy research.

For information about the NISS Graduate Student Network, visit <https://bit.ly/3MNCOBG>. For information about other events hosted by NISS, visit www.niss.org/events. ■

STATS4GOOD



Activities to Make an Impact Using Data for Good



David Corliss is lead, Industrial Business Analytics, and manager, Data Science Center of Excellence, Stellantis. He serves on the steering committee for the Conference on Statistical Practice and is the founder of Peace-Work.

One of the most vibrant and impactful areas of data for good is environmental research and advocacy. Statisticians are making a difference through participating in new research, supporting data-driven decision-making in industry and government, educating the public, and helping more people become involved in this critically needed work. With Earth Day on April 22, Stats4Good takes a look at ways the ASA and its members are protecting the world around us through the use of statistics.

Ever since its founding in 1839, the American Statistical Association has advocated for the highest standards in science and its use for the public good. Statistical studies on the impact of human activity on the environment can be found from the ASA's earliest days. For example, *Publications of the American Statistical Association*, v.3 (1892–1893), includes a study by Census Bureau investigator John Hyde on the geographic concentration of agriculture. In this practice, a single crop dominates a wide area,

Getting Involved

In opportunities this month, Democracy Lab is hosting a 48-hour Earth Day hackathon April 21–23 at <https://bit.ly/3t7Z7dC>. With six projects to choose from, there are many ways statisticians and data scientists can get involved.

Also, check out RealClimate.org at <https://bit.ly/3IfAlHg> and past JSM online programs to find presentations, research groups, and other resources sponsored by the Section on Statistics and the Environment and Advisory Committee on Climate Change Policy.

with other crops greatly outnumbering others in different parts of the country. The resulting soil depletion, Hyde wrote, created “the necessity—


soon to become apparent—of a more considerate treatment of the soil on the part of the farmers of the western states.” This is human-caused environmental damage documented in a paper published by the ASA in 1893.

The statistical work of Hyde and his colleagues continues today in myriad ways. ASA members have long understood the significance of climate change through research, education, and policy advocacy. The ASA published a statement in 2007 endorsing the “unequivocal” science of human-caused impacts described in the United Nations’ Intergovernmental Panel on Climate Change. A search of JSM’s online program from last year finds 93 references to climate change. Also, the ASA Advisory Committee on Climate Change Policy (ACCCP) works with the ASA director of science policy to advise Congress on climate change issues, with special emphasis on the roles of statistics and statisticians in advancing science and informing policy. The advisory committee maintains resources available through its website (<https://community.amstat.org/acccp/home>), including a link to climate change data and source code maintained by RealClimate.org.

The ASA Section on Statistics and the Environment (ENVR) supports the statistical community by providing a channel for communication and networking, creating educational resources, and advocating for sound, data-driven environmental policy. Section members sponsor conferences, meetings, and workshops on environmental statistics to foster research and promote best practices. Awards administered by the section include a distinguished achievement award and one for early-career investigators. The section also coordinates activities between individuals and groups within the ASA and other organizations with an interest in environmental science and advocacy.

ENVR is also a major sponsor of JSM sessions and mentoring roundtables. Searching on the name of the section in previous JSM online programs is a great way to find researchers and projects in your area of interest.

Additionally, the section partners with other ASA organizations to promote shared visions and goals. For example, the section issued a statement on justice, equity, diversity, and inclusion recognizing diversity as a source of strength, ingenuity, and inspiration. Becoming a member of the section can get you started on your personal journey



The challenges in environmental statistics can be great, including poor or incomplete data and even push-back from others ... The rewards are even greater when we use our skills to help save the planet we all share.

of environmental advocacy using statistics while you keep up to date on research opportunities, events, and other activities.

The ASA also supports partnership with other organizations working in environmental advocacy using analytics. The International Environmetrics Society, an association of the International Statistical Institute, works globally to support environmental research and advocacy through statistical science. The Consortium of Social Science Associations (<http://cossa.org>), of which the ASA is a member, is an association of many academic and professional groups in the social sciences working together to advocate for data-driven federal policy, including climate change and other environmental issues.

Finally, many ASA chapters offer presentations about and activities on statistical science and the environment.

These are just a few ways the ASA and its members participate in environmental advocacy through sound statistical science. As is so often the case in D4G, local agencies and organizations have data but need statistical expertise from volunteers and professionals to turn data into action and affect the world around us. The challenges in environmental statistics can be great, including poor or incomplete data and even push-back from others. As great as the challenges are, the rewards are even greater when we use our skills to help save the planet we all share. ■



Jeter

Summer Renee Jeter was awarded the Student Poster Award during the virtual 2022 Conference on Statistical Practice, which took place February 1–3. Her poster was titled “Development of an Artificial Intelligence System to Prevent Overexertion Injuries at the Workplace.” ■

Elena Naumova, professor and chair of the division of nutrition epidemiology and data science at the Friedman School of Nutrition Science and Policy has been named a member of the US Environmental Protection Agency’s Scientific Advisory Board. As a member, Naumova will contribute her expert knowledge to help ensure the EPA makes decisions and establishes policies based on the most up-to-date scientific evidence.

Naumova will join 12 other scholars on the Biosolids Panel, (<https://bit.ly/3N48gfl>), which will review and advise the development of the draft Biosolids Chemical Risk Assessment and Biosolids Screening Tool for the EPA. Nominated by the American Statistical Association, she is joined by researchers from across the country. Read more about her background on the Tufts University website at <https://bit.ly/3N48bZ5>. ■

Obituaries

William Michael (Mike) O’Fallon

ASA Fellow, Founder, and president in 2000, William Michael O’Fallon died on February 19, 2022, in Rochester, Minnesota.

Born March 7, 1934, O’Fallon attended St. John’s University (SJU) in Collegeville, Minnesota, graduating in 1956. Since he intended to be a high-school teacher, he then studied at Vanderbilt University, where he earned his master’s degree in mathematics in 1957. However, he was recruited to teach mathematics at SJU in the fall of 1957.

In 1960, O’Fallon was accepted into the doctoral program at the Mathematical Statistics of The University of North Carolina at Chapel Hill, where he met his wife, Judith Rich. He completed his PhD in statistics in 1967.

O’Fallon worked as associate professor at Duke University for several years before taking a sabbatical to study epidemiology. In 1974, the Mayo Clinic’s department of statistics and epidemiology requested he design a breast cancer epidemiology study and, later that year, the department recruited him to chair the biostatistics section. O’Fallon held that position for 20 years.

During his time at the Mayo Clinic, O’Fallon worked as a professor in the Mayo Medical School, coauthored more than 450 peer-reviewed publications, and served as principal investigator on nearly 50 major grants. He was appointed to chair Mayo’s department of health sciences research in 1994, a position he held until 2000.



O’Fallon

O’Fallon was elected fellow of the ASA in 1986 and he served as ASA president in 2000. In 2008, when asked to reminisce about his term as ASA president, O’Fallon responded, “It was an honor I never expected and was not at all sure

I wanted. Indeed, when I told one of my colleagues at Mayo that I had accepted the nomination, she responded, ‘You must be certifiable.’”

O’Fallon went on to say, “The theme for my presidential year was that we as a profession, needed to embrace our diversity by recognizing and valuing the many talents statisticians of all levels bring to the table.” He also expressed his hope that the ASA would make progress toward embracing diversity and that the climate of togetherness would continue into the 21st century.

In 2002, the ASA presented O’Fallon with the prestigious Founder’s Award for “extraordinarily effective leadership.”

O’Fallon was committed to helping others. In retirement, he served as the interim director of the Channel One Food Bank. He was active in The Rotary Club of Rochester, serving as club president in 2005 and assistant district governor from 2009–2011. He was also active in his church, serving on committees, participating in men’s group activities, mentoring new members, and lecturing.

A memorial service to celebrate O’Fallon’s life will be held in Rochester this summer, when family members and friends can attend.

To read O’Fallon’s full obituary, visit <https://bit.ly/3MUWfZu>.

Michael Woodroffe

Michael Woodroffe, Leonard J. Savage Professor Emeritus of Statistics at the University of Michigan, passed away February 22, 2022, at the age of 81.

Michael made many fundamental contributions at the interface of probability and statistics, including sequential analysis and nonlinear renewal theory, shape-restricted inference, and central limit theorems under dependence. He was one of the founders of the Michigan Department of Statistics in 1969 and the last solo editor of the *Annals of Statistics*.

Michael was an exceptional statistician and a great mentor who supervised more than 40 PhD students and a wonderful human being who touched many lives directly.

Thomas B. Jabine

Submitted by Richard Valliant

Thomas B. Jabine, an ASA Fellow since 1965 and an elected member of the International Statistical Institute (ISI), died on January 30, 2022, at the age of 97.

Tom was notable for a long and distinguished career in the US federal government, his service as a statistical expert to international government agencies, and his service to the ASA.

He earned a BS in math and an MS in economics and statistics at the Massachusetts Institute of Technology in 1949 and married Marian Brandon Smith, his wife of 56 years, in 1950. He was chief of the Statistical Research Division for the US Census Bureau, chief mathematical statistician for the Office of Research and Statistics in the Social Security Administration (SSA), and statistical policy expert for the Energy Information

Administration (EIA). He was also a consultant to the United Nations; US Agency for International Development; Organization of American States; and the governments of Uruguay, Nepal, Iran, Turkey, Afghanistan, Sri Lanka, Bangladesh, and Papua New Guinea. Additionally, Jabine was the editor and author of several books on statistics and survey methods.

During his 20-year career at the Census Bureau, Jabine rose from mathematical statistician to chief of the Statistical Research Division. He was among the cadre of statisticians working for Morris Hansen and William Hurwitz who developed many of the methods in probability sampling that became industry standards. He branched out from sample design to questionnaire design after it became clear to him that minimization of error in surveys required work on both sampling and nonsampling error. During the 1950s and 1960s, he designed some of the first split-panel tests in government surveys of alternative questionnaire features and data-collection methods.

Soon after Jabine joined SSA's Office of Research and Statistics, passage of the Privacy Act of 1974 imposed several new requirements on federal agencies collecting and disseminating data about individuals. He was charged with developing procedures for meeting these and other legal requirements at SSA and later at the EIA. In the 1980s, he was a member and chair of the ASA's Committee on Privacy and Confidentiality. In addition to being an ASA Fellow and elected member of ISI, Jabine's honors include serving as president of the Washington Statistical Society in 1978–1979 and

receiving the Roger Herriot award in 1999.

At the Committee on National Statistics (CNSTAT) of the National Academy of Sciences, Jabine coedited or consulted on 13 of the committee's reports. Among them were the 1984 report, *Cognitive Aspects of Survey Methodology: Building a Bridge Between Disciplines*, and the 1993 report, *Private Lives and Public Policies: Confidentiality and Accessibility of Government Statistics*.

Research on cognitive methods in surveys and protection of the privacy of respondents to surveys and censuses has burgeoned since then.

Jabine felt some of his most rewarding work was providing technical assistance in census and survey methods to statistical offices in developing countries and later working on the role of statistics in human rights. In the late 1950s, he helped Brazilian census planners introduce sampling methods in their 1960 population census. From 1963–1965, he assisted the Thai statistical office in designing and initiating household sample surveys. In the 1980s, he served as a chair of the ASA's Committee on Scientific Freedom and Human Rights. Initially, the committee's efforts were directed toward helping statisticians in other countries whose rights were being violated.

Later, they extended the scope of that work and the committee's charge to cover the use of statistics to monitor the status of human rights.

An interview with Jabine was done by Michael Larsen (2008) for *CHANCE*, for which Jabine was the puzzle master for 10 years (<https://bit.ly/3sjby5O>). He was a co-founder of the Senior Statistician's Society in Washington, DC.

Charles R. Mann

Lee-Ann C. Hayek and Richard Sampson

Charles Mann—president of Charles R Mann Associates in Washington, DC; ASA Fellow; and longtime ASA member—passed away on February 14, 2022, after a long illness.

He had been a member of the ASA since the late 1970s and, between 1980 and 1986, served on the Ad Hoc Committee for Ethics, which initiated and structured the original code of ethics. He was a member of this committee when members requested the ASA Board to establish a permanent ethics committee with the purpose of developing a permanent ethics code for the association. Charles was a member of this committee from its beginning in 1986 until the acceptance of the code of ethics in the early 1990s. He—along with T. Ireland, the first chair of the ad hoc committee, and L. C. Hayek, cochair of the ethics committee—wrote the code, and the latter presented it to the ASA Board, obtaining acceptance. Charles considered this among his highest achievements for the ASA.

Charles was also a member of the Washington Statistical Society and its board in the late 1980s, when he cochaired the Social and Demographic Committee.

In 1996, Charles was elected a fellow of ASA “for excellence in the application of statistical methodology in the legal and regulatory communities; and for leadership in developing awareness and consideration of

professional ethics in the practice of statistics.”

Charles held a BS in applied mathematics from Brooklyn’s Polytechnic Institute, an MS in mathematical statistics from Michigan State, and a PhD in statistics from the University of Missouri. He was an instructor at the University of Maine, Orono, and an assistant professor in the department of statistics at The George Washington University. Before he opened his own firm, he headed and became a vice president of the statistical services division of Group Operations, Inc., in Washington, DC. He is the author of the entry on underutilization in the *Encyclopedia of Statistical Sciences*.

In 1977, Charles became founder and president of Charles R Mann Associates and was one of the pioneers in the provision of statistical services to legal practitioners in employment law. He participated in more than 100 seminars, workshops, and individual presentations to lawyers on various statistical applications and methodologies to be applied for proper statistical evaluation of employment discrimination claims. He also helped educate the legal profession to use multiple regression analysis to evaluate equal pay claims and use only statistically significant differences in application and/or employment rates for establishing a *prima facie* case. In addition to providing lawyers

with advice and reports on statistical analyses, Charles provided expert witness testimony in more than 160 cases, including major and landmark cases in a variety of legal arenas, and participated personally in settlement negotiations for several major national class action cases.

The Equal Employment Opportunity Act of 1972 first authorized the EEOC and private individuals to bring lawsuits under Title VII, which prohibits employment discrimination on the basis of race, sex, and national origin. In 1973, a nationwide class action lawsuit—O’Bannon and EEOC v. Merrill Lynch, Pierce, Fenner & Smith, Inc.—alleged Merrill Lynch discriminated against women applicants for a stockbroker position while the EEOC alleged discrimination on the basis of race, sex, and national origin in all positions. Charles helped forge a defense for the Merrill Lynch lawyers, which resulted in an affirmative action consent decree that adopted Charles’s unique statistical methodology for establishing goals and timetables for hiring minorities and women. This ‘five year plan’ compares the percentage of minorities and women actually employed with the percentage in the ‘comparable’ workforce and then establishes goals and timetables when a statistically significant difference exists in the employment rate. This was a landmark settlement and set the standard for the brokerage industry.

Many early employment law cases were litigated by parties looking only at the number and percentages of minorities and women actually employed, versus their corresponding number and percentages in the civilian labor force. This was commonly referred to as the “any difference rule.” For example, where a company had no women employed out of five electrical engineers compared to 20 percent of women in the labor force, a prima facie case of discrimination was established under the “any difference” rule. Charles was tireless in his attack on such uncritical thinking and incorrect methodology. He urged lawyers for both plaintiffs and defendants to focus on the “expected” numbers: to use statistics in a more refined way to ascertain whether the null hypothesis of nondiscrimination should be rejected.

Charles was also involved in a variety of discrimination cases outside employment law, such as *Anne Brent and the Fair Housing Center of Metropolitan Detroit v. Henry Ford Village, et al.*, a 1997 case alleging discrimination under the Fair Housing Act in the methods of advertising. There was also *Kernan v. Holiday Universal*, United States District Court for the District of Maryland, a defense of a nationwide class action lawsuit alleging racial discrimination under the federal public accommodation statutes involving health club memberships.

Parallel with his work in employment discrimination litigation, Charles provided expertise in the original development

of affirmative action programs for federal contractors and subcontractors. This longstanding Department of Labor program was established by Executive Order 11246 and administered by the Office of Federal Contract Compliance Programs (OFCCP). Among other regulations, the order requires government contractors and subcontractors to “... take affirmative action to [ensure] that applicants are employed, and that employee[s] are treated during employment, without regard to their race, color, religion, sex, or national origin.” As enforcement increased, the secretary of labor approved an interpretation that authorized a rule requiring contractors to seek to achieve and maintain a percentage of women and minority workers exactly equal to their estimated availability in the external civilian workforce. Charles was first to recognize this as another version of the “any difference” rule in litigation and vigorously opposed it, waging nearly a one ‘Mann’ war with the OFCCP to recognize statistical procedures to measure more accurately whether the differences were statistically significant.

The OFCCP then abandoned the “any difference” rule and adopted the 80 percent rule, which Charles likewise fought. That is, the percentage of minorities and women in the internal workforce had to be at least 80 percent of their corresponding availability in the external workforce. As Charles successfully educated the legal profession in using proper statistical analyses, it became clear there needed to be a sound

statistical basis for taking affirmative action in setting goals and timetables for the employer to avoid direct violations of Title VII. This dispute led to the seminal case that vindicated Charles’s views and can be seen as the crowning achievement in his career of advising the courts and legal profession in statistics in the employment context.

Firestone Synthetic Rubber & Latex Co. & Koppers Company, Inc. v F. Ray Marsha, et al., 507 F. Supp. 1330 (E.D. Tex. 1981) was a declaratory judgment action brought to prevent the debarment of a contractor for, among other things, only declaring underutilization of minorities and women when their internal employment rate was statistically significantly less than their availability in the corresponding labor force (at the .05 level). Enforcement of the “any difference” rule was finally ended.

In addition, Charles’s use of regression to analyze pay data was the first to be accepted by the Supreme Court in *Bazemore v. Friday*. That decision established the criteria courts now use to evaluate the reliability of regression analyses submitted in litigation and to justify affirmative action plans.

Charles was a highly esteemed mathematical statistician, responsible for the court’s understanding and adopting statistical analyses and methodologies still recognized and used in a wide variety of cases today, benefiting lives by helping to establish rigorous and transparent statistical methods for accountability in the legal system.

IMS Seeks Applications for Student Award

The Institute of Mathematical Statistics (IMS) is accepting applications for the 2023 Lawrence D. Brown PhD Student Award. Eligible applicants compete to be one of three speakers at an invited session as part of the IMS annual meeting.

The award includes reimbursement of both travel expenses and the meeting registration fee. To be eligible, applicants must be IMS members (student membership is free), current PhD students, and able to present at the IMS meeting.

The deadline to apply is May 1.

To view the selection and application process visit, the IMS website at <https://bit.ly/3w8yRBH>. ■

NCTM Offers Grants, Scholarships, Awards

The National Council of Teachers of Mathematics (NCTM) offers grants, scholarships, and awards to help math teachers, prospective teachers, and other math educators improve the teaching and learning of mathematics. Funding ranges from \$1,500 to \$24,000.

Apply at www.nctm.org/grants by May 1. ■

Deadlines and Contact Information for Select ASA National Awards, Special Lectureships, and COPSS Awards

AWARD	DEADLINE	QUESTIONS & NOMINATIONS
Links Lecture Award	July 1	awards@amstat.org
Health Policy Statistics Section Achievement Awards	September 15	www.asahealthpolicy.org/for-students
Lester R. Curtin Award	October 15	awards@amstat.org
Deming Lecturer Award	October 15	awards@amstat.org
Lingzi Lu Memorial Award	October 15	awards@amstat.org

sectionnews

Survey Research Methods

The Survey Research Methods Section (SRMS) is seeking webinar topics. If you have an idea for a webinar you would like to see offered or would like to give, submit it to SRMS education officer, Daniell Toth, at Toth.Daniell@bls.gov. Informal proposals are welcome; we will discuss your idea and determine if a more formal proposal is warranted.

SRMS provides free access to the *JSM Proceedings* for the entire history of the section (1978–2020), as well as for the Social Statistics Section (from which SRMS separated in 1978) from 1958–1977. Additionally, proceedings from all five International Conference on Establishment Surveys (ICES) meetings (1993–2016) are available for free.

Some of these years are prior to the electronic proceedings available through the ASA (2009–today); the section has scanned all earlier papers

as a service to survey researchers and is working on adding the 2021 *JSM Proceedings*.

To access the proceedings page, click on “Proceedings” at the top of the section’s new homepage or proceed directly to www.asasrms.org/Proceedings/index.html.

SRMS has an active discussion board within the ASA Community (<https://community.amstat.org/home>). Members receive these posts in their electronic mailboxes, so they are a good way to reach the community. Exploring the rest of the ASA Community pages can also be rewarding.

SRMS is also on Twitter with the handle @srmsasa and LinkedIn ([linkedin.com/in/officers-srms](https://www.linkedin.com/in/officers-srms)). Look for a midweek tweet and post 2–3 times per month with news and events. Follow SRMS and send your news to share with the SRMS membership and survey researchers everywhere. ■



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Indiana

■ Postdoctoral fellow position, Department of Biostatistics/Indiana University School of Medicine, Indianapolis, IN. Duties: statistical research on interval-censored survival analysis, recurrent event analysis, panel count data analysis, longitudinal data analysis. PhD in biostatistics, statistics or related field, demonstrated track record on survival analysis/recurrent events required. Competitive salary/excellent benefits. Submit CV, transcript(s), letter of application, 3 references to: <https://indiana.peopleadmin.com/postings/12445>. Indiana University is an EEO/AA employer, M/F/D/V. ■

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SAS..... cover 4

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Shahidul Islam

Recurrent events methodologies

Tianlu Xue

random matrix

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Bayesian path!



STATISTICS: A FOUNDATION FOR INNOVATION

SAVE THE DATE

KEY DATES FOR PARTICIPANTS

May 31, 2022
Draft Manuscript Deadline



KEY DATES FOR ATTENDEES

May 2, 2022 (11:00 a.m. ET)
Early Registration and Housing Open

May 31, 2022
Early Registration Deadline

June 1–30, 2022
Regular Registration

July 1–August 11, 2022
Late Registration

July 6, 2022
Housing Deadline

AUGUST 6–11

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