January 2021 • Issue #523 AND STATISTICAL ASSOCIATION • http://magazine.amstat.org

## Reaching for High-Impact Opportunities Pushes Profession Forward

**ALSO:** My ASA Story: Sastry Pantula

Meet Spiro Stefanou, Head of the Economic Research Service



### **DID YOU KNOW?**

## SAS/STAT<sup>®</sup> 15.1 OFFERS BRAND-NEW CAPABILITIES.

### SAS/STAT 15.1 HIGHLIGHTS

Bayesian generalized linear mixed models.

Causal graph analysis.

Regression for time-to-event data based on restricted mean survival time.

Counterfactual analysis using quantile regression.

Semiparametric proportional hazards model for interval-censored data.

### support.sas.com/statistics

### Recent SAS/STAT **ADDITIONS**

Causal mediation analysis.

Compartmental models for pharmacokinetic analysis.

Fast quantile process regression.

Cause-specific proportional hazards analysis for competing-risks data.

Variance estimation by the bootstrap method.



## **AMSTAT**NEWS

### JANUARY 2021 • ISSUE #523

#### Executive Director

Ron Wasserstein: ron@amstat.org

Associate Executive Director and Director of Operations Stephen Porzio: steve@amstat.org

Senior Advisor for Statistics Communication and Media Innovation Regina Nuzzo: regina@amstat.org

#### **Director of Science Policy** Steve Pierson: *pierson@amstat.org*

Director of Strategic Initiatives and Outreach Donna LaLonde: donnal@amstat.org

> Director of Education Rebecca Nichols: rebecca@amstat.org

Managing Editor Megan Murphy: megan@amstat.org

Editor and Content Strategist Val Nirala: val@amstat.org

Production Coordinators/Graphic Designers Olivia Brown: olivia@amstat.org Megan Ruyle: meg@amstat.org

Contributing Staff Members Rebecca Nichols • Amanda Malloy • Kim Gilliam

Amstat News welcomes news items and letters from readers on matters of interest to the association and the profession. Address correspondence to Managing Editor, Amstat News, American Statistical Association, 732 North Washington Street, Alexandria VA 22314-1943 USA, or email amstat@ amstat.org. Items must be received by the first day of the preceding month to ensure appearance in the next issue (for example, June 1 for the July issue). Material can be sent as a Microsoft Word document, PDF, or within an email. Articles will be edited for space. Accompanying artwork will be accepted in graphics file formats only (.jpg, etc.), minimum 300 dpi. No material in WordPerfect will be accepted.

Amstat News (ISSN 0163-9617) is published monthly by the American Statistical Association, 732 North Washington Street, Alexandria VA 22314-1943 USA. **Periodicals postage paid** at Alexandria, Virginia, and additional mailing offices. POSTMASTER: Send address changes to Amstat News, 732 North Washington Street, Alexandria VA 22314-1943 USA. Send Canadian address changes to APC, PO Box 503, RPO West Beaver Creek, Rich Hill, ON L4B 4R6. Annual subscriptions are \$50 per year for nonmembers. Amstat News is the member publication of the ASA. For annual membership rates, see www.amstat.org/join or contact ASA Member Services at (888) 231-3473.

> American Statistical Association 732 North Washington Street Alexandria, VA 22314–1943 USA (703) 684–1221 ASA GENERAL: asainfo@amstat.org ADDRESS CHANGES: addresschange@amstat.org AMSTAT EDITORIAL: amstat@amstat.org ADVERTISING: advertis@amstat.org WEBSITE: http://magazine.amstat.org

Printed in USA © 2021 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.

## features

- 3 2021: A Year of Hope and Helping
- 5 Entries Invited for Statistical Significance Competition
- 5 JSR to Publish Special Issue in Celebration of 50 Years
- 6 Highlights of the November 18–20, 2020, ASA Board of Directors Meeting
- 8 Donor Spotlight: Mohamed Al Lawati
- 10 Meet Spiro Stefanou, Head of the Economic Research Service
- 12 My ASA Story: Sastry Pantula, Dean
- 14 Reaching for High-Impact Opportunities Pushes Profession Forward
- 17 Nominate a Colleague for ASA Leadership Position
- 17 Webinar: Privacy Risk and Preservation

## columns

#### 18

### STAT*tr@k* Jeremy Gu: Data Science from the Tech Industry to the World of Fashion

STAT*tr@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*.

### 20 STATS4GOOD Data for Good: The Year in Review

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.* 

### 22 MASTER'S NOTEBOOK To Get a PhD or Not to Get a PhD? Part 4

This column is written for statisticians with master's degrees and highlights areas of employment that will benefit statisticians at the master's level. Comments and suggestions should be sent to Megan Murphy, *Amstat News* managing editor, at *megan@amstat.org*.



### Pssst!

### **Coming Soon: ASA Podcast**

A dynamic duo will host the ASA's new podcast, "Practical Significance": the ASA's director of strategic initiatives, Donna Lalonde, and executive director, Ron Wasserstein. See next month's issue for details.



### **Add ICES to Your Calendar**

Don't miss this international event—Register early and save! Early registration opens February 10.

Learn more at ww2.amstat.org/meetings/ices/2021



## departments

### 24 education

USCOTS 2021: Teaching Conference Taking Proposals

GAISE II Now Available; Download for Free



## member news

- 27 Awards and Deadlines
- 29 People News
- 35 Section Chapter Committee News
- 37 Professional Opportunities



Follow us on Twitter www.twitter.com/AmstatNews

Join the ASA Community http://community.amstat.org



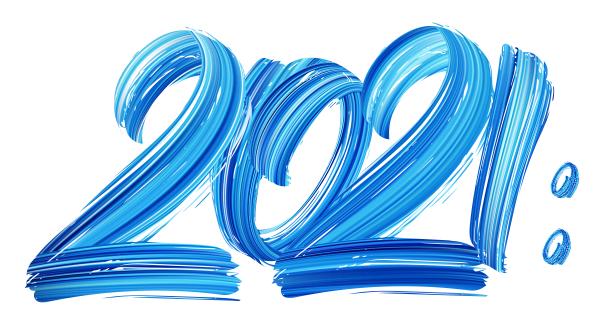
Like us on Facebook www.facebook.com/AmstatNews

Follow us on Instagram www.instagram.com/AmstatNews

Subscribe to our YouTube channel www.youtube.com/user/AmstatVideos



### president's corner



## A Year of Hope and Helping

Here's wishing you a happy, healthy, and productive new year, fellow statisticians. I don't know about you, but I have never been more eager for a year to end than I was in 2020. Each succeeding month I would think things could not possibly get weirder, crazier, or more challenging. Yet, somehow, events continued to unfold to dash my hopes for any sense of sanity or stability. So much for 2020.

By the time you read this, we will be living in the year 2021 and the pall of 2020 will be behind us. The pandemic caused enormous suffering in our society, including reductions in housing stability for millions of families and the economic downturn and associated losses of jobs, businesses, and wealth. Hunger among our nation's families has soared. Twenty-three percent report food insecurity. Racial injustices and health disparities continued their rise last year, and political divisiveness deepened. Finally, well more than 300,000 of our fellow US residents succumbed to COVID.

I hope neither you nor your loved ones were sick from COVID or contract it in the future. Although the distribution of vaccine promises a slow end to our sequestered lives, we very much continue to be embedded in the throes of the pandemic; times will remain difficult and uncertain for the foreseeable future. Yet here we are in a new year. There is reason for optimism and hope despite the challenges we face.

Now, more than ever, we as statisticians and human beings need to support each other. I encourage you to join me in devoting the year 2021 to building community. The ongoing COVID erawhere essentially all communications are virtualprovides an opportunity for both expanding your network and strengthening existing ties. If you are engaged in your career as a statistician, think about reconnecting with your undergraduate and graduate classmates; reconnect with former job colleagues. Stay in touch with your mentees and mentor(s); ask them how they are doing, share your tips for coping with the times, and see if they have any tips for you. If you are a student, stay in touch with your classmates and professors. Share your experiences and coping strategies.

Let's strengthen our ASA community. Say hi to fellow members of your ASA sections or chapters and participate in their activities. Speak out and contribute to our ASA Community by offering your perspective on an issue or helping a fellow statistician who has a technical question. Virtually introduce yourself to statisticians you have been wanting to meet. Bolster your social media presence by posting and following others. The ASA member directory or even LinkedIn can be a great resource for connecting. Ultimately, we will endure the pandemic and its effects on society, but the journey can be more readily navigated if we do it together, supporting each other as statisticians, colleagues, friends, and fellow human beings.



Rob Santos

Let's also support our local communities. The first part of 2021 will be critical in helping the public understand the safety and efficacy of the vaccine. We need a high proportion of the residents in each of our communities to be inoculated. Having a vaccine is necessary but not sufficient. We can communicate with friends, family, neighbors, and the public and deliver a message of trust based on our understanding and review of the statistical results of clinical trials.

Many of us have already done this, but much more is needed. All communications can help, be they conversations, social media postings, media interviews, op-eds, whatever. Let us do our part to spread the word that vaccines can be trusted, provided, of course, you believe that. And if you do not, let's have open, respectful discussions about your concerns. Our communities will benefit from hearing our voices.

Be aware of and sensitive to the suffering occurring in your local community. Families are hungry and stressed out, cannot pay bills, and are dealing with difficult health events and family issues. Many of us are blessed to be able to work at home while continuing to earn a paycheck and advance our careers. But so many people and families have not been so fortunate. You can help by donating to your local food bank or a nonprofit that helps your community. You can offer support and comfort to friends and family. We are all in this together.

The pandemic also brought into stark view some of the blemishes of society, one which is of special importance to me: exacerbated racial-ethnic disparities in health, justice, and virtually all aspects of society. Our ASA commitment to inclusion and equity will continue through the pandemic and beyond. The ASA is early into the long journey of understanding and addressing issues of justice, equity, diversity, and inclusion (JEDI, *bit.ly/3qXNMcW*) in statistics and data science. Please think about how you can help. As an association member, consider joining the ASA JEDI Outreach Group. The JEDI group is committed to identifying and overcoming systemic racism and hindering biases; their activities include assessing and improving JEDI efforts, developing resources for individuals and organizations in our professional community, enabling growth and appreciation for cultural humility, and communicating the group's efforts and solutions that have been implemented. There is also self-reflection and research you can do on unconscious bias. Becoming more aware of and sensitive to the effect of one's communications and actions on others different than you (be it race-ethnicity, gender, religion, technical expertise, language, etc.) will make you both a better statistician and a better human being.

Finally, the ASA has launched its Anti-Racism Task Force to review the association's infrastructure and policies; assess association communications, services, and benefits; and inform the public of the responsible use of statistics and data science in systems that unintentionally contribute to racial and ethnic bias. The task force will prepare a roadmap for the ASA to follow in advancing its JEDI objectives and realizing its commitments. Inequities, racial injustice, and noninclusiveness are not going away any time soon, and we as statisticians can do our part to address these issues and help create a better society for all. Please feel free to reach out to the task force (ww2.amstat.org/ committees/commdetails.cfm?txtComm=ABTBOD16) if you are available to help. There may be activities that could use a helping hand.

You can probably tell I have a passion for service to community. We exist, survive, and thrive in multiple "communities," including our beloved ASA community; our neighborhood, city, or town; our global professional network of colleagues; our families and friends; our church (if you are religious); and our social media pals. All deserve nurturing during these challenging times. Let us do our part to help society get through the pandemic and address societal imperfections, and let's do that with our statistical acumen and our hearts.

Polt & Sorta

# Entries Invited for Statistical Significance Competition

The Scientific and Public Affairs Advisory Committee (SPAAC) invites all JSM 2021 poster contributors to compete for a policy applications prize in its 12th Statistical Significance competition. A prize of \$300 will be awarded to the presenter with the JSM poster that includes a Statistical Significance piece the judges deem describes the best contribution of statistics to society.

Statistical Significance is a short, one-page illustration of the value of statistics to society within the context of the research problem dealt with in the poster submitted for JSM presentation (see *bit.ly/2xtiwIT*). The objective is to illustrate to a lay person how the statistical solution to the problem presented in the poster would help form decisions that improve society in specific areas such as health, agriculture, economy, education, manufacturing, and medicine. The piece should be clearly written to convey the beneficial role of statistics in a concise and unambiguous manner. The most effective Statistical Significance pieces are easy to develop, simple in exposition, enlightening, and fun to read.

Contest participants must include a one-page Statistical Significance piece with their poster presentation at JSM. Both the scientific merit of the poster and the Statistical Significance piece will be judged.

A panel of judges appointed by the SPAAC will visit the posters during a topic-contributed session at JSM and determine a winner the following day. The winner will be notified immediately thereafter.

Participation in this competition is only available to contributed poster authors who submit their poster abstract by the JSM deadline of April 14. To enter, email your intention to compete and your abstract number to Steve Pierson at *spierson@ amstat.org* by midnight April 30. Feel free to contact Pierson with any questions.

For more information about the competition, visit *https:// community.amstat.org/spaac/awards/ poster-award.* 



## JSR to Publish Special Issue in Celebration of 50 Years

The Journal of Statistical Research (JSR) invites manuscripts for a special issue on the occasion of its 50th year of publication and the 100-year anniversary of the University of Dhaka. The theme of the issue is Statistics: Opportunities and New Challenges and it will be edited by M. Ataharul Islam of the University of Dhaka, Sanjoy K. Sinha of Carleton University, and Abdus S. Wahed of the University of Pittsburgh.

The special issue will be dedicated to original research articles in both theoretical and applied statistics. The anticipated publication date for this issue is June 2021, and the issue will be published in Volume 55 (Number 1).

The deadline for manuscript submission is March 1. Authors interested in contributing to the special issue should prepare manuscripts following the *JSR* submission guidelines at *http://jsr.isrt.ac.bd/submit-articles*. Two copies of the manuscript, one with the author information and the other without, should be sent in PDF format to *JSRsubmit@isrt.ac.bd*. A LaTeX source file of the accepted manuscript should be provided, as well. Upon manuscript submission, indicate your manuscript is intended for the special issue.

All communication about the manuscript submission and review will be managed within the *JSR* editorial policy. For further information, visit *http://jsr.isrt.ac.bd* or contact any of the editors.

## Highlights of the November 18–20, 2020, ASA Board of Directors Meeting

Ron Wasserstein, ASA Executive Director

SA President Wendy Martinez called to order the final regular meeting of the ASA Board on November 18. The board met via videoconference over a three-day period. The highlights of the board meeting follow.

### **Action Items**

The board approved the following:

- Revisions to the charges of the Committee on Funded Research and Committee on Statistics and Disability
- Funding to convert to new platforms for membership and content management
- Proposed changes to the constitution and bylaws, not including the changes to the first paragraph of Article III, Section 2 of the bylaws. That paragraph proposed a change to the voting method used in ASA elections, and the board decided, based on member responses, to leave that section as is. That is, we will continue to use approval voting as our voting method.
- Entering into a partnership with ACM and IEEE-CS to accredit undergraduate data science programs under the ABET accreditation aegis
- A policy for naming ASA awards and scholarships
- Adding FENStatS as an accreditation partner

### **Report and Discussion Items**

- Associate Executive Director and Director of Operations Steve Porzio updated the board on 2020 financials as of the end of the third quarter. He noted that the ASA will operate at a loss in 2020. Porzio said we can manage this deficit because our balance sheet is healthy.
- ASA Treasurer Ruixiao Lu reported on the ASA's investments. She described the diversity of the investment portfolio. Lu noted it is time to review our contract with our investment adviser and to consider whether to continue with the same adviser. Bids have been

received from other companies and will be reviewed by the Investments Committee.

- The board broke into small groups to ponder, over a two-day period, the future of ASA meetings during and after the pandemic. They raised questions and made many suggestions that the staff will consider as meetings are planned for 2021 and beyond.
- As it does annually, the board discussed the status of committees in the Professional Issues and Visibility Council and Education Council. The committee councils serve as the connection between their committees and the board. The board expressed gratitude for the great work these committees do on behalf of the profession and association.
- The board heard updates and reports from several organizations with which we have collaborations or are developing collaborative efforts, including (in the order the board heard the reports):
  - Academic Data Science Alliance
  - Institute for Mathematical and Statistical Innovation
  - Canadian Statistical Sciences Institute
  - National Institute of Statistical Sciences
  - Sports Analytics Club Program
  - Royal Statistical Society
- Adrian Coles and David Marker, co-chairs of the ASA's Antiracism Task Force, informed the board about the launch of this task force. They reviewed the charge and vision of the task force, including their working definition of antiracism. They outlined the areas of impact they would like to see the committee strive for, their timetable for achieving this impact, and their plan for reporting to the board.
- Martinez, President-elect Rob Santos, and incoming President-elect Kathy Ensor updated the board on the strategic initiatives they are

planning or that are in progress. Information about them will appear in *Amstat News*.

- The board reviewed the report of the ASA's Strategic Plan Review Committee, which consists of the third-year board members, publications representative, treasurer, and executive director. The committee made recommendations to improve evaluation of ASA initiatives.
- Council of Chapters Representative Ji-Hyun Lee reviewed the JSM-related activities of the council, the activities of the Chapter Status Committee, plans for virtual attendance options at future COC business meetings, and a plan to hold winter meetings of the COCGB in connection with the Conference on Statistical Practice once that becomes feasible (i.e., post-pandemic). She also discussed feedback from Council of Chapters members regarding the holding of its meetings virtually at JSM.
- Council of Sections Representative Katherine Halvorsen reviewed the leadership workshop for council chairs held in late September, the video created to help section treasurers do their jobs, and the completion of a report on factors affecting section membership. She also noted that three sections have updated their charters.
- ASA Director of Science Policy Steve Pierson introduced our new science policy fellow, Jonathan Auerbach. Pierson reported on advocacy efforts of the association, focusing on issues surrounding the 2020 census, the transition to a new administration, technical papers developed by staff, and statistical issues in Supreme Court cases.
- Amanda Malloy, ASA director of development, reviewed the major fundraising challenges we experienced this year. She noted that, nonetheless, people are continuing to donate and we continue to add new donors. Giving Day was again successful, Malloy said, generating many gifts and involving new donors. She asked the board to assist with thank-you notes to be sent to all donors who contributed at least \$200 in 2020.

The next regular meeting of the board will be April 14–16, 2021, via videoconference. ■

### **2020 Board of Directors**

Wendy Martinez, President

Rob Santos, President-Elect

Karen Kafadar, Past President

Katherine Monti, Third-Year Vice President

Richard De Veaux, Second-Year Vice President

Dionne Price, First-Year Vice President

Don Jang, Third-Year Council of Chapters Representative

**Anamaria Kazanis,** Second-Year Council of Chapters Representative

Ji-Hyun Lee, First-Year Council of Chapters Representative

Katherine Halvorsen, Third-Year Council of Sections Representative

Mark Glickman, Second-Year Council of Sections Representative

Rebecca Hubbard, First-Year Council of Sections Representative

Alexandra Schmidt, International Representative

Scott Evans, Publications Representative

Ruixiao Lu, Treasurer

Ron Wasserstein, Executive Director and Board Secretary

### 2021 Board of Directors

Rob Santos, President Kathy Ensor, President-Elect Wendy Martinez, Past President Richard De Veaux, Third-Year Vice President Dionne Price, Second-Year Vice President Matilde Sanchez-Kam, First-Year Vice President Anamaria Kazanis, Third-Year Council of Chapters Representative Ji-Hyun Lee, Second-Year Council of Chapters Representative Alexandra Hanlon, First-Year Council of Chapters Representative Mark Glickman, Third-Year Council of Sections Representative Rebecca Hubbard, Second-Year Council of Sections Representative Kate Calder, First-Year Council of Sections Representative Alexandra Schmidt, International Representative Bin Nan, Publications Representative Ruixiao Lu, Treasurer Ron Wasserstein, Executive Director and Board Secretary

## Donor Spotlight: Mohamed Al Lawati

Amanda Malloy, ASA Director of Development



Amanda Malloy

t isn't often I get to visit with someone on the other side of the world, but thanks to Zoom and the good fortune of our schedules aligning, I had the opportunity to visit with and get to know Mohamed Al Lawati.

Al Lawati has been an ASA member and donor for several years. He was a principal sponsor of the Conference on Statistical Practice in 2019 and 2020, is a Helen Walker Society member (the ASA's donor club for those who give \$1,000 or more annually), and recently committed to help fund programs that focus on cultivating future leaders in statistics and data science.

After earning his highschool diploma in Kuwait, Al Lawati received a scholarship to study accounting in the Arab Republic of Egypt. Following graduation, he secured his first job as an employee in the Ministry of Finance in the Sultanate of Oman.

In 1990, Al Lawati was sent to the United States, where he studied at the University of Georgia and earned a master's degree in statistics.

"I received a scholarship from my country, the Sultanate of Oman, to study a master's degree in statistics because of the focus



Mohamed Al Lawati

on the digital economy and that statistics has a distinctive role in this field," Al Lawati told me. "I was also eager to study statistics and applied statistics, so I wanted to specialize in this field."

This allowed him to advance professionally and go on to hold several more leadership positions at the Ministry of Finance, such as the director of planning and financial studies and the director of finance. Following his service in the Ministry of Finance, he opened a successful real-estate business in Oman, which is part of the main business sector there.

In 2018, Al Lawati earned a PhD in small- and mediumsized enterprises from the British International Institute and, in 2019, received a fellowship in business administration from the British Institute of Economics and Political Science. He is currently serving as the deputy chairman of the Omani Society of Certified Public Accountants.

At this point in his life, Al Lawati says it is important for him to be philanthropic. He has a strong desire to give back and help the next generation.

"My charitable activities and my social responsibility have not been limited to the Sultanate of Oman, but rather to neighboring countries, including African countries. My interest in the American Statistical Association started when I began my master's degree in statistics and has continued since then and especially since we are now working under the digital economy system," Al Lawati said. "In addition to my master's degree in statistics at the University of Georgia and my relationships with the university administration there, I have a strong motivation to strengthen my relationship with ASA."

Al Lawati was particularly inspired by the leadership challenge created as part of former ASA president Lisa LaVange's leadership initiative and has partnered with the ASA to fund this program and ones like it that help cultivate the next generation of leaders in statistics and data science.

"I am inspired by ways of leadership in practicing my own work. For this reason, I have a strong desire to contribute to financing and sponsoring programs like the leadership challenge in 2021," Al Lawati said.



### About the ASA-Dr. Mohamed Al Lawati Leadership Challenge

The need for statisticians and data scientists to enter the workforce has never been greater. Likewise, the need for these professionals to present and communicate their work to colleagues is critical. Many times, students My interest in the American Statistical Association started when I began my master's degree in statistics and has continued since then and especially since we are now working under the digital economy system.

enter the workforce without having gained valuable 21st-century skills that are key to their success and critical to the advancement of their work. These include presentation and communication skills, working effectively in a team, and leadership skills.

The ASA–Dr. Mohamed Al Lawati Leadership Challenge is one example of the kind of innovative programs created to achieve these goals.

Teams with three to five members take on a leadership problem presented by the ASA such as building a plan to grow and sustain the ASA's membership. At least two team members must be students during the challenge period. The remaining members of the team must have graduated within the last two years.

Team members participate in a leadership challenge orientation session and three virtual leadership development workshops designed to help them hone their presentation, leadership, and communication skills. The teams are then given the opportunity to present their plans to the ASA Board of Directors, giving the team members the chance to meet and network with some of the leaders in the profession and witness how a board meeting is conducted. Participants receive a scholarship to attend an ASA meeting (in person or virtual) and complimentary ASA membership for three years.

## **MEET SPIRO STEFANOU,** Head of the Economic Research Service

piro Stefanou has been the administrator of the Economic Research Service (ERS) at the **J**US Department of Agriculture since August 2020. He provides leadership and guidance for the agency research, analytical, and technical operations. Prior to his arrival at ERS, he was professor and former chair in the food and resource economics department at the University of Florida and professor of agricultural economics at Penn State University. He is a fellow of the Agricultural and Applied Economics Association and held visiting positions at universities in Greece, The Netherlands, Italy, and Austria. Stefanou is past editor of the American Journal of Agricultural Economics and Applied Economic Perspectives and Policy and has served on the editorial boards of six national and international journals.

### What about this position appealed to you?

The Economic Research Service is a world leader in conducting objective, policy-informing research addressing the current trends and emerging issues impacting agriculture, the food system, the environment, and rural America. In addition, ERS is one of the 13 federal statistical agencies, and we are a datadriven operation. We produce data products, use data products generated by other federal statistical agencies, and acquire proprietary data products. Leveraging these data assets with our human capital expertise offers tremendous potential to have an impact. Given this potential, ERS has a unique opportunity to re-envision how we conduct business and craft the research and outreach agenda leveraging new staff ideas and a new location in America's heartland.

## Describe the top 2–3 priorities you have for the Economic Research Service.

My priorities revolve around our goals to undertake relevant, timely, and objective economic research to promote the growth of US agriculture and rural areas as we are mindful of our environmental impact. Part of being relevant is being ready to address the challenges on the horizon. These horizons will demand that we operate at the nexus of agriculture/food, the environment, and health. This prism of systems demands connecting with new partners across disciplines and across the public-private divide. We are revisiting the range of branded ERS outreach products beyond our current portfolio to more rapidly address these timely and emerging needs.



Spiro Stefanou

## What do you see as your biggest challenge(s) for ERS?

I would like to identify two important, serious challenges. The first is a challenge most enterprises encounter that revolves around operating in the short run while planning for the long run. I always see these challenges in the context of a sports analogy. This is a team effort; everyone needs to keep their head up and take care of business. At the same time, we need to move without the ball to be in a position to make the play. Bringing this back to ERS, we need to balance the demands for timely, rapid analysis of emerging issues and, at the same time, craft and invest in research and outlook programs that anticipate future needs to continue producing timely and relevant research and data.

The second significant challenge is the responsibility of being a federal statistical agency, which entails a high bar to clear that centers on trust. The role of trust is a burden we proudly bear, and honesty and judgement are the foundations of trust. We count on data providers to trust that information collected for statistical purposes will be protected and that these data will be used for the purposes the agency described. Having no way to independently verify the completeness and accuracy of statistical information, data users must trust the credibility of the information and products we provide.

## How can the statistical community help you?

The statistical community can assist us with the methodological and computational challenges of communicating our data products. We, as datadriven economists, are at our best when we can communicate insights into how policies impact stakeholders' decisions. As we combine data with more detail over individuals, households, time, and space, there is an evolving need to find effective and impactful mechanisms to translate the data into insights. Our 'customers' face narrowing bandwidth and have a need for creative translation of new trends and their impacts.

My priorities revolve around our goals to undertake relevant, timely, and objective economic research to promote the growth of US agriculture and rural areas as we are mindful of our environmental impact. Part of being relevant is being ready to address the challenges on the horizon.

### Prior to your tenure, what do you see as the biggest recent accomplishment of the agency?

The decision to undertake significant investment in data products from proprietary sources and to creatively merge them into federal data products. These combined data products create more fuel for our research activities and stimulate new directions for our research programs.

## Tell us more about your research and how it overlaps with the work of ERS.

My research activities address themes of competitiveness and growth and related policy implications. This research revolves around how firms make decisions when current decisions impact future production possibilities. How firms choose to adopt effective technologies and their capabilities to extract the maximum potential from these technologies is a key feature of these frameworks. Investment and innovation patterns, firm learning, and capacity utilization are key features of these investigations.

With agriculture being a natural resource–based activity, productivity gains are going to come from innovation. My long-standing work in productivity and economic performance are topics of relevance to USDA's goal to promote growth in agriculture. Along with several colleagues, we've developed the theoretical foundations for addressing efficiency and productivity in a dynamic production environment and generated many studies and considerable discussion in economic policy circles across nations.

A core mission of ERS is to undertake objective economic research on trends and emerging issues that impact agriculture, the environment, food, and rural America. Assessing opportunities and impact of policies that can promote growth and well-being in this part of our economy is a key part of this mission. The policy stories associated with the dynamic capabilities and productivity have wide interest, since growth can come from firms wasting fewer resources or adapting their size to extract the full potential of technologies in place and/or firms looking to push the technological envelope.

## How does your research inform how you lead ERS?

I have always been drawn to the short-run, long-run story of economics. We are always operating in the short run. Rutherford Aris has a great statement in his book *Discrete Dynamic Programming* that left an indelible impression on me:

"... If you don't do the best you can with what you happen to have got, you'll never do the best you might have done with what you should have had ..."

Optimal decisions are linked forward "... to the best we might have done ..." and backward "...with what you should have had. ..." This is a statement about realizing our potential! Planning is essential to realizing our potential. The plans can provide a guidepost, but plans can be revised. ■

## MY ASA STORY Sastry G. Pantula, Dean College of Natural Sciences at California State University, San Bernardino

photo courtesy of CSUSB photographer, Corrine McCurdy

This is a new series featuring 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.

## My advice to young statisticians is to engage with the ASA early and often.

"Engage to Excel" is the title of a PCAST report in 2012 I distinctly remember while I was at the National Science Foundation. It is also the mantra I am using now with our students at California State University, San Bernardino. It is very important for our students to engage with the university, especially during this pandemic while we are virtual. And my advice to young statisticians is to engage with the ASA early and often. In the process, we all excel! My engagement with the ASA has helped me in many ways in my career, and I hope I can be of help to others as they move up their ladder.

It all started with a simple nudge from my major professor, Wayne Fuller, at Iowa State to join the ASA as a student in 1980. In 1983, I gave my first JSM talk in Toronto. It is not the nervousness of giving a talk I remember, but rather the Opening Mixer. I stood next to Wayne, who is a magnet and center of attraction. I recall him introducing me to so many famous statisticians in one single evening. I think I have attended every single JSM since then, and I always make sure I stay with Wayne at the mixer—it is a *networking Mecca*! I also make sure I attend the Diversity Mentoring Program to connect with future graduate students, future faculty, future allies, and future leaders.

As a young faculty member at North Carolina State University (NCSU) in 1982, the local ASA chapter provided me a welcoming place to network with statisticians in the Research Triangle area, which had a large density of statisticians. Chapter meetings and seminars used to be in Building C (There were only three buildings then!) on SAS campus and at the Research Triangle Institute. Young faculty had an opportunity to serve on ASA chapters, which I enjoyed very much. Professional service is valued at NCSU. I was also active in the Business and Economic Statistics Section and was elected to be the program chair for JSM 2000. My service to this section led me to be an associate editor for the *Journal* of Business & Economic Statistics. It has given me a broader view of the excellent research in my areas of interest. You learn more when you teach, and you expand your horizons when you review other people's work.

### One of the best calls I ever received was when I was nominated to be the ASA president.

A chance meeting with a former ASA president, Fritz Scheuren, led me to be nominated for and appointed as the treasurer for the ASA. It really gave me an insider view of how a 20,000-member "big tent" organization is run, with many volunteers like us and many dedicated people who serve on the ASA Board looking out and advocating for our profession. It also gave me a chance to work with and observe amazing ASA staff who prioritize our success.

One of the best calls I ever received was when I was nominated to be the ASA president. What an honor to have the opportunity to serve the ASA! The second-best call I ever received was from ASA Executive Director Ron Wasserstein congratulating me on becoming the first Asian president of the ASA in more than 100 years! It gave me an opportunity to GIVE (Growth, Impact, Visibility, and Education) to the ASA. It also gave me the opportunity to visit a number of our chapters, represent the ASA globally, and take a group of statisticians to China on a People to People trip. This leadership position certainly enhanced my chances of becoming the first statistician to be the director of the Division of Mathematical Sciences at the National Science Foundation.

Being director was one of the best jobs and gave me a bird's-eye view of the outstanding research happening in mathematical and statistical sciences. This service to our profession opened the doors for me to be a dean at a couple of colleges, including my current job. I have had the opportunity to serve on several ASA committees and currently serve on the External Nominations and Awards Committee.

Serving the ASA, in small steps, one step at a time, made me understand the personal gratification I get from serving others. It helped me decide on and pursue career choices that allow me to help others reach their full potential. It is the number of allies in the ASA who helped me get to where I am and help me continue to grow. The more you serve, the more you thrive; the more you give, the more you get; and the more you engage, the more



Sastry and his adviser and mentor, Iowa State University professor Wayne Fuller, have a family breakfast during JSM 2014, a JSM tradition. (photo by Eric Sampson/ASA)



Ron Wasserstein, Ingram Olkin, and Sastry Pantula during the 175th anniversary celebration at the 2014 Joint Statistical Meetings in Boston (photo by Eric Sampson/ASA)

you excel! *Infinite possibilities*. I highly recommend serving the ASA and promoting the practice and profession of statistics. It has been great for me, and I know you will reap the benefits, as well.

# Reaching for High-Impact Opportunities **Pushes** Profession Forward

External Nominations and Awards Committee Members

n 2017, the ASA leadership convened the External Nominations and Awards Committee with the specific charge to do the following:

- Identify boards, committees, and other bodies external to statistics to which statisticians should be appointed to assist in advancing science and raising the profile of the profession
- Identify high-profile awards (external to the American Statistical Association) for which some ASA members might be eligible
- Identify people who should be nominated for these positions or awards, assess eligibility, and contact those individuals who would be able to effectively nominate the ASA member

The focus is on opportunities of high impact and visibility outside the statistical profession.

The rationale for forming the committee was clear: Statisticians have an important role in helping make evidence-based decisions in a world awash in data an should serve on expert panels, advisory committees, and commissions where their expertise can enrich collaborative deliberations. Statisticians have been indispensable in playing these roles over a long period and they and the profession should be recognized.

### **Outcomes of Committee Activity**

Members of the External Nominations and Awards Committee take pride in nominating ASA members for external awards and share in the nominee's joy when a nomination is successful. For example, the committee nominated James O'Malley from Dartmouth for the 2019 Award for Excellence in Methodology in Health Economics and Outcomes Research from the International Society for Pharmacoeconomics and Outcomes Research based on his original research published in *Statistics in Medicine* in 2019 (see Page 32). O'Malley's awardwinning work investigated the relationship between individuals' proximity to fast-food establishments and their body mass index.

The award not only brought personal honor to O'Malley but also public visibility to his home institution, which featured his winning in its news feeds and on multiple websites.

When interviewed, O'Malley said, "The award is testimony to the increasingly important role that statistics plays in society and ... it depicts the profession of statistics in a very positive light."



### **Benefit of Professional Services**

Since its inception, the External Nominations and Awards Committee has collaborated with ASA sections and committees to nominate ASA members to serve on external boards and committees. As John Tukey famously said, "The best thing about being a statistician is that you get to play in everyone's backyard." Statisticians bring unique insights to collaborative efforts, because their knowledge is critical to nearly all applied sciences. However, these insights can only bear fruit if statisticians have a seat at the table when decisions are being made.

Besides representing the statistical profession, serving on external committees or boards offers networking opportunities that can open new doors. The JSM 2020 session "E Pluribus Unum: Achieving Your Potential in Statistics Through Different Organizations" (see *bit.ly/38nAvSH*) focused on the benefits of serving in professional societies and on external boards and offered tips for building networks. With the right timing, this can be a great way to grow professionally for many statisticians.

### **Finding Nominees**

Members of the External Nominations and Awards Committee need the help of all statistician colleagues, as they are limited by their knowledge of individual statisticians who might be eligible for award or committee opportunities. To expand the committee's reach, especially to increase the nomination of diverse candidates, committee members frequently depend on sections, other ASA committees/groups, and the ASA community to identify potential candidates. When asked to help identify candidates in the future, consider who may be eligible, especially candidates who go beyond "the usual suspects." The committee is committed to broadening the candidate pool and nominating diverse candidates in terms of race, ethnicity, sex, gender, and other characteristics.

### External Nominations and Awards Committee Members

Christy Chuang-Stein Mary Batcher Amit Bhattacharyya Joseph Cappelleri Felicity Boyd Enders Lee-Ann Hayek Regina Liu Sastry Pantula Kimberly Sellers David Marker

### **Submitting Nominations**

On multiple occasions, committee members have reached out to candidates who could represent the profession well, but the inquiries went unanswered. If the profession does not have trailblazers who are willing to put their hats in the ring, statisticians may never break the holds on prestigious awards by researchers from other scientific fields.

When a member of the External Nominations and Awards Committee reaches out about going after an external opportunity or award, give the invitation serious consideration. Respond even if your answer is negative, ideally with suggestions for other eligible candidates. There is no better way to expand the profession's reach than by putting ASA members on influential boards and committees and helping them win prestigious awards.

### Nominate a Colleague for ASA Leadership Position

Mominations are being sought for ASA presidentelect and vice president candidates for the 2022 election. While the 2021 elections have yet to be held, the Committee on Nominations needs time to evaluate recommendations to propose the best possible slate of candidates for these critical positions.

As a member of the ASA, you recognize the importance of leadership in our diverse, complex, and multidisciplinary field. You and all fellow ASA members deserve visionary leaders who can ensure our discipline has a voice at the table when appropriate, whether it be in academe; research firms; federal, state, or local government; or nonprofit organizations. This is why we need your input.

For this election cycle, the president-elect will be selected from industry and the vice president will be selected from government. Think about your colleagues and associates who are members of the ASA and would make good candidates for these positions. Think about members who have helped run a conference or are active in your section or chapter. Then, nominate your choices for the 2023 president-elect and vice president by emailing *elections@amstat.org.* 

Supply as much information about your nominee as possible to assist the committee in researching each candidate thoroughly and discretely.

The deadline for nominations is February 1. ■

### WEBINAR Privacy Risk and Preservation

he ASA Committee on Privacy and Confidentiality is hosting a webinar on contact tracing and information sharing January 29 at 1 p.m. EST over Zoom. The host will be Fang Liu, professor of applied and computational mathematics and statistics at the University of Notre Dame.

Contact tracing in the COVID-19 pandemic is key to preventing the spread of the disease. Countries and regions around the world have developed and deployed contact tracing software or mobile apps. While contact tracing plays an important role in the pandemic, red flags have been raised regarding the privacy risk associated with the contact tracing apps and software.

Liu will provide an overview of the GPS- and Bluetoothbased contact tracing apps in the framework of both centralized and decentralized models, examine their associated privacy risk, and discuss the effectiveness of the privacy-preserving measures adopted in these apps. She will also share the ongoing work of her group on the application of formal privacy protection concepts and models to COVID data collection and sharing.

Register at *bit.ly/387yCsT.* ■



The **2-4 positions** in each Dept., are based at our Boston Seaport Headquarters. Please contact Vertex University Relations at **University\_Relations@vrtx.com by Feb 19**<sup>th</sup>.

### STAT*tr*@k

## Jeremy Gu: Data Science from the Tech Industry to the World of Fashion

Editor's Note: A version of this article was originally published on ThisIsStatistics.com in March of 2020. It has been republished here with permission.



Jeremy Gu

hen you think of the biggest companies in the world built on data, which do you think of? Amazon? Uber? Stitch Fix? Data scientist Jeremy Gu has experience at all three, using data to advance their offerings and make strategic business decisions.

After Jeremy graduated from the University of Minnesota with undergraduate degrees in math and statistics and the University of Washington with his master's in statistics, he found his first job at Amazon. He held several roles there working with machine learning, marketing analytics, and data science.

"Amazon means a lot to me. I feel extremely fortunate to have started my career there," Jeremy said. "Data science at Amazon is disrupting the e-commerce industry in many ways. Amazon has several business lines, and therefore data scientists can find many various, challenging, and unique questions that data can provide solutions to," he continued. "For example, its supply chain optimization attracts many great researchers to improve delivery efficiency, and its advertising technology provides capabilities that data scientists can leverage to improve ad performance."

"Amazon has a long history of using data, and thus, the data science career development is mature," Jeremy said. "Data scientists can choose different career paths: business insights, machine learning, economics, optimization, and so on. A few prestigious scholars and experienced managers at Amazon, together with HR partners, design career growth plans for data scientists from various backgrounds."

Amazon's leadership principles, such as "customer obsession" and "earn trust," changed Jeremy's way of thinking. During his first year at Amazon, he wasn't fully aware of the importance of the principles. But after several years of working in the industry, Jeremy recommends students read these principles before they land their first jobs. "Amazon helped me train my technical skills like coding and modeling, but it also helped me build my soft skills such as communicating with others and understanding the business," he said.

### Building on Technical Skills with Experimentation Platforms

Following his time at Amazon, Jeremy worked for Uber. He was the senior data scientist on the experimentation platform team, then went on to lead a group of data scientists to develop business strategy for Uber.

"Amazon and Uber have common areas in data science because they have similar business problems," Jeremy said. "Like the optimization in the supply chains of Amazon, the optimization in the shared-ride business of Uber enjoys a high level of public attention because many people in the US use Amazon and Uber. Data scientists work on questions such as how to minimize the time on the route and how to provide an accurate estimated time of arrival," he continued.

Even though Jeremy left Uber in December of 2019, he said his experience there was as precious as his time at Amazon. "Uber taught me to hold onto the rails and keep moving in a storm, and Amazon laid a solid foundation on which I can develop my career wisely," he said.

You've likely seen Jeremy's work on Uber Eats without even noticing it. Jeremy and his team determined the best email subject lines that would convert clicks to orders and performed tests to decipher what was most meaningful for users.

There's a lot that goes on behind the scenes of sending a seemingly simple email. What's the best subject line? How do emoji perform? Do users prefer \$5 off, free delivery, or 10 percent off? What subject line drives the most people to open the email and subsequently place an order? While you may have never thought about the data in your inbox, this is one of the many integral roles statistics plays in larger business strategy.

### From Tech to Fashion

Jeremy is now the data science manager at Stitch Fix, a fashion company that uses data to help recommend style options to its subscribers. To increase the customer base, Jeremy's team works on optimizing marketing channels and improving marketing effectiveness.

The technology industry offers lots of opportunities for statisticians and data scientists. According to Jeremy, there are many opportunities within the industry and a wide variety of projects to work on, as well as the added bonus of collaborating with colleagues who specialize in other fields.

"Stitch Fix is a successful public company ... younger than Amazon and Uber. From its Day 1, the company has built data science projects as important and impactful as the other two companies," Jeremy said. "For example, how to quantitatively learn your style, or how to recommend clothes you'd never consider but it turns out you like to wear."

The business problems in the company—the personalized styling, the warehouse inventory, and the supply chain logistics—require an enormous amount of work from data science, according to Jeremy. "The most significant difference between working at Stitch Fix and working at Amazon and Uber is in the responsibility of the job," Jeremy said. "Data scientists at Stitch Fix are more likely to take on tasks in engineering and business development in addition to data science. In bigger companies, in terms of the number of employees, data scientists are more likely to focus on the technical details of the projects, while the flexibility and the variety of the work may be bounded."

### **Discovering Data Science's Power**

Jeremy first became interested in statistics because he liked analyzing data and making predictions. "I am fascinated by the ways people make decisions, especially those made by the great leaders in history. Stats 101—taught by a great professor, Sanford Weisberg—gave me a comprehensive overview of many commonly used techniques and made me realize that statistics provide a quantitative way of decision-making in life," Jeremy said.

As for advice for current students, Jeremy suggests exploring your strengths and interests to find out where they intersect.

At some point, after collecting enough life experience, you will be self-aware and know what you want to spend your time on. When you put your energy into the things that you are passionate about, your strengths grow very fast.

"At the University of Minnesota, I recalled that Professor Peihua Qiu, who taught me in two wonderful statistics classes, always told us that our interests were the best teacher. So did my manager, Ben Yao, at Amazon. I see that great passion is one commonality among successful students at school and high performers in the industry," Jeremy said.

He continued, "Curiosity is a good start. "If you are curious about something, be brave and try it, be humble and seek help from others, and don't be frustrated when you fail. You will refine your vision spontaneously, when meeting new people and giving your time for reflection. At some point, after collecting enough life experience, you will be self-aware and know what you want to spend your time on. When you put your energy into the things that you are passionate about, your strengths grow very fast."

### **MORE ONLINE**

Read more statistician career profiles at https:// thisisstatistics.org/ category/profile.



David Corliss leads a data science team at Fiat Chrysler. He serves on the steering committee for the Conference on Statistical Practice and is the founder of Peace-Work, a volunteer cooperative of statisticians and data scientists providing analytic support for charitable groups and applying statistical methods in issue-driven advocacy.

### STATS4GOOD Data for Good: The Year in Review

The year 2020 was a year of great changes and challenges. From a pandemic, working from remote locations, economic upheaval, and constant challenges against science during a highly polarized election year, we come to a new year exhausted and yet full of hope. The Data for Good community has been at the center of many storms in the past year, rising to the challenge to support communities, guide an economy through a sea of troubles, preserve the environment, fight for justice, and—perhaps as no year before—save lives.

More than any other event in this tumultuous year, the COVID-19 pandemic has put Data for Good in a variety of crucial roles. From understanding the virus and its effects to best practices to avoid spreading the disease to the race to develop treatments and vaccines, analytics has been at the forefront of the fight against the pandemic. D4G teams have also been deeply engaged in addressing the wider effects of the pandemic, including economic disruption and the disproportionate impact of COVID-19 or marginalized communities. The pandemic has had ecological impacts, as well, giving us a line of sight into a world with less pollution in many places. And ASA journals, conferences, and webinars have played a leading role in rapid dissemination of important research on COVID-19 and its effects.

During this pandemic, we have learned a lot about SARS-CoV-2 and the virus that causes it. Sadly, the pandemic has also been a working laboratory on the psychology and sociology of science rejection and its potentially deadly consequences. Perhaps the most important lesson the D4G community has learned is that getting the science right is essential but science alone is not enough. Effective communication, policy advocacy, and support for science education at the elementary level so kids are less likely to suffer from science denial later on are as much a part of Data for Good as analyzing the data.

Analytic tools, methods, and technology continued to advance rapidly in 2020, perhaps even accelerating at times due to the urgency of the pandemic. Applying new technology to develop solutions in Data for Good has been a theme for this column this year. Tools and techniques for working with big data are becoming basic skills used in many areas of statistics. Big data is almost everywhere in D4G today. Social media data is mined for hundreds of projects making an impact on peoples' lives, from tapping medical opinions to better understand COVID-19 to identifying victims of hidden crimes like human trafficking (*bit.ly/385u1aR*). Satellite data is another area of technological advancement, with a wave of new D4G projects in 2020. The data is often freely available for the public, especially government data sources, making it a great choice for hackathons. Analysis of satellite data is being used to fight wild fires (*https://bigearthhacks.stanford.edu*), monitor forest cover (*bit.ly/3qUOPKC*), and even identify populations at higher risk of COVID-19 without going door to door during the pandemic (*bit.ly/3aiVMPM*).

One data tool I have noticed becoming more important is SQL. It's becoming a kind of *lingua franca* for data—a language everyone uses to move data independently of platform or analytic software, independent of the language used for analysis. This is especially important for students, who often learn many powerful analytic tools and methods only to find they can't use them to solve problems without SQL to access and move the data. Cloud environments and tools make up another area of rapid technological advancement. As big data continues to grow in importance, SQL and cloud tools have, too. D4G projects are a great place to learn and apply these skills.

2020 may always be remembered as the "Year of COVID," but it will also be remembered as a watershed year for Data for Good in the ASA. At JSM, D4G took center stage with the theme *Everyone Counts: Data for the Public Good.* JSM 2020 became the premier event for D4G practitioners with sessions, panels, and events dedicated to using statistics to make a difference in thousands of ways. It was a generational event in Data for Good globally, fostering enthusiasm, learning, and networking. All in all, JSM was a remarkable event that will have an impact on D4G practitioners and practices for years to come.

One highlight at JSM every year is the announcement of the winner of the ASA's Karl E. Peace Award for Outstanding Statistical Contributions for the Betterment of Society. This year's recipient,

### Get Involved

The National Oceanic and Atmospheric Administration supports a number of scholarships for undergraduate education and summer internships, which offer many excellent opportunities to work in environmental science for the greater good. Applications are due by February 1. All the details can be found at *bit.ly/2WmbMIJ*.

Francesca Dominici of Harvard, was recognized for her leading work at the intersection of statistics and public policy, addressing issues of transparency and reproducibility in science in general, and her statistical work on the health effects of pollution.

Looking ahead, DataKind founder Jake Porway offered his insight in a December *Amstat News* interview. The conversation covered designing effective projects, focusing on finding the right problem to be solved, and developing private-sector partnerships to make an impact on a global scale. This visionary leader discussed systematic inequalities and how to use data and analysis to bring about lasting structural change for the greatest impact on peoples' lives. If you haven't seen the interview, be sure to check it out at *bit.ly/3noTi6e*.

2020 has certainly been a year for the record books. As we wrap up, I want to express my deep thanks for everyone at *Amstat News*, especially Managing Editor Megan Murphy. The entire team at the ASA has been tremendously supportive of this column and the vital role Data for Good plays in making a difference for so many. Most of all, I want to thank you—our readers—and everyone in the Data for Good community for your continued interest and support. Please say hello at conferences and events (even if virtual) or send an email to suggest topics, projects, and events to feature in Stats4Good. ■

### MASTER'S NOTEBOOK

## To Get a PhD or Not to Get a PhD? Part 4



Erin Twomey-Wilson is an evaluation and research specialist at The College Crusade of Rhode Island and holds a GStat certification and MS in statistics.

The ASA Committee on Applied Statisticians gives you the experiences of four statisticians who took different paths after earning their master's degrees. In previous issues, we featured Kathryn Irvine—who earned a PhD—and Mark Otto and Allison Florance, who both chose to join the workforce after earning their master's. This month, **Erin Twomey-Wilson** explains why she found a master's degree to be the best fit for her.

Statistics has consistently been part of my academic career. Since meteorology was always a passion, I took every science and math class to prepare—including statistics. On the way, I met a mentor and friend, Professor Silva, who drew me into earth science.

After my bachelor's, my first job was in environmental wastewater hazard sampling. I took the samples from waste-carrying trucks—it was a nasty job. My mentor encouraged me to go into physics at the University of Massachusetts Dartmouth to earn a master's.

At the University of Massachusetts at Dartmouth, I walked into my first class and the all-male class and teacher were surprised to see me. Nobody wanted to work with me because I was the only female. Therefore, I spent my time doing homework with the undergraduate physics students. They made my time in graduate school enjoyable. Math was the universal language not just in physics but also in earth science, oceanography, and physical science. As a teaching assistant, my mentor arranged for me to teach an undergraduate course in earth science and meteorology.

I developed my love for statistics while writing my thesis on the effects of the North Atlantic Oscillation on in-situ sea surface temperatures in Narragansett Bay, Rhode Island. I looked for patterns in the temporal correlations. This could be important to understand how the pole to equator temperature difference decreases affect climate change. The completion of my physics degree allowed me to master high-level math courses that would prepare me well for my next academic achievement. On the personal side, I married my husband, Stephen, a front-end web developer who thought my interest in math was cool.

My physics degree led me to my dream job as a research analyst with the US Geological Survey (USGS) at Woods Hole Coastal and Marine Science Center in 2006. While continuing to work at the USGS, I earned a US Department of Agriculture Certificate of Accomplishment in meteorology. I worked there until the 2012 downturn, when they let all contractors go. My statistics background led me to a job working for a health insurance company a couple months later. I quickly realized actuarial work was not the path I wanted to take and decided to get a master's degree in statistics.

I worked all online for my second master's, a thousand miles away at Penn State. Probability theory nearly killed me. My employer paid for my master's and the company actuaries helped me at lunch, even looking over my homework. I used every other resource, too, including paying for tutors and crashing online study sessions. My statistics degree gave me the confidence and knowledge to leave my job and pursue a career I love.

Now I specialize in research and evaluation of college access programs. I love brainstorming, collaborating, designing, and analyzing my own surveys. There is a seven-year grant cycle during which I test the effectiveness of different programs, tracking low-income and first-generation students in sixth grade through college to job interviews. In one analysis, I showed a 40 percent increase in graduation rates of students who matriculate to four-year colleges versus two-year community colleges. Statistics is making college accessible to many Rhode Island students. Imagine that!

My master's-only career is varied and has allowed for a wide variety of work and experiences. I have the ability to jump into a different field, take continuing education courses, and tailor my training to make me more valuable.

I have thought about getting a PhD, especially when I have been cut out of conversations with PhDs who think someone with a master's has nothing to contribute. Maybe I am missing out on opportunities or higher pay but, at mid-career, I can take on anything with my master's and a few continuing education courses at JSM. I am thrilled with the direction my career and life have taken. Not getting a PhD was the right decision for me. ■

# 

## ASA Awards and Recognition

Know of a deserving person who should be considered for ASA recognition?

The ASA's extensive awards program recognizes statisticians who have made outstanding contributions through areas such as:

- Research
- Teaching
- Consulting
- Service to the association or to the profession

The ASA also provides student scholarships.

Nominate Someone Today www.amstat.org/awards



Many ASA sections and chapters offer their own awards. Visit the section and chapter websites to view their offerings.



## **Teaching Conference Taking Proposals**

The US Conference on Teaching Statistics (USCOTS) will be held virtually June 28 to July 1, with pre-conference workshops starting June 24. The conference provides a welcoming and engaging environment in which teachers can exchange ideas and motivate each other to improve their teaching of statistics. The conference features thought-provoking plenary sessions, interactive breakout sessions, informative posters-and-beyond sessions, and opening and closing sessions with five-minute presentations. Other highlights include birds-of-afeather discussions, a speed mentoring session, an awards ceremony, extensive pre-conference workshops, and exhibitor technology demonstrations.

The USCOTS theme for 2021 is *Expanding Opportunities.* Sessions will explore many aspects of this theme, including strategies for increasing participation and achievement in the study of statistics for students from underrepresented groups, supporting and encouraging students and colleagues who are beginning or contemplating careers in statistics education, and leveraging the emerging discipline of data science to democratize opportunities for students from all backgrounds.

USCOTS has been held in odd-numbered years since 2005. This will be the first USCOTS to be held virtually.

Proposals are being accepted for interactive breakout sessions, pre-conference workshops, posters-and-beyond contributions, and birds of a feather discussion topics. Deadlines are the following:

- February 1: Proposals for pre-conference workshops
- February 1: Proposals for interactive breakout sessions
- March 11: Proposals for posters-and-beyond contributions (if you would like to receive formative feedback before your final submission)
- April 22: Final proposals for posters-andbeyond contributions
- May 31: Proposals for birds of a feather discussions

More information about the conference and proposal submission is available at *www.CAUSEweb. org/cause/uscots/uscots21* and *www.CAUSEweb.org/ cause/uscots/uscots21/proposals.* 

Questions can be emailed to program co-chairs Allan Rossman (*arossman@calpoly.edu*) and Kelly McConville (*mcconville@reed.edu*) or CAUSE director, Dennis Pearl (*dkp13@psu.edu*). ■

## GAISE II Now Available; Download for Free

The Pre-K-12 Guidelines for Assessment and Instruction in Statistics Education II (GAISE II): A Framework for Statistics and Data Science Education is now available for free download at bit.ly/GAISEII and will soon be available for purchase via NCTM or Amazon.

The *GAISE II* report presents a framework for statistics and data science literacy at the elementary-, middle-, and high-school levels and addresses the evolution of data types and skills needed to make sense of the wealth of data that confronts us. Updates include the following:

- The importance of questioning through each stage of the statistical problem-solving process (formulating a statistical investigative question, collecting or considering data, analyzing data, and interpreting results) and how this process remains at the forefront of statistical thinking
- 2. The consideration of different data and variable types and the importance of care-fully designing how primary data is collected or secondary data is considered to answer a statistical investigative question, the process of collecting and cleaning data, the interrogation of data, and the analysis of data
- 3. The inclusion of multivariate thinking throughout all levels of K–12 education
- 4. The role of probabilistic thinking in quantifying randomness used by students throughout all school levels
- 5. The shifts and deepening of the role of technology throughout pre-K-12 education
- 6. The importance of how now, more than ever, statistical information is communicated

"The American Statistical Association is committed to providing leadership in all aspects of statistics education," said 2020 ASA President Wendy Martinez. "I made K–6 education the focus of one of my presidential initiatives, so I am delighted that pre-K–12 GAISE II becomes available during my year as president. GAISE II, which updates the pre-K–12 GAISE released in 2005, reflects best practices in statistics education, expanded definitions of data, and advances in technology. Teachers, curriculum developers, administrators, and policymakers will be able to use this document to develop and implement standards and lessons that ensure data and statistical literacy. GAISE II provides a framework for rich instruction in statistics for all students!" ■





# 202 CONFERENCE ON STATISTICAL PRACTICE



## FEBRUARY 17-19, 2021

Do you use statistics and data science in your daily work solving real-world problems? Want to communicate and collaborate more effectively with nonstatisticians and hone your skills?

The Conference on Statistical Practice brings together statistical practitioners—including data analysts, researchers, and scientists—with these goals in mind.

Short courses, tutorials, and sessions are designed to sharpen a broad spectrum of necessary skills in the following areas:

ᅙ Leadership	<b>?</b> Career Development
<b>?</b> Communication	ᅙ Data Analysis
ᅙ Data Management	<b>?</b> Collaboration
ᅙ Study Design	ᅙ Big Data

Learn more at ww2.amstat.org/csp.

## \$7,500 Scholarships Available

he Statistics Division of the American Society for Quality is accepting applications for \$7,500 scholarships to support students who are enrolled in, or are accepted into enrollment in, a master's degree or higher program with a concentration in applied statistics and/or quality management. This includes the theory and application of statistical inference, statistical decision-making, experimental design, analysis and interpretation of data, statistical process control, quality control, quality assurance, quality improvement, quality management, and related fields. The emphasis is on applications as opposed to theory. Studies must take place at US or Canadian institutions; online and in-class programs are included.

Year 2020–2021 scholarship winners are the following:

- Mervin Woodlin Jr., Villanova University, in the MS category
- Jialei Chen, Georgia Tech University, in the PhD category

During the last 24 years, scholarships totaling more than \$345,000 have been awarded to 60 students. Qualified applicants must have graduated in good academic standing in any field of undergraduate study. Scholarship awards are based on demonstrated ability, academic achievement, industrial and teaching experience, involvement in student or professional organizations, faculty recommendations, and career objectives. Application instructions and forms can be downloaded from *bit.ly/2WlJAFG*. Forms are due by April 1.

For more information, email Lynne B. Hare at *lynne.hare@com-cast.net* or write to 55 Buckskin Path, Plymouth, MA 02360. ■



Using Network-level (and Individual-level) Information in			
Design and Analysis			
Complexities Caused by Noncompliance in Cluster			
Randomized Trials			
Current Issues in the Design and Analysis of			
Stepped Wedge Trials			
Randomization: Beyond the Closurization Principle			
The Ring Trial Design for the Estimation of Vaccine Efficacy			
and Effectiveness During Infectious Disease Outbreaks			
Challenges in Implementing CRTs: from Hawthorne Effect			
to Measurement Bias			
Practical Considerations in Utilizing Cluster Randomization			
Trials in Medical Research			
PANELISTS			
University College London			
University of Birmingham			
NIH			
NIH			
FDA CBER			
University of Pennsylvania			

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

Program	Deadline	Nominations & Questions
Gottfried E. Noether Awards	January 15, 2021	awards@amstat.org
COPSS Leadership Academy	January 15, 2021	Catherine Calder, calder@austin.utexas.edu.
Karl E. Peace Award	February 1, 2021	awards@amstat.org
W. J. Dixon Award for Excellence in Statistical Consulting	February 15, 2021	awards@amstat.org
Harry V. Roberts Statistical Advocate of the Year Award	February 15, 2021	awards@amstat.org
Waller Awards	February 15, 2021	awards@amstat.org
Samuel S. Wilks Memorial Award	February 15, 2021	awards@amstat.org
W. J. Youden Award in Interlaboratory Testing	February 15, 2021	awards@amstat.org
Statistics in Physical Engineering Sciences Award	February 20, 2021	Ming Li, mli@alumni.iastate.edu
Gertrude M. Cox Scholarship	February 23, 2021	awards@amstat.org
Edward C. Bryant Scholarship Trust Fund	March 1, 2021	awards@amstat.org
Excellence in Statistical Reporting Award	March 1, 2021	awards@amstat.org
ASA Fellows	March 1, 2021	awards@amstat.org
ASA Mentoring Award	March 1, 2021	awards@amstat.org
Outstanding Statistical Application Award	March 1, 2021	awards@amstat.org
Statistical Partnerships Among Academe, Industry, and Government (SPAIG) Award	March 1, 2021	awards@amstat.org
Biopharmaceutical Section Scholarship Award	March 15, 2021	community.amstat.org/biop/ awards/scholarship
Founders Award	March 15, 2021	awards@amstat.org
Causality in Statistics Education Award	March 16, 2021	educinfo@amstat.org
Government Statistics Section Wray Jackson Smith Scholarship	April 1, 2021	jenny.guarino@dot.gov
Links Lecture Award	June 1, 2021	awards@amstat.org
Health Policy Statistics Section Achievement Awards	September 15, 2021	hpssawards2020@gmail.com
Lester R. Curtin Award	October 15, 2021	awards@amstat.org
Deming Lecturer Award	October 15, 2021	awards@amstat.org
Lingzi Lu Memorial Award	October 15, 2021	awards@amstat.org

### **Nominate an ASA Fellow**

The designation of ASA Fellow has been a significant honor for nearly 100 years. Under ASA bylaws, the Committee on Fellows can elect up to onethird of one percent of the total association membership as fellows each year.

Individuals are nominated by their ASA-member peers. To be selected, nominees must have an established reputation and have made outstanding contributions to statistical science. The Committee on Fellows evaluates each candidate's contributions to the advancement of statistical science and places due weight on the following:

- Published works
- Position held with employer
- ASA activities
- Membership and accomplishments in other societies
- Professional activities

To be eligible for nomination, a person must be a current member of the ASA who has held continuous membership from March 1, 2017, to February 29, 2020.

Nominations may be submitted online until March 1 at *bit. ly/ASAFellowNoms.* Questions should be sent to *awards@ amstat.org.* 

## **Eight Statisticians Honored by AAAS**

In November, the American Association for the Advancement of Science (AAAS) council elected nearly 500 members as fellows. A virtual induction ceremony for the 489 newly elected fellows will take place on February 13. The honorees will receive official certificates and rosette pins in gold and blue—colors symbolizing science and engineering—by mail.

The eight new fellows of AAAS Section U (Statistics) are listed below with their citations:

• Sudipto Banerjee, University of California, Los Angeles

For innovative contributions to Bayesian methodology with focus on spatially indexed information; for high-impact applications; and for educational and mentoring excellence, professional service, and academic administration.

- David L. Banks, Duke University For leadership at the Statistical and Applied Mathematical Sciences Institute, research on risk analysis, and editorial service.
- Deborah J. Donnell, Fred Hutchinson Cancer Research Center

For distinguished contributions to the field of HIV prevention research, particularly for design and analysis of clinical trials of pre-exposure prophylaxis and treatment as prevention.

- Timothy C. Hesterberg, Google, Inc. For excellent research in importance sampling and bootstrap methodology, important contributions to statistics education using resampling, and outstanding leadership and service to the profession.
- Qi Long, University of Pennsylvania For distinguished contributions to analysis of incomplete data, causal inference, and analysis of big data for advancing precision health.
- Ying Lu, Stanford University School of Medicine For distinguished contributions to the advancement of statistics in medical and biomedical research, particularly for the quality control and risk prediction associated with medical diagnosis.
- Richard L. Smith, The University of North Carolina at Chapel Hill

For distinguished contributions to statistics, particularly the statistical analysis of extreme events and environmental applications, including climate change and air pollution.

• Elizabeth A. Stuart, Johns Hopkins Bloomberg School of Public Health For highly influential contributions to development and application of causal inference methods; for excellence in teaching and mentoring; and for distinguished professional

leadership in statistics.



## How Can We Help?

We want to help you share your own news with colleagues and showcase your latest successes.

It is important to us that everyone knows about your research, recent awards, and promotions!

If you have any news you would like to share, email *megan@amstat.org*.

## Beaumont Appointed Survey Methodology Editor

Eric Rancourt, Survey Methodology Management Board Chair

Statistics Canada recently appointed Jean-François Beaumont, senior statistical adviser at Statistics Canada, as the new editor of *Survey Methodology*. Beaumont has been associated with the journal for 20 years; he served as assistant editor from 2000–2010 and associate editor from 2010–2020. He succeeds Wesley Yung, who has been editor since 2015.

Survey Methodology has evolved tremendously over the past 45 years under the leadership of its previous editors: M.P. Singh (1975–2005), John Kovar (2006–2009), Michel Hidiroglou (2010–2015), and Yung (2016–2020). In the first years after its creation, the journal published papers mainly from Statistics Canada's authors but soon acquired the worldwide reputation of a high-quality journal for survey statisticians and methodologists. Today, *Survey Methodology* publishes innovative theoretical and applied statistical research papers from international authors on issues relevant to the activities of national statistical offices.

There is a new publication landscape with many players in the field, and authors have heightened expectations in terms of review expediencies. While navigating this new ecosystem, members of the *Survey Methodology* Management Board are confident the journal will continue to flourish under the

## Journal of Survey Statistics and Methodology

# SURVEY METHODOLOGY Page 2014 States of March March Money Methods National March March Model Machadem Andream Marchadem March M

OXFORD UNIVERSITY PRESS

editorship of Beaumont and keep its same essential core value of scientific rigor.

*Survey Methodology* is available for free at *www. statcan.gc.ca\SurveyMethodology*. ■



## Cheryl Addy Wins Kutner Award

The Michael H. Kutner Award for Distinguished Service to the Discipline is given annually to a graduate of the Emory University Department of Biostatistics and Bioinformatics. This year's award recipient is Cheryl L. Addy from the University of South Carolina.



Cheryl Addy

After earning her doctoral degree from Emory in 1988, Addy took a position as instructor in the department of epidemiology and biostatistics at the University of South Carolina Arnold School of Public Health, where she advanced to associate professor in 1993 and full professor in 2014. She served as the department chair from 1994-1999, assistant dean for administration from 1998-2002, and associate dean for academic affairs from 2002-2005. In 2005, Addy was appointed as executive associate dean of the Arnold School of Public Health and, in 2008, she was appointed as senior associate dean for academic affairs. Currently, Addy is the vice provost and dean of the graduate school at the University of South Carolina.

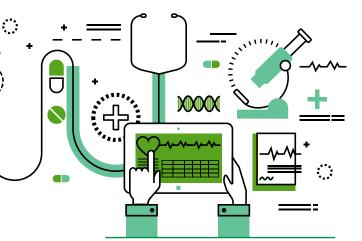
Addy has received numerous awards, including the Distinguished Service Award from the American Statistical Association in 1997, Faculty Service Award from the Arnold School of Public Health in 2008, and Academic Award from the American Public Health Association Statistics Section in 2011. She has established a stellar collaborative record as a biostatistician with more than 100 co-authored publications in high-impact journals. She served as the statistical editor for the Journal of Suicide and Life-Threatening Behavior from 1990-1996.

Addy has also played an active role with the Council of Education for Public Health, having made 13 accreditation site visits while chairing six of them. For the Association of Schools and Programs of Public Health, she has served on the Biometrics Council since 1996 (co-chair in 2011). Addy has Recent Kutner Award Winners 2019: Michael G. Hudgens 2018: Dionne Price 2017: Brent Blumenstein 2016: Scott Clark 2015: Raymond Bain 2014: Edward Frome and David Dunson

also served on the Education Committee since 2008. Since 2002, she has served as the section representative for academic affairs for the Council of Associate Deans. Additionally, she has served the University of South Carolina in numerous ways. These include serving as graduate director for the department of epidemiology and biostatistics from 1997-2005, serving on the faculty senate from 1991-1994, serving on the Inter-Professional Education for the Health Sciences Steering Committee since 2011, and serving as a member of the Council of Graduate Directors since 1997. ■

## James O'Malley Wins Award for Methodological Research

Joseph C. Cappelleri, Pfizer Inc.



In today's world of ever-increasing quantitative sophistication and automation ... it is important to continue to encourage methodological research that identifies situations in which current approaches are not satisfactory and works toward overcoming the deficiencies to solve a problem to its fullest. The ASA External Nominations and Awards Committee successfully nominated James O'Malley, professor of biomedical data science for The Dartmouth Institute for Health Policy and Clinical Practice, for the 2019 Award for Excellence in Methodology in Health Economics and Outcomes Research from the International Society for Pharmacoeconomics and Outcomes Research (ISPOR).

O'Malley's award-winning paper, published in *Statistics in Medicine* in 2019, investigated the relationship between individuals' proximity to fast-food establishments and their body mass index (BMI). His research made an important advance in the statistical methodology for hierarchical models by allowing the latent or random effects of a neighborhood to have a bivariate impact on an individual's BMI through both residential and workplace exposure.

The Geisel School of Medicine, The Dartmouth Institute for Health Policy and Clinical Practice, the department of biomedical data science, and the program in quantitative biomedical sciences all featured O'Malley winning the award in their news feeds or on their websites. When interviewed, O'Malley emphasized that the award is testimony to the increasingly important role



James O'Malley

statistics plays in society and how wonderful it is that the award reflected a contribution to statistical methodology. "Given today's increasingly collaborative and interdisciplinary research arena, it is very meaningful. And I think it depicts the profession of statistics in a very positive light."

In today's world of everincreasing quantitative sophistication and automation (e.g., artificial intelligence, neural networks, machine learning, deep learning), it is important to continue to encourage methodological research that identifies situations in which current approaches are not satisfactory and works toward overcoming the deficiencies to solve a problem to its fullest.

To read more about O'Malley and the award, visit *bit. ly/3mwd3HX* and *bit.ly/3r3jVjt.*■

# 2020 FALL DATA CHALLENGE WINNERS ANNOUNCED

•

In this year's Fall Data Challenge, "Get Out the Vote," 56 teams submitted recommendations for increasing voter turnout using voting behavior data provided by IPUMS. Following are the winners:

### **Best Overall Winners**

- Undergraduate Team: Super Juniors Qi An, Mengzhi Qin, Xuling Yang, and Chenyuan Zhu Sponsored by Ranjini Grove
- High-School Team: NGIST Binze Li, Isabella He, Julian Dong, and Aurora Wu Sponsored by Yongsheng Bai, Zhaohui Qin, and Weihua An

### Honorable Mention, Best Visualization

- Undergraduate
   Aby Jaeger and Nikki Seina
   Sponsored by Heather Kitada Smalley
- High School
   Samantha Waterston and Emily Mason
   Sponsored by John Rothrock

## Honorable Mention, Best Use of External Data

- Undergraduate Emily Litzenberg, Kate Lang, Nate Mulugeta, and Shannon Connor Sponsored by Elizabeth Johnson
- High School James Anderson, Kevin Huang, Prathik Kakarlamudi, Angela Tsang, and Zack Zhuang *Sponsored by Claudia Smith*

*This*IsStatistics organized the challenge. For more information about *This*IsStatistics or the challenge, visit *bit.ly/2WjqQ9Z.* ■

IS STATISTICS A SECTION OR CHAPTER

EXPAND your professional network and strengthen your

>>>>>

000

relationships in the community



**EXPLORE** chapter and section leadership opportunities

**STAY CURRENT** with the different methodologies and applications in your area of expertise

If you've been thinking about joining an ASA section or regional chapter, we have made it easier than ever. With a few clicks, you can add section and chapter membership and pay online.

0

Chapter and section membership can greatly enhance the value of your membership.

Add section and chapter membership at ww2.amstat.org/membersonly/additems.

### **Quality and Productivity**

#### Chris Gotwalt, Q&P Chair

Here, at the end of 2020, it is almost trite to point out what an eventful year this had been. Crises like COVID-19 are a major shock to our institutions. Though they can carry a heavy dose of loss and tragedy, crises also afford us the opportunity to identify what we really value, what we should preserve, and what we should change. For Q&P, 2020 has had important and positive developments, and I believe we enter 2021 a stronger and healthier section.

The biggest news is we are planning to transition primary sponsorship for the Fall Technical Conference (FTC) from ASQ to the ASA via Q&P. The contract, which would start in 2022, has not been written or signed yet, but the FTC Steering Committee and Q&P Executive Committee are on board and a plan for operational aspects of the transition is in place. Once this is complete, Q&P will go from primary sponsorship of one conferencethe Quality and Productivity Research Conference (QPRC)to two. FTC is an outstanding conference with a rich tradition extending over 60 years that we enthusiastically look forward to supporting in the future. For Q&P, taking this on amounts to the largest expansion of the responsibilities of the section in many years.

Q&P treasurer, Sharad Prabhu, will map the financial processes of FTC into a framework as consistent as possible with those of QPRC. This will make managing the accounts of two conferences less burdensome and Byzantine for Q&P treasurers in the future.

The Q&P Executive Committee has adapted and modernized its meetings, which are now online. We found our ability to meet and make decisions is easier and more agile this way. We have chosen to continue this practice moving forward, rather than having in-person meetings at QPRC, JSM, and FTC. Having executive committee meetings live over the web will serve us well because it removes the need for travel and facilitates more flexible scheduling, making participation accessible for a more diverse population of interested volunteers.

At the end of last year, as I transitioned into my role as chair, the O&P Executive Committee had unexpected challenges that required us to obtain ASA approval for several people to stay on beyond their usual terms. This gave me the luxury of an experienced team. Dave Collins stayed on as Q&P secretary until we found his successor, Annie Zangi. Additionally, Shan Ba stayed on as program chair and Brian Weaver stayed on as past chair. I look forward to working with Brian in 2021 as we update the Q&P operating manual, which essentially describes the operating procedures from the late 20th century and is critically in need of an update.

At the beginning of 2020, Brian and I assessed that Q&P was doing many individual

things well-conferences, journals, mentoring and scholarship programs—as well as having awards recognizing outstanding contributions to our field. However, there were serious breakdowns of organizational continuity and connectedness in Q&P's leadership. We have overcome much of this and I am confident there will be continuing improvements by my successor, Richard Warr. One future improvement to Q&P's executive committee would be to diversify the set of organizations (i.e., corporations, national labs, and universities) contributing volunteers to leadership positions. We recruit and nominate those we know and trust. As we do this in the future, we need to anticipate this earlier in the year and reach farther.

The crisis of 2020 caused us all to miss out on much of what we looked forward to at the beginning of the year. Rather than list what we lost or occurred in radically changed form, it suffices to recognize that almost every aspect of our lives is completely different than it was at the beginning of March. Despite these surprises and challenges, Q&P has adapted fairly well: Our leadership team is certainly better connected than it was a year or two ago and Q&P's portfolio of responsibilities is set to become much larger in a way that will scale and be sustainable. Overall, I think Q&P is much better positioned to thrive into the future.

### **Survey Research Methods**

While 2020 has been a stay-athome year, SRMS continued its activities. The Joint Statistical Meetings were virtual, but SRMS presented its usual program (which included 10 invited sessions, 14 topic-contributed sessions, eight contributed sessions, one poster session, and four roundtables) and even held a virtual mixer where all were welcome.

Part of SRMS dues goes toward full subscriptions to the *Journal of Survey Statistics and Methodology*. Every year, we also sponsor student travel awards to JSM and co-sponsor with the Government Statistics and Social Statistics sections a student paper competition to be part of a JSM topic-contributed session.

SRMS works hard to communicate with its members through newsletters every January and July (see *bit.ly/2KpC5ei*), these *Amstat News* articles, the ASA Community, and our Twitter account @srmsasa.

For member education, a four-part webinar on weighting was held in November. Our next webinar will be on respondentdriven sampling and led by Krista Gile on January 21 from 10 a.m. to 12 p.m. EST. Learn more about our webinars at *bit.ly/3p0j1lF*. SRMS also sponsored the Big Data Meets Survey Science (@BigSurv20) conference, which met virtually for five Fridays in November and December.

In 2020, we awarded the section's first Outstanding Section Service Award to our long-time webmaster, Pushpal Mukhopadhyay. Check out our proceedings site for proceedings that go back to before we split off from the Social Statistics Section in 1978.

In 2021, get involved. We will need candidates for board positions and other volunteers for 2022. Hopefully we can meet in person!

## COMMITTEE MEMBER? CHAPTER OR SECTION OFFICER? ASA Leader HUB IS HERE FOR YOU

ASA leaders are ASA members who volunteer in some way, primarily as **chapter or section officers** or **committee chairs or members.** We aim to make your volunteer experience easy by providing materials you need in **One convenient location**.

Visit the Leader HUB on the ASA Community at https://community.amstat.org/asaleaderhub/home.



Professional Opportunity listings may not exceed 65 words, plus equal opportunity information. The deadline for their receipt is the 20th of the month two months prior to when the ad is to be published (e.g., May 20 for the July issue). Ads will be published in the next available issue following receipt.

Listings are shown alphabetically by state, followed by international listings. Vacancy listings may include the institutional name and address or be identified by number, as desired.

Professional Opportunities vacancies also will be published on the ASA's website (*www.amstat.org*). Vacancy listings will appear on the website for the entire calendar month. Ads may not be placed for publication in the magazine only; all ads will be published both electronically and in print.

These listings and additional information about the 65-word ads can be found at *ww2.amstat.org/ads*.

Employers are expected to acknowledge all responses resulting from publication of their ads. Personnel advertising is accepted with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual orientation.

Also, look for job ads on the ASA website at https://jobs.amstat.org/jobseekers.

• Assistant professor position to engage in independent and collaborative research as part of the Johns Hopkins School of Medicine Richman Precision Medicine Center of Excellence in Alzheimer Disease. Expertise in machine learning and interest in dementia and use of electronic medical records and other large data sources. www.hopkinsmedicine.org/psychiatry/ about/assistant-professorship. EOE.

### Missouri

Missouri University of Science & Technology (Missouri S&T) invites applications for the position of the Fred and June Kummer Endowed Department Chair of Mathematics and Statistics. The position will preferably start with the academic year 2021– 2022. Learn more about the Kummer Institute at *kummerinstitute.mst.edu*, the application process at *http://hraadi.mst.edu/hr/employment/faculty*, and the department at *http://math.mst. edu.* For full consideration, applicants should apply by February 14, 2021. Missouri S&T is an AA/EEO institution. Women, minorities, and persons with disabilities are encouraged to apply. Missouri S&T seeks to meet the needs of dual-career families. Missouri S&T participates in E-Verify; for more information on E-Verify, please contact DHS at: 1(888) 464-4218.

### Nebraska

■ The Department of Biostatistics, College of Public Health at the University of Nebraska Medical Center (UNMC), seeks outstanding faculty candidates for a tenure-leading position at a level of assistant or associate professor. For a full job description and to apply requirements, go to *http:// unmc.peopleadmin.com/postings/54199*. UNMC is an Equal Opportunity/ Affirmative Action Employer. Individuals from diverse backgrounds are encouraged to apply.

### California

■ The Department of Statistics in the Donald Bren School of Information and Computer Sciences at the University of California, Irvine invites applications for a tenure-track faculty position at the assistant rank level beginning July 1, 2021. Please visit *https://recruit.ap.uci.edu/JPF06327* for more information and to apply. EOE.

### Illinois

The Department of Mathematics and Statistics at Loyola University Chicago invites applicants for two assistant professor positions in statistics, data science and bioinformatics. Full position descriptions and application instructions can be found at *http://mathjobs. org.* EOE.

### Maryland

Westat is seeking a senior survey methodologist to join our internationally respected, highly collaborative, multidisciplinary statistical science team. In this role, you will be responsible for overseeing staff who conduct methodological research to develop and improve survey procedures and capabilities; developing innovative survey methodologies; mentoring junior staff; and collaborating with other practice areas in project development. Full job description at https://bit.ly/36WXnHY. Apply at www.westat.com/careers. EOE. Minorities/Females/Protected Veterans/ Disabled.

### **New York**

■ Cornell University invites applications for the position of professor and chair of the Department of Statistics and Data Science (*https://academicjobsonline.org/ajo/ jobs/16158*). With a strong tradition of theoretical and interdisciplinary research and teaching the department integrates well with Cornell's extensive and diverse academic community. Applicants should have an internationally recognized research program in one or more of the following areas: statistical methodology, statistical theory, or data science. EOE.

### International

■ Assistant Professor of Statistics. Department of Decision Sciences, Bocconi University, Italy. Applications from outstanding candidates are invited for tenure-track positions at the assistant professor level in the areas of interest of the department, which include statistics, probability and machine learning. The appointments will commence in fall 2021. Applications must be submitted online at *www.unibocconi.eu/jobmarket* to be received by January 8, 2021. EOE. ■ ₩estat

### Statistical Career Opportunities

Westat is an employee-owned corporation headquartered in Rockville, Maryland. We provide statistical consulting and survey research to the agencies of the U.S. Government and to a broad range of business and institutional clients. With a strong technical and managerial staff and a long record of quality research, Westat is a leader in the statistical services field.

We are currently recruiting for the following position:

**Senior Survey Sampling Statistician** This position requires a master's degree or Ph.D. in statistics with coursework in survey sampling or a master's or Ph.D. In survey sampling. A Master's degree or Ph.D. in Statistics with course work in survey sampling or a Masters or Ph.D. in Survey Sampling. Candidates with a master's must have at least 15 years of experience in sample survey design, selection or weighting. Candidates with a Ph.D. must have at least 12 years of experience in sample survey design, selection or weighting. Candidates would benefit from knowing SAS, R and other statistical software packages although candidates are not required to do programming.

Westat is an Equal Opportunity Employer and does not discriminate on the basis of race, creed, color, religion, sex, age, national origin, veteran status, disability, marital status, sexual orientation, citizen status, genetic information, gender identity, or any other protected status under applicable law. To apply, go to **www.westat.com/careers**. www.westat.com

Improving Lives Through Research®



An Employee-Owned Research Corporation

EOE

### Department of Statistics Columbia University Lecturer in Discipline Position Starting Fall 2021

The Department of Statistics invites applications for multiple positions at the rank of Lecturer in Discipline to begin July 1, 2021. These are full-time appointments with multi-year renewal contingent on successful review. These positions will contribute to the departmental educational mission at the undergraduate and masters levels.

Lecturers in Discipline are officers in the University who meet a programmatic need for instruction in specialized fields. The selected candidates will be expected to teach 3 courses per semester. A Ph.D. in Statistics or related field and a commitment to high-quality teaching at both the undergraduate and MA levels in Statistics and/or Probability are required. Experience with online education is desirable but not required. Candidates will be expected to participate in the full gamut of statistics education including curriculum improvement, modifying and developing courses, and exploring new strategies for the teaching of statistics.

The department currently consists of 35 faculty members and 60 PhD students. The department has been expanding rapidly and, like the university itself, is an extraordinarily vibrant academic community. We are especially interested in candidates who, through their research, teaching and/or service, will contribute to the diversity and excellence of the academic community. Women and minorities are especially encouraged to apply. For further information about the department and our activities, centers, research areas, and curricular programs, please go to our web page at: *http://www.stat.columbia.edu*.

All applications must be submitted through Columbia's online Recruitment of Academic Personnel System (RAPS) and must include the following materials: cover letter, curriculum vitae, statement of teaching philosophy, research statement, evidence of teaching effectiveness (teaching evaluations), a sample course syllabus and the names of 3 references. Applicants also should arrange for three letters of recommendation to be uploaded on their behalf.

For more information and to apply, please go to: http://pa334.peopleadmin.com/postings/6606

Inquiries may be made to Dood Kalicharan at *dk@stat.columbia.edu* Review of applications begins on February 1, 2021 and will continue until the position is filled. Columbia University is an Equal Opportunity/Affirmative Action employer.

## **Strength in Numbers**

Join the 300+ strong and diverse community of U.S. Census Bureau mathematical statisticians—at the heart of the statistical quality of our demographic and economic census, surveys, and research.

### Your Work as a Mathematical Statistician at the Census Bureau

- Design sample surveys and analyze the data collected.
- Design and analyze experiments to improve survey questionnaires and interview procedures.
- Improve statistical methods for modeling and adjustment of seasonal time series.
- Perform research on statistical methodology that will improve the quality and value of the data collected.
- Publish research papers and technical documentation of your work.

### Requirements

- U.S. citizenship
- Bachelor's, Master's, or Ph.D with at least 24 semester hours in math and statistics (see Web site for more specifics on required coursework)

Apply at www.census.gov, click on Census Careers, Type of Position, Professional/Scientific/Technical, Math Statistician

The U.S. Census Bureau is an Equal Opportunity Employer.



U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU *CENSUS.gov* 

### AMSTATNEWS ADVERTISING DIRECTORY

Listed below are our display advertisements only. If you are looking for job-placement ads, please see the professional opportunities section. For more job listings or more information about advertising, please visit *www.amstat.org*.

## misc. products and services

### professional opportunities

Columbia University	p. 38
US Census Bureau	p. 39
Vertex	p. 17
Westat	p. 38

### software

JMP Software from SAS	cover	4
SAS Institute	cover	2

## SOCIAL CHATTER

# What do you miss about in-person conferences?

### **FOLLOW US**

community. amstat.org



www.facebook. com/AmstatNews



www.instagram .com/AmstatNews

### NEXT MONTH :

Tell us! If statisticians had a breakfast cereal, what would the name be? Make sure to tag @AmstatNews in your response.

### Irene Helenowski, Ph.D. • @OrderOfTheDimen

The thrill of traveling, the joy in meeting colleagues in person, the sense of community when among peers in a big ballroom for a keynote lecture :)

### Kisung You • @kyoustat

A chance to tell the speaker by facial expressions to jump over to next slide.

### Caleb King • @ckingstats

I second @OrderofTheDimen. I always looked forward to traveling to a new place and catching up with colleagues I often would only see at conferences.

### Ioannis Kontoyiannis • @yiannis\_entropy

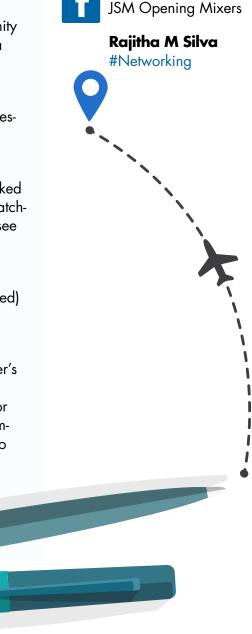
Definitely random meetings (no pun intended) with new people!

### Xiao-Li Meng • @XiaoLiMeng1

paper, MPH • @pophealth3

Free pens.

Let's see: the chance of lifting up each other's bootstraps, bragging about one's \nu hat, showing off another learning machine ... or just being normal, enjoying a paired t, sampling bits of pie, and chatting about how to deal with nuisance in confidence? :-)



Kel Zou

# STATISTICS TEACHING AND LEARNING OF STATISTICS

<text><text><text>

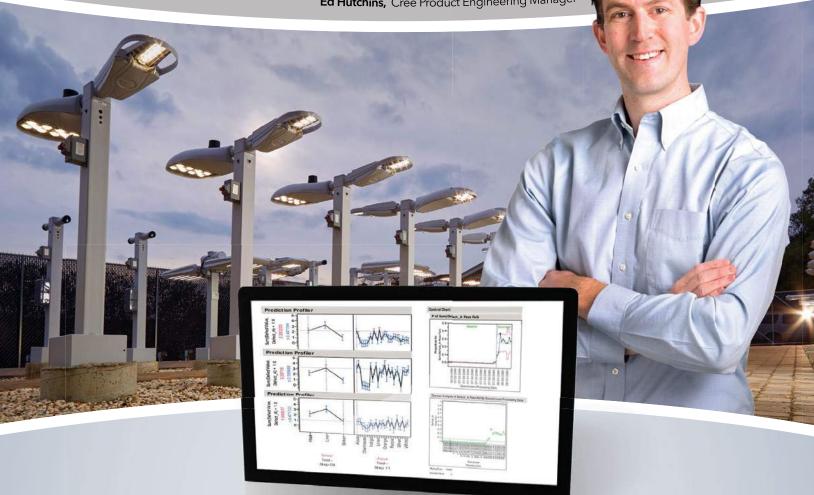
# THE NEW ONLINE JOURNAL FOR K-12 TEACHERS

STATISTICS TEACHER (ST) is an online journal published by the American Statistical Association/ National Council of Teachers of Mathematics Joint Committee on Curriculum in Statistics and Probability for Grades K-12.

- Timely Articles
- Peer-Reviewed Lessons Plans
- Columns
- News and Announcements
- Education Publications
- And More!

ASAN CXXX www.statisticsteacher.org

Ed Hutchins, Cree Product Engineering Manager



# Great software in the right hands can change the world.

Cree's engineers are innovating better, more efficient LED solutions for a brighter future. With analytics, brilliant things happen.

Read about Cree's success, and find out how JMP can help you change your world:

www.great.jmp



SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. 

include the served of their respective companies. Copyright © 2017, SAS Institute Inc. All rights reserved. 
156201.0817US