January 2022 • Issue #535

AMSTATNEWS

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February 1–April 15, 2022
Late-Breaking Session Proposal Submission

May 31, 2022
Draft Manuscript Deadline

KEY DATES FOR ATTENDEES

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

May 31, 2022
Early Registration Deadline

June 1–30, 2022
Regular Registration

July 1–August 11, 2022
Late Registration

July 6, 2022
Housing Deadline

AUGUST 6–11

2022 JOINT STATISTICAL MEETINGS

WASHINGTON, DC

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JANUARY 2022 • ISSUE #535

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American Statistical Association

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

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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@peacework.org.*

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Grant Writing Takes a Village

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*.

ASA AWARDED $1.5M NSF GRANT TO BOOST UNDERREPRESENTED STUDENTS

The National Science Foundation awarded the association a three-year, $1.5 million grant to ensure students from underrepresented groups have access to cutting-edge data science courses, research opportunities, and industry partnerships.

The grant will allow the ASA to work with partners to create a National Data Mine Network, which will provide opportunities for students to do hands-on work on data science challenges of relevance to industry.

ASA DATA VISUALIZATION POSTER COMPETITION FOR GRADES K–12

Members of the ASA/NCTM Joint Committee on K–12 Education in Statistics and Probability and the ASA's education department encourage students and their advisers to participate in the annual Data Visualization Poster Competition.

What is a data visualization poster? It is a display containing two or more related graphics that summarize a set of data, look at the data from different points of view, and answer specific questions about the data.

Posters are due every year on April 1. Poster submission is electronic, and there is a new judging rubric. Learn more at *bit.ly/ASAk12postercomp*.

CORRECTION

Ryan Machtme's name was inadvertently missed in the Committee on Statistics and Disability spotlight article from the December, 2021, issue. We apologize for the error.

Check out the awards and apply or nominate a colleague today!

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As the Statistics Profession Grows, So Does the ASA

Katherine Ensor

It's finally here: 2022! We are all hoping for a tremendous year and emergence from the marathon pandemic that has affected us in profound ways.

I am honored to serve the American Statistical Association as its 117th president. It is such an exciting and dynamic time to be a statistician. While we move into an era in which data is the new gold, it is important to share our talents, intellect, and passions and to build a more interconnected world that celebrates diversity, equity, and inclusion.

As a reflection of the powerful contributions statisticians have made throughout history to shape and prepare for the future, I chose the theme *Statistics: A Foundation for Innovation* for the 2022 Joint Statistical Meetings (JSM), the largest gathering of statisticians and data scientists in North America. We statisticians live and breathe the excitement of developing and implementing the scientific tools for discovery, inference, and action from data. We enthusiastically pass along this knowledge to generations of statisticians and data scientists. I hope you consider contributing an abstract to JSM (deadline is February 1) and joining us in Washington, DC, this August. Thank you to JSM program chair, Ming-Hui Chen, and the committee members for bringing forward an exceptional program.

I am also honored to succeed fellow Texan and 2021 ASA president, Rob Santos, who has just stepped into a new role as director of the US Census Bureau. Rob is, of course, an exceptional choice for leading the Census Bureau, with innate leadership skills and extensive expertise as head of research at the Urban Institute. He is the bureau's first permanent, Senate-confirmed, Latino director.

It is worth noting the long history of the ASA supporting the Census Bureau and its critical role to our nation. Quoting 1996 ASA President Lynn Billard, "In 1839, the American Statistical Association was formed amid concern for the 'antiquated and ineffective machinery' that had been in use since 1790." Over the next 180 years, ASA presidents and members have played an integral role in shaping, refining, and strengthening this central pillar of the US democratic system.

During my year as president, I see three areas of immediate opportunities for the ASA. The first is leadership, and the second is keeping vibrant data science and AI activities moving forward. The new third opportunity is in the area of sustainability and community analytics. Let me speak briefly to each of these.

Leadership: In 2018, the ASA founded the Leadership Institute. The institute was one of the core initiatives of 2018 President Lisa LaVange and emerged after longtime efforts by both Lisa and 2012 President Bob Rodriguez, among others. Our profession can point to members who hold strategic leadership positions across industry, government, and academia. Training in statistics naturally develops a foundation for leadership in large part due to the interdisciplinary nature of our profession. Further, many of the core issues of leadership are also core to our profession, such as ethics-based decisions. But leadership requires training and development, which is a key component of the current leadership endeavor.

Leadership also extends to the ASA as an organization. The ASA Board issues policy statements on matters of national importance related to data and statistics. The ASA's policy office expertly works with appropriate entities to bring these issues forward. This is an example of ASA leadership. Expanding ASA influence to the top levels of academia, government, and industry will have a positive impact on our profession and our profession's ability to meet global challenges.

Data Science and AI: Our field has seen an explosion of new methods in statistics and data science, integrating the best of statistical thinking with practical implementation. This new world has also brought challenges to our academic programs with strong investments in data science in other fields.

Advancing our mission of "Promoting the Practice and Profession of Statistics" has made the ASA a superb organization and professional home for us all.

Forward-looking universities rely heavily on, and invest in, their statistics departments to build the best integrated data science programs for their students. I see an opportunity for the ASA to work with university leaders to articulate the value statisticians bring to the strategic leadership table. Many universities are developing institutes and schools around data science, providing clear opportunities for advanced leadership from statisticians.

The ASA Ad Hoc Committee on Data Science, a committee I co-led with Mark Glickman, recommended forming a continuing committee on data science and artificial intelligence that will advise the ASA Board on actions in this area. The charge of the committee is to examine the ASA as an inclusive community for data scientists, regardless of one's path to this field. There have been numerous recent advancements within the ASA with respect to data science and AI, so I look forward to working with the executive committee to constitute this new committee and to highlighting these accomplishments in a future column.

Sustainability, Community Analytics, and the Changing Landscape of Data: The time is now for statisticians to jump into the growing area of urban analytics. This area requires the best of our statistical thinking coupled with a willingness to engage local governments, NGOs, and communities to better our urban and rural environments.

Our urban environments generate massive amounts of geo-referenced data, allowing the savvy statistician to draw significant insights into how we work, live, play, and learn within our communities. Our rural environments are also critical, but the important questions and data landscape are often different.

We witnessed a surge in academic, local government, and NGO partnerships during COVID-19. We have also witnessed an increased need for improved data literacy in our workforce and a better understanding of how climate change and world events affect our methods and models. Many university partnerships have been established to advance urban science, sustainability, and planning through expert use of data and statistics (see *www.nap.edu/read/25480/chapter/1*). Urban and rural analytics bring an opportunity for greater involvement of local chapters in their community activities. How can the ASA help foster such collaborations?

Hand-in-hand with the questions of community analytics are the growing issues of data privacy and the changing landscape of availability of government-generated data. There have been significant changes to the availability and potential use of publicly available data. Across the globe, governments make different decisions related to data privacy. These decisions affect our roles as statisticians guided by the ASA ethical guidelines for statistical practice (*https://bit.ly/3m9CH81*).

These challenges go well beyond the ASA but provide an opportunity for the ASA to take a leadership role, partnering with other societies, industry, and government agencies to begin to understand these changes and expertly address their impact.

I look back in amazement at the dynamic changes in the ASA and profession since the beginning of my career as a statistician in the late '80s. Advancing our mission of "Promoting the Practice and Profession of Statistics" has made the ASA a superb organization and professional home for us all. It continues to grow and develop as our profession grows and develops.

I look forward to serving as your president in 2022. Thank you for all that you do, and take care of yourself and others. Wishing you a successful and healthy year.

Highlights of the November Board of Directors Meeting

ASA President Rob Santos called to order the final 2021 meeting of the ASA Board of Directors on November 19. The meeting was conducted in hybrid format—several board members were in Alexandria, Virginia, at the ASA headquarters and the rest joined via videoconference over two days. The highlights of the meeting follow.

Actions

The board …

- Updated the document describing the roles and responsibilities for each board member.
- Approved a change to the bylaws that makes the ASA treasurer position an elected, rather than appointed, position and gives the treasurer a vote. Before the change, the treasurer was appointed by the board and was not a voting member.
- Extended the appointment of Ruixiao Lu as treasurer for an additional year, providing time in the election cycle for the aforementioned bylaws change to take effect.
- Endorsed the "Quality Manifesto for the 21st Century," prepared by the International Academy for Quality. The background on and a link to this document will be in an *Amstat News* article.

Reports and Discussions

- Associate Executive Director and Director of Operations Steve Porzio summarized the financials as of the end of the third quarter of 2021. He noted the status of various segments of the budget and said the association's balance sheet is healthy. Of note is an uptick in the use of the ASA JobWeb.
- Lu reported on the ASA's investments. She reviewed the allocation of the ASA's nearly $23 million among various types of investments as of September 30 and the results of our investments over the past decade. Lu also updated the board on the activities of the Investments Committee, Budget Committee, and Audit Committee.
- On behalf of Adrian Coles and David Marker, co-chairs of the ASA's Antiracism Task Force, Ron Wasserstein updated the board on the progress of the task force. It is well along on drafting its final report.
- ASA Director of Science Policy Steve Pierson provided his regular report on the ASA's advocacy efforts. He introduced our new science policy fellow, Edward Wu, who updated the board on the projects he is working on. Pierson outlined several areas of focus for the policy office and noted efforts to broaden the ASA's advocacy work.
- The board discussed plans for JSM 2022, which we are planning to hold in person next summer in Washington, DC. A large number of sessions will be recorded so those who register for JSM can view some of the sessions they could not attend in person.
- Also regarding JSM 2022, the board heard and discussed plans for the ASA Awards Ceremony.
- Rebecca Hubbard reported on the activities of the task force on increasing diversity in ASA journals. The task force will have recommendations early in 2022.
- Lu reported on the activities of the strategic planning working group and noted the tasks for it. The group will be collecting a wealth of feedback from various constituencies as the board considers modifications to the membership growth and public awareness portions of the strategic plan.
- Amanda Malloy, ASA director of development, updated the board on development activities during 2021. Malloy reviewed the results of a successful Giving Day 2021. She thanked the board and members of the Development Committee for their support. She also introduced the new members of the ASA GivesBack program and noted the key projects for the development program in 2022.
- Jing Cao, chair of the ASA Committee on Professional Ethics (CoPE), and Rochelle

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

2022 Board of Directors

Kathy Ensor, President

Dionne Price, President-Elect

Matilde Sanchez-Kam, Second-Year Vice President

Nick Horton, First-Year Vice President

Scarlett Bellamy, Vice President (completing the term of Dionne Price)

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

Alexandra Hanlon, Second-Year Council of Chapters Representative

Kendra Schmid, First-Year Council of Chapters Representative

Rebecca Hubbard, Third-Year Council of Sections Representative

Kate Calder, Second-Year Council of Sections Representative

Michelle Shardell, First-Year Council of Sections Representative

Alexandra Schmidt, International Representative

Bin Nan, Publications Representative

Ruixiao Lu, Treasurer

Ron Wasserstein, Executive Director and Board Secretary

Tractenberg, former chair of CoPE, presented a draft revision of the ASA Ethical Guidelines for Statistical Practice. They reviewed the process by which the revisions were made. The board provided feedback on the draft. The final draft will come to the board in the first quarter of 2022.

- Dionne Price presented the annual report of the committees that comprise the Professional Issues and Visibility Council, and Dick De Veaux did likewise for the entities in the Education Council. Santos noted the importance of these reports in keeping the board informed of committee activities and needs.
- Matilde Sanchez-Kam reported the findings of an ad hoc committee to review the ASA nominations process. The ad hoc committee was formed to review a set of recommendations from the 2021 ASA Committee on Nominations. Some changes in procedures recommended by the ad hoc committee will be implemented and a procedures manual has been developed. Santos thanked both the ad hoc committee and Committee on Nominations for their efforts to improve our processes.
- Donna LaLonde, ASA director of strategic initiatives and outreach, brought to the board for its preliminary review a proposed joint statement with NCTM on Pre-K–12 teacher preparation in statistics and data science. She asked for feedback so the joint ASA/NCTM committee can review it, revise the statement as necessary, and bring it back to the board for approval.

This board meeting was the last for Santos. He was appointed by President Joe Biden and confirmed by the Senate to be the director of the US Census Bureau, effective January 1, 2022. At that time, he will resign his position on the ASA Board.

The next meeting of the board will be April 8–9 in Alexandria, Virginia. ■

ASA Board Endorses New 2021 Quality Manifesto

Theresa L. Utlaut, Intel Corporation, and Richard Warr, Brigham Young University

During its November meeting, the ASA Board unanimously voted to endorse the 2021 Quality Manifesto from the International Academy for Quality (IAQ), a nonprofit organization of elected members dedicated to advancing quality management around the world. The IAQ was formed in 1966 to unite thought leaders in North America, Europe, and Asia who were using the principles of quality control to transform the post-war economies of Japan and Europe.

The new document, written by N. (Ram) Ramanathan and Gregory Watson, is an update to the IAQ's 2001 Quality Manifesto. The authors note in an accompanying paper that much in the world has changed since the first document, including a greater demand for using resources efficiently, minimizing environmental damage, and incorporating new biotechnology. "Therefore, there is evident need for a revitalized expression about the meaning and application of quality," they write. "This enhanced quality perspective must be as much at home integrating environmental questions as with humanistic applications for society."

The 2021 Quality Manifesto lists 10 ways quality professionals can revitalize their dedication to global leadership through quality. Quality has two critical foundations, it says: "the discipline of science coupled with mutual respect for all human beings."

ASA members might be particularly interested in the ninth resolution: "Bring data into daily conversation: rendering, in an age of data profusion, everyone from board members to frontline associates skillful in generating and interpreting data for applications in control, improvement, and daily conversation."

The entire document can be read at *https://bit.ly/3pHEG48*. ■

Nominate a Colleague for ASA Leadership Position

Nominations are being sought for ASA president-elect and vice president candidates for the 2023 election. While the 2022 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 academe and the vice president will be selected from industry. 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 2024 president-elect and vice president by emailing *elections@amstat.org*.

In addition, for the first time, the position of ASA treasurer will be an elected position. Consider nominating individuals for this key board leadership role, as well.

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

The deadline for nominations is February 1.

Win $300 in Statistical Significance Competition

MORE ONLINE
View a write-up about the 2021 winners at *https://bit.ly/3GHJayT*.

A $300 prize will be awarded to the JSM poster that includes a Statistical Significance piece judges deem describes the best contribution of statistics to society. (Note: Participation in this competition is only available to contributed poster authors who submit their poster abstract by February 1.)

What constitutes a Statistical Significance piece? Statistical Significance is a 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.

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 our society in specific areas such as health, agriculture, economy, education, manufacturing, and medicine.

This specific 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!

Participants must include a one-page Statistical Significance piece with their poster presentation at JSM. Both the scientific merit of the poster and Statistical Significance piece will be judged. However, posters without the separate Statistical Significance page will be ineligible to win the competition, even if they participate in the competition.

A panel of judges will visit the posters during a special topic-contributed session at JSM and determine first place, second place, and honorable mentions. The winners will be notified immediately thereafter.

To enter, participants must notify the competition organizers of their plans to participate using the Google form at *https://bit.ly/3DElJ7k*. For more information, visit the Statistical Significance Competition website at *https://bit.ly/31DdBag*. ■

Call for Proposals: New Program Focuses on Internet Measurements

The Internet Measurement Research (IMR) program headed by the National Science Foundation's Directorate for Computer and Information Science and Engineering, in partnership with the Directorate of Mathematical and Physical Sciences, is a new focused program to support methodologies, tools, and research infrastructure for internet measurements.

The scope, complexity, and means of accessing the internet have changed dramatically throughout its existence. Methods, data collection, and data sharing for internet measurement have not kept up with the importance and proliferation of wireless and fixed broadband access networks. This leaves important aspects of the access network in many geographic regions undermeasured.

With widespread use of cellular phones to access the internet, more accurate and/or additional ways to measure and assess performance, connectivity, network topology, and service gaps have become necessary. The goal of the IMR program is to encourage, coordinate, and connect research in internet measurement in a comprehensive manner. Such research is essential to assess the health of the internet more comprehensively, improve network technologies and systems, and develop new methods of networking.

Proposal Deadline Dates

- February 15 for Track 1 (Methodologies and Methods [MM])
- March 8 for Track 2 (Measurement Tool Development and Demonstration [MT])
- March 22 for Track 3 (Internet Measurement Related Infrastructure-Planning [RI-P])

Details about this program solicitation and its three tracks, as well as the instructions for proposal preparation and submission, can be found at *https://bit.ly/3dOd9c1*.

Committee on Career Development Starts Year with Webinar Panel

Elizabeth Mannshardt, 2022 CCD Chair

The ASA Committee on Career Development (CCD) will host its first event of 2022—a webinar, titled "Distinguished Careers in Statistics and Data Science," January 28 at 11 a.m. EST. Registration is free but required at *https://bit.ly/3IzPUR2*. The webinar panel will be moderated by Donna LaLonde with members of the committee. Participants can submit questions in advance or ask them during the webinar Q&A.

Distinguished Careers in Statistics and Data Science

In 2021, ASA CCD launched a webinar series, Along Your Career Path in Data Science, which included "Early Data Science Careers and the Job Search Process" and "Career Next-Steps and Promotions." Featured speakers in this next installment in the series are Linda J. Young, John Bailer, and Abie Ekangaki.

Linda J. Young is the chief mathematical statistician and director of research and development at the National Agricultural Statistics Service. Her research interests include integrating diverse data, especially that involving spatial data, agricultural data, and statistical ecology. Young has authored three books and more than 100 publications in a mixture of statistics and subject-matter journals. She also served as editor of the *Journal of Agricultural, Biological, and Environmental Statistics*.

Within the professional statistical societies, Young has served in a broad range of offices, including vice president of the ASA and chair of the Committee of Presidents of Statistical Societies. She is a recipient of the ASA's Founders Award, a fellow of the ASA and American Association for the Advancement of Science, and an elected member of the International Statistical Institute.

What Is ASA CCD?

This committee provides support and information about career decisions to ASA members and information to non-members who are considering a career in statistics. ASA CCD hosts several events (e.g., networking panels at JSM) and highlights resources for professional development and mentoring across the ASA. The aim of all CCD events is to encourage interaction and connection within the community, so all events are free.

John Bailer is university distinguished professor and chair in the department of statistics at Miami University in Southwest Ohio. He is the founding chair of the department of statistics at Miami. His research interests include quantitative risk estimation, the design and analysis of environmental toxicology and occupational health studies, and gerontological data analysis. He has published four books and 150+ peer-reviewed papers, many with student co-authors. He has mentored more than 50 graduate student projects and served on 100 graduate student committees.

Bailer served as ISI president (2019–2021) and was on the ISI executive committee. He was also on the ASA Board of Directors (2011–2013) and served as a member of the IBS/ENAR Regional Advisory Committee.

Promoting quantitative literacy and enhancing connections between statistics and journalism are more recent passions, which resulted in the *Stats+Stories* podcast (*www.statsandstories.net*; @statsandstories on Twitter).

Abie Ekangaki is vice president of statistical consulting with Premier Research, a leading clinical research organization in the biotechnology space. With more than 26 years of experience as a biostatistician, Ekangaki has worked in different capacities within industry, academia, and the international organization system, including several senior technical and senior leadership positions. He worked as a research scientist with the World Health Organization in Geneva, Switzerland.

Prior to joining Premier Research, Ekangaki spent 10 years with Eli Lilly before becoming head of North America Biostatistics at Quintiles, then head of Global Statistical Sciences for Immunology at UCB BioPharma. He is the founder and past chair of the BioPharm Leadership-in-Practice Committee (LiPCom) and passionate about promoting statistical leadership.

To receive notifications for all upcoming CCD events, sign up to be on the "Friends of the CCD" email list at *https://bit.ly/3rMKZpO*. If you have ideas for career development opportunities or are interested in serving on the committee in 2022, contact the 2022 CCD chair, Elizabeth Mannshardt, at *mannshardt@stat.ncsu.edu*. ■

Linda J. Young

John Bailer

Abie Ekangaki

MORE ONLINE
For details about the committee, its events, and previous webinars, visit *https://community.amstat.org/ccd/home*.

Nominations Are OPEN

The International Prize in Statistics—one of the highest honors in statistics—is awarded every two years to an individual or team "for major achievements using statistics to advance science, technology, and human welfare."

Previous Winners

2021

Nan Laird

Nan Laird, Harvey V. Fineberg Professor of Biostatistics (Emerita) at Harvard T.H. Chan School of Public Health, in recognition of her work on powerful methods that have made possible the analysis of complex longitudinal studies.

2019

Bradley Efron

Bradley Efron, professor of statistics and biomedical data science at Stanford University, in recognition of the "bootstrap," a method he developed in 1977 for assessing the uncertainty of scientific results that has had extraordinary impact across many scientific fields.

2017

Sir David Cox

Sir David Cox, inaugural recipient of the International Prize in Statistics, Cox is recognized for his 1972 paper in which he developed the proportional hazards model that today bears his name. The Cox Model is widely used in the analysis of survival data and enables researchers to identify the risks of specific factors for mortality or other survival outcomes among groups of patients with very different characteristics.

Nominations for the 2023 International Prize in Statistics are open. When choosing a nominee for the prize, consider the following points:

- The prize will be awarded for a single work or body of work, rather than for more diffuse reasons such as "lifetime achievement." Not only should powerful and original ideas be recognized by the prize, but also contributions that lead to breakthroughs in other disciplines or works with important practical effects on the world.
- Generally, the prize will be awarded to individuals, but in some cases, groups of individuals working on similar ideas—or even teams of individuals or organizations—could be recognized.
- The recipient(s) must be living at the time of selection for the award.
- The 2023 prize will be announced in October 2022 and presented at the ISI World Statistics Congress.

A nomination packet consists of the following:

- Name, address, phone number, and email address of the person making the nomination
- Name, address, and email address of the candidate (person being nominated)
- Nomination statement (maximum of 1,200 words) addressing why the candidate should receive this award (The statement should explain the contributions of the candidate in terms understandable to a non-specialist and indicate the relationship between the nominator and candidate.)
- Copy of the candidate's CV, listing publications, honors, service contributions, etc.
- Up to four letters of support (The committee reserves the right to contact the nominator and writers of the support letters to seek additional information and insight.)

Unsuccessful nominations are carried over for one selection cycle (two years). Download the nomination form at *https://bit.ly/3EFAXdG* and email it and related materials to *nominations@statprize.org* by August 15. ■

MORE ONLINE

For details, visit the International Prize in Statistics website at *https://statprize.org/nominations.cfm*.

To read more about the previous recipients and their work, visit *https://statprize.org/previouswinners.cfm*.

THE JEDI CORNER

At the Rise of JEDI: Lessons Learned from Fall of the Jedi Order in *Star Wars*

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

Shu-Min Liao is an assistant professor of statistics at Amherst College. She completed her PhD training in statistics at The Pennsylvania State University in 2009, but her professional career was unfortunately interrupted by life-threatening medical complications in 2013–2018. She is currently living with multiple disabilities and minority identities—all of which make her a better educator and researcher. Sparked by those unusual experiences, Shu-Min is passionate about STEM Education research and antiracism work (besides discrete copula modeling). She is a member of the ASA JEDI Outreach Group and a faculty facilitator for the "Being Human in STEM" course at Amherst College.

This summer, I enjoyed the fun of watching all three *Star Wars* movies in chronological order with my nine-year-old boy. He is finally old enough to enjoy those films with me; plus, not being able to travel during the pandemic gave us time (or excuses?) to watch all the movies on nine Friday nights.

Far from being a *Star Wars* fan, I was delighted to see the new ASA outreach group named JEDI—an abbreviation for Justice, Equity, Diversity, and Inclusion. But when I told my son (shortly after JSM 2021) that his mom wants to be a JEDI, he responded without even blinking his eyes, "Nah, I want to be Darth Vader, or Kylo Ren, but not a Jedi; the Jedi failed anyway." [Disclosure: We hadn't watched the last film, *The Rise of Skywalker*, at that point.]

Was my boy right? If so, why did the Jedi (Order) fail?

A few quick Google searches led me to hundreds, if not thousands, of discussions about this topic. While, unsurprisingly, different people had different views and interpretations of why the Jedi failed, what astonished me the most was the similarities between the problems the Jedi were facing in the Skywalker saga and those we are facing in academia today.

Let me explain.

Hierarchical Power Structure and Privilege: As the CBR.com article, "The 15 Most Evil Things About the Jedi Order," stated, "The pyramidal hierarchy of the Jedi Order is topped with the extremely powerful Jedi High Council. … With long-lived members like Yoda and Plo Koon, the Order could potentially be ruled by the same individuals for centuries, greatly limiting the *diversity* and *natural evolution* of Jedi leadership with the times." Only the most powerful Jedi could join the Council, which had the power and privilege to decide the destinies of other Jedi (including who/when to be *promoted* as a Jedi Master) and the fate of the galaxy.

Such hierarchy is nothing new in academia. As Brian Martin pointed out in Chapter 3 of *Tied Knowledge: Power in Higher Education*, "Universities are hierarchical. … The academic hierarchy, like other hierarchies, is a system in which people exercise power not by virtue of their personal talents but by virtue of the position they occupy."

More recently, Emma Benn in *Power and Privilege: Reshaping the Opportunity Structure for Equitable Leadership in Statistics and Data Science* provided an incisive description of the relationship between power and privilege: "There are endowed benefits for individuals who are granted control or authority over others and this can leave those under their control at risk for harm."

Both statements sparked me to ask: Who has the power and privilege in our system? Who is at risk? How can we use power and privilege to "serve and build," rather than "destroy and take"?

Problematic Dichotomy: The Jedi are light and good, while the Sith are dark and bad. Nothing in between. But aren't light and dark "two sides of the same coin"? No dark, no light. The Jedi arrogantly claimed they were the sole gatekeeper of the Force, but who decided the Jedi's perspectives about the Force were more "correct" than those of the Sith's?

In academia, similar dichotomy is everywhere. For example, here is some advice I've gotten from senior colleagues over the years:

> "You should try to work on more popular topics; otherwise, it would be very hard for you to get grants."

> "You should focus on methodological research, rather than pedagogical research, as statistics education research would only count as real research if it's funded."

> "Antiracism and JEDI works are important, but unfortunately you won't get tenured with them."

Getting more publications and grants is good; others are subordinate. Research is more important than teaching and service. People with tenure are more successful (and have more voice and power) than those without. How many of us ever questioned whose criteria is good, who defines success, who decides which types of scholarship or research are more significant than others?

Rigid System with Little Room for Humanity or Failure: The Jedi Order throughout the prequel-era was dogmatic and used rigid criteria to decide who was Force-sensitive and who wasn't. They believed 8- or 9-year-old kids were too old to begin Jedi training. Most Jedi were recruited when they were toddlers or little kids and forbidden to have emotional bonds (like love) or negative feelings (like anger), as those human emotions were viewed as the passageway to the Dark side. How dehumanizing!

If you believe our academic system is better than the Jedi's, please think again. For most tenure-track positions, you only have five years to establish a new, independent, and successful research agenda, so make sure you choose your research topics carefully, especially if you don't have a 'powerful' academic family to pave the road for you. Moreover, make no mistake, as you probably won't have enough time to start a new research line from scratch if you fail. Failure is unfortunately forbidden. Long vacations are missions impossible. Remember to bring your research with you on all family trips. Don't think about self-care, as that is just a waste of time. Oh, also reveal no weakness or tears in front of students and colleagues, as those are signs of losers. [Okay, I'm exaggerating here, but you get the point.]

How about our students? The structural inequity and injustice they face is no less—it might be more—than junior faculty, especially for those from equity-seeking groups. According to Joe Feldman, author of *Grading for Equity: What It Is, Why It Matters, and How It Can Transform Schools and Classrooms*, students are on the bottom of the academic power hierarchy (especially those coming from disadvantaged families) and have little say in what should be taught in class and how, even though it's for their learning.

Most colleges and universities, at best, provide equal, but not necessarily equitable, resources to students, which penalizes those arriving to college with inequitable preparation along with a grading system designed with the privileged in mind.

Dichotomy is everywhere in student life, too—good vs. bad grades, winners vs. losers, popular vs. nerd, rich vs. poor, white vs. non-white, etc. Further, higher education rarely prepares students for unavoidable failures and challenges in life. We do little to help young adults understand their unique identities and strengths or to learn self-care skills for promoting lifelong mental health. Some might argue it's not the faculty's job, but shouldn't we—the educators—educate not only students' brains, but also their hearts?

Solutions? My favorite novelist, Haruki Murakami, said a decade ago:

> **We are all human beings**, individuals transcending nationality and race and religion, and we are all fragile eggs faced with a solid wall called The System. To all appearances, we have no hope of winning. The wall is too high, too strong, and too cold. If we have any hope of victory at all, it will have to come from our believing in the ***utter uniqueness and irreplaceability*** of our own and others' souls and from our believing in the warmth we gain by ***joining souls together.*** … The System did not make us; we made the System.

May the Force be with us! ■

Further Reading

Groneman, Thomas. 2017. Blight Side of the Force: The 15 Most Evil Things About the Jedi Order. *CBR.com.* *https://bit.ly/3pCGmvQ*

Martin, Brian. 1998. Hierarchy. In *Tied Knowledge: Power in Higher Education.* *https://bit.ly/3rRYdBy*

Benn, Emma. 2021. *Power and Privilege: Reshaping the Opportunity Structure for Equitable Leadership in Statistics and Data Science.* *https://bit.ly/3EWh0zH*

Propelled by Possibility: Tarana Burke Speaks at TEDWomen 2018 *https://bit.ly/31Q3crt*

Feldman, Joe. 2019. *Grading for Equity: What It Is, Why It Matters, and How It Can Transform Schools and Classrooms.* *https://bit.ly/3oGx5Ue*

Murakami, Haruki. 2009. Always on the Side of the Egg. *Haaretz.com.* *https://bit.ly/3rSu0lR*

UConn Sports Analytics Symposium a Home Run

Jun Yan

The third UConn Sports Analytics Symposium (UCSAS) was held virtually on October 9, 2021. Among the 300+ registrants, more than two-thirds were graduate, undergraduate, or pre-college students and about one-third registered through our international hubs.

The program featured the following presentations:

- Eric Tulsky, Assistant General Manager, Carolina Hurricanes, "No Stone Unturned: Leveraging Public Domain Analysis"
- Justin Jacobs, Principal Research Statistician, Sandia National Laboratories, "A Square-Integrable Methodology into Play Registration for NBA Tracking Data"
- Sarah Bailey, Manager of Analytics and Data, Los Angeles Rams, "Sports Science in NFL: An Overview of How Analytics and Performance Can Work Together"

All keynote speakers answered questions from the audience.

A panel discussion on careers in sports analytics featured four female sports analysts. The discussion was moderated by Alison Lukan, Seattle Kraken contributor and television analyst for Root Sports. The three panelists were Jessica Hensley, data analyst for the United States Olympic & Paralympic Committee; Kelsey Roberts, database/basketball analyst for the New York Knicks; and Sara Ziegler, sports editor for *FiveThirtyEight*.

The virtual poster session included 15 posters, 12 of which were presented by students. Each presenter had a virtual room for viewers to drop by. Also, each poster was uploaded onto Twitter several days before the event.

A poster award committee led by Jeremy Abramson of the University of Southern California judged the student posters, and the Student Poster Award went to Quang Nguyen of Loyola University Chicago for his poster, "Concerns Regarding Sport Climbing Competition Format and Scoring System: Who's Suffering?"

The following six training workshops were each 50 minutes and well attended:

- Introduction to R by Tuhin Sheikh
- Introduction to Python by Surya Eada
- Hockey Analytics with R by Meghan Hall
- Basketball Analytics with R by Jackson Lautier
- Web Scraping for Sports Data by Lucas Godoy
- TensorFlow with Applications in Sports Analytics by Jun Jin

The workshops on hockey analytics and TensorFlow are new additions to the archived workshops, which can be accessed from the symposium website at *https://bit.ly/3DKpI2m*.

The symposium was supported by the UConn and sports analytics communities. Welcoming remarks were delivered by Andrew Agwunobi, UConn interim president; Paul Caddy, UConn head coach of field hockey; and Seth Partnow, special adviser to the CEO at StatsBomb.

The organizing committee consisted of Alison Lukan, Brian MacDonald, Greg Matthews, Lauren Poe, and Jun Yan.

The event was hosted by the UConn Statistical Data Science Lab, and sponsors included the ASA New York City Chapter, CluBear China, UConn Data Science Lab, UConn Department of Statistics, and UConn Sports Management Program.

Recordings of all sessions (except the workshop on web scraping) are available at *https://bit.ly/3oEU41Q*. ■

SIGNIFICANCE HIGHLIGHTS

December Issue Presents a Statistical Indulgence

History of the Data Economy series comes to a close

The December 2021 issue of *Significance* is out now and features an assortment of statistical stories and data discussions to indulge in over the festive season.

First, the end of the year brings our History of the Data Economy series to a close, with a look at what the future has in store for data-driven industries.

We also take a deep dive into "risk know-how," a project to develop a framework for helping communities around the world understand and engage with information about risk.

In our Profiles section, friends and former colleagues reflect on the life and legacy of Chen Wen-chen, a promising young statistics professor who died in tragic and suspicious circumstances 40 years ago.

And in our Notebook section, there is an overview of the work of Joshua Angrist and Guido Imbens, two of this year's Nobel Prize winners whose ideas have helped transform the study of key policy questions in areas including education, immigration, and labor markets.

Also in the December issue:

- Randomized controlled trials are often presented as the gold standard for testing new medical treatments. In the early stages of research, however, reports from single trials are likely to show exaggerated effect estimates. Erik van Zwet, Simon Schwab, and Sander Greenland explain why—and propose a remedy.
- Financial investment strategies are often designed and tested using historical market data. But this can frequently give rise to "optimal" strategies that are statistical mirages and perform poorly in the real world, as David H. Bailey and Marcos López de Prado explain.
- The iris data set is one of the best-known and most widely used data sets in statistics and data science. But the origins of at least part of the data has been something of a mystery for decades. Antony Unwin and Kim Kleinman believe they have traced the source.

Access the digital version of *Significance* through ASA or RSS member portals (*www.significancemagazine.com/654*) or download and read the magazine on the go with our iOS and Android apps (*https://bit.ly/3pLKtWv*). Print issues will be mailed to subscribers soon.

Significance is online at *www.significancemagazine.com.* ■

ICSA Panel Discusses Partnerships, Collaborations Across Sectors

Victoria Gamerman, Boehringer Ingelheim; John E. Kolassa, Rutgers, The State University of New Jersey; Jim Z. Li, Viatris; Fanni Natanegara, Eli Lilly and Company; Kimberly F. Sellers, Georgetown University; Aniketh Talwai, Medidata; Kelly H. Zou, Viatris

EDITOR'S NOTE
The views expressed here are the authors' and do not necessarily represent those of their employers.

A version of this article will also be published in *The Bulletin*.

During the 2021 International Chinese Statistical Association (ICSA) Applied Statistics Symposium, several panelists discussed the key elements of forming and sustaining successful partnerships and collaborations, along with the challenges and barriers. This is Part 1 of a two-part panel that includes six experts from either academia, industry, or consulting, with Kelly Zou serving as the moderator. Look for Part 2 in the February issue.

Partnerships and collaborations come in all shapes. As Martin Luther King Jr. said, "We may have all come on different ships, but we're in the same boat now."

Frequently, sharing ideas between stakeholders from different organizations leads to exchange visits, support for graduate students, consulting jobs, grant support, and continuing education opportunities for statisticians or data scientists outside academe.

For statistics and data science to be impactful, sharing ideas and knowledge is key. The themes discussed here apply broadly, with deep implications for the impact and perception of our field.

Panelists

Victoria Gamerman

John E. Kolassa

Jim Z. Li

Fanni Natanegara

Kimberly F. Sellers

Aniketh Talwai

Kelly H. Zou

How would you define "partnership," since it may be of many shapes?

According to Fanni Natanegara of Eli Lilly and Company, partnership is an association between two or more individuals who pool their resources and skills to achieve a common goal. The partnerships she has seen in her role as a pharmaceutical statistician and ASA Statistical Partnerships Among Academe, Industry, and Government (SPAIG) Committee member have taken many forms. Formal partnerships can involve signing a contract such as a "master service agreement," where academicians partner with industry statisticians to solve a research problem that could end up in method and tool development, manuscripts, presentations, and dissertation topics. This type of partnership could also involve monetary transactions. Informal partnerships may not necessarily include monetary exchange and can still produce manuscripts and presentations.

Is "collaboration" the same as "partnership"? Why?

John E. Kolassa of Rutgers sees "collaboration" and "partnership" as separate concepts on a spectrum of collaboration intensity. At one end of this spectrum is partnership, where the statistician's name is on every publication, the statistician contributes to the grant application by planning the analysis and details of data collection, and the statistician is involved all

the way through to the final publications. At the other end of the spectrum, a colleague describes a type of data and solicits an opinion on data analysis, experimental pitfalls, and other aspects to provide valid scientific reports. This may be considered as "collaboration," which is less intense. It is important to keep in mind that many lab science collaborators treat their studies with a more proprietary spirit and recognizing this spirit helps avoid conflict.

What are benefits of collaborations and partnerships in statistics/data science?

Victoria Gamerman of Boehringer Ingelheim noted data science is a varied field that requires multifaceted roles. For successful collaborations and partnerships, there are different types of roles to consider and balance, depending on the desired outcome of the relationships: specialists and generalists. The specialization concept is key to finding which collaborator or partner has subject matter expertise on which topic or topics. This expertise strength from one partner should then be paired with another who has a strength in a different and complementary area.

These partnerships and collaborations also allow us to look outside our own area of expertise and way of thinking to focus on the outcome in the short term, with the perspectives of how to scale it either as part of the relationship or beyond. This ability to move from use case or single problem solution to generating sustainable solutions that are scalable within one of the partner organizations is where the benefit of these coming together moments will be seen and valued by all parties.

Through this approach of finding complementary expertise, bringing together diverse approaches, and valuing short- and long-term outcomes, the pressure of finding a single candidate who is a unicorn capable of 'doing it all' is not necessary. Instead, an organization can identify external experts related to its needs, work with these specialists through the partner organization, and achieve the desired goals with broader benefit.

What are some requirements for fruitful collaborations or partnerships?

Gamerman emphasized that a key element for the parties involved in the collaboration or partnership is understanding each other's drivers. For example, one organization may emphasize getting regulatory-grade evidence to support a molecule through development while another organization may place an emphasis on external scientific publications related to the disease area in which the molecule works. Different motivators and drivers have their place, and both need to be taken into consideration when defining what a successful collaboration or partnership looks like. Having an aligned understanding of what is important to the other parties will allow for an early and proactive assessment of potential challenges (e.g., which priorities to pursue) and define an approach for handling them (e.g., a governance or steering committee).

Aniketh Talwai of Medidata suggests the following:

- Establishing formal stakeholder management mechanisms (e.g., governance committees; go vs. no-go; and gating sessions, project charters, and contractors) ahead of launch
- Adhering to these mechanisms over the course of the effort to provide transparency and lend clarity to scope, contributions, permissions, and resourcing. Such an action works to prevent misunderstandings and helps resolve issues before they escalate into conflicts.
- Adopting a modular, stepwise approach to project delivery, taking quick wins up front and having proof-of-success at each step, as opposed to trying to solve all the hardest challenges or complete everything perfectly in one go, not only provides for the learning curve needed for all new collaborations but also helps guard against disillusionment leading to premature abandonment of the effort.
- Having the collective periodically step back and consider the interests of all stakeholders, not just those of the immediate partners, and proactively involve them helps to bring in a diversity of viewpoints and forestall potential constraints.

Don't miss Part 2 in the February issue of *Amstat News*. The panelists offer communication tips and best practices for navigating multidisciplinary collaborations. ■

COC Members Reach Out with Books Despite COVID Snags

The members were creative and flexible in meeting international festival's challenges

The 2021 International Science and Engineering Fair (ISEF) was held virtually April 29 – May 21, with ASA members serving as volunteer judges for the projects.

Involvement in ISEF has been an outreach project of the ASA Council of Chapters since 1987. The council appoints an ASA-ISEF liaison, and the ASA provides a modest budget that includes travel expenses for one chapter member to travel to the fair.

The primary outreach activity is the official judging for the Special Awards in Statistics (see *https://bit.ly/30p38yM*); however, there are three additional areas with opportunities for outreach: statistical presentations at ISEF prior to the judging, delivering *CHANCE* and *Significance* magazines during the first round of screening, and presenting statistics books to selected students based on their use of statistics in their projects.

The statistical presentations offered by the judges are attended by approximately 100 people. No statistics symposium was included in the virtual ISEF 2021.

When ISEF 2020 was canceled and ISEF 2021 became a virtual event, volunteers created a Google doc to use as a landing page for students to access both *CHANCE* and *Significance* magazines online. Included were links to articles selected for their timeliness regarding statistical evaluation of pandemic-related data and illustration of the wide range of applications for statistics.

The third opportunity for increasing outreach is the presentation of statistics books to selected students. Distributing these books follows a tradition established by Susan Ellenberg in the initial years that led to the formal establishment of the ASA Special Awards in Statistics in 1987.

With all the judging and interaction with students virtual this year, the real challenge was how to offer 100 students their choice of a book when the students were located around the world and the books were in an office in Southern California.

The statistics judges were creative and flexible. One judge produced a brochure with descriptions of each of the 16 books, and another judge designed a Google form that facilitated the students selecting their top three book choices. Many other statistics judges posted messages for the students at their virtual ISEF project booths to let them know they had been selected to receive a statistics book and would be receiving an email from the ISEF staff with information for selecting their book.

More than 20 students responded within two hours of receiving the email. The three most popular books 'sold out' the first day. These books were *Discovering Knowledge in Data: An Introduction to Data Mining* by Daniel Larose; *Introductory Statistics: Exploring the World Through Data* by Rob Gould, Rebecca Wong, and Colleen Ryan; and *Elementary Introduction to Statistical Learning Theory* by Sanjeev Kulkarni and Gilbert Harman.

The next challenge for the statistics judges was to package and mail more than 100 books to addresses across the US and overseas. But no problem! In late June, several fully vaccinated judges met to prepare the books for shipping. They included personalized labels that

Student Feedback

One ISEF judge designed a Google form that had a place for students to leave comments. Three overseas students sent selfies showing the book they received along with the following comments:

Michael Mitchell: "Your support has contributed to furthering my interest in pursuing science and technology to the highest levels. I am currently a freshman at Rice University in Houston, Texas pursuing a degree in Chemical and Biomolecular Engineering with a focus in bioengineering. I also received admission into Princeton University, Johns Hopkins University, and the California Institute of Technology."

Michael Mitchell

Aranyo Roy: "Thank you for the recognition and the book! I'll be starting at Yale University this fall as a prospective Psychology major; so this book will be immensely helpful!"

Aranyo Roy

Madalina Griza: "Thank you very much for the book!"

Madalina Griza

acknowledged the book donors and listed the web links for the ASA chapters. The books were then put in bubble wrap shipping bags, weighed, and labeled with the USPS bar-coded shipping label.

These books represent a tangible and meaningful gift from our profession to budding scientists. In time, some of these young scientists may join the ASA and be future leaders in the field of statistics.

For more information about this year's ISEF event, read "ASA Members Honor Three with Special Awards in Statistics" in the December 2021 issue of *Amstat News*. For information about ISEF, visit *www.societyforscience.org/isef*. ■

Register for COMAP Contest

COMAP'S Mathematical Contest in Modeling (MCM) / Interdisciplinary Contest in Modeling (ICM) is an international contest designed to provide undergraduate students the opportunity to work as team members and engage in and improve their modeling, problem-solving, and writing skills. Teams apply mathematics to model, develop, and communicate a solution to a real-world problem.

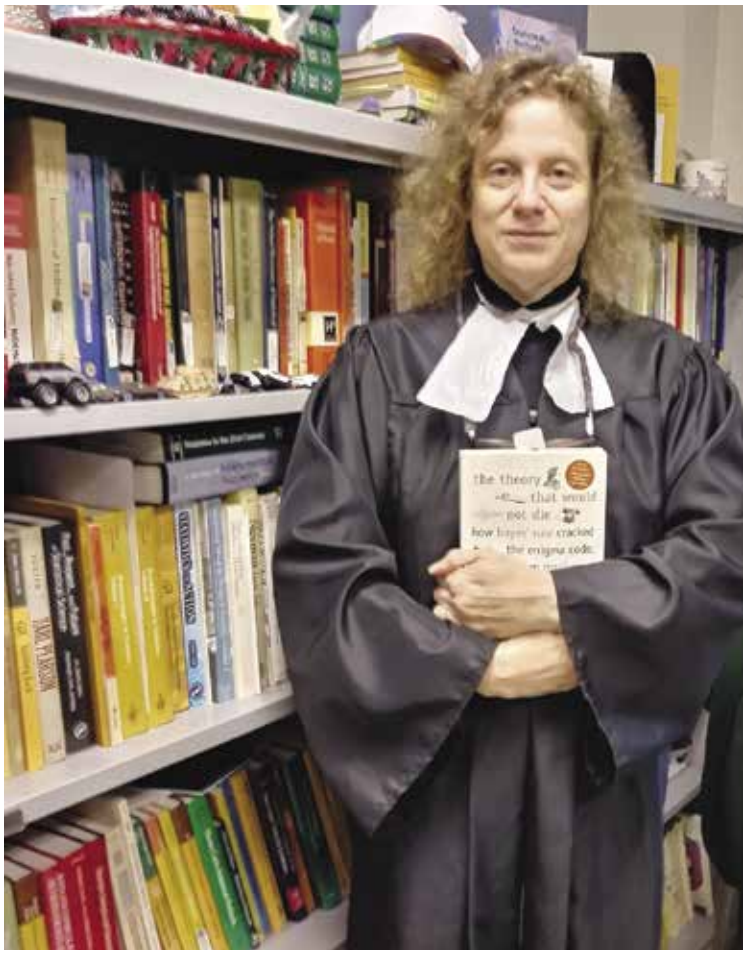
2022 Contest Dates and Times

- **Registration Deadline:** Before 3:00 p.m. EST on Thursday, February 17
- **Contest Starts:** 5:00 p.m. EST on Thursday, February 17
- **Contest Ends:** 8:00 p.m. EST on Monday, February 21
- **Solution Report Deadline:** 9:00 p.m. EST on Monday, February 21
- Contest Results: The results will be posted on or before May 20

Rules and instructions, including a comprehensive guide, can be found at *https://bit.ly/31TosNA*.

MY ASA STORY

Jana Asher | Assistant Professor and Director of Statistics Education



Jana Asher is an assistant professor and director of statistics education at Slippery Rock University.

The 20+ years of my career have been colorful and varied, but I know the ASA will be there with me no matter what comes next.

I joined the ASA in 1999, the first year I went to the Joint Statistical Meetings (JSM). I was about to return to graduate school after 18 months at the US Census Bureau. Because JSM was in Baltimore that year and the Census Bureau was willing to foot the bill, it seemed like a good idea to go see what it was about. Somehow, by the time JSM was over, I was the membership chair for the Caucus for Women in Statistics and had met dozens of new professional contacts while attending the evening socials and business meetings.

I found participating in ASA activities an incredibly rewarding break from the rigors of graduate school over the next several years. I became active in the Government Statistics Section (GSS), helping to cofound the Wray Jackson Smith Scholarship with Pat Dixon and Wendy Alvey. I then ended up in the election for the 2003 GSS program chair-elect, and, surprisingly, I won! Participating on the 2004 Program Committee was so rewarding, I ended up running for and serving as the 2008 program chair for the Social Statistics Section.

Another activity I found a great deal of joy in doing was writing articles for *Amstat News*. The following became a reflection of my career over the years:

- "A Statistician by Chance" (2001)

The 20+ years of my career have been colorful and varied, but I know the ASA will be there with me no matter what comes next.

Jana Asher (left) with students at Slippery Rock University, where she helped start a statistics club

- "A Statistician in Iraq" (2003)
- "A Statistician Turned Field Worker: Seven Months in Sierra Leone, Part I" (2004)
- "A Statistician at Home" (2008)

I also wrote articles about statistics and human rights, international statistics issues, and equity and justice in our field. Writing these articles connected me to people I wouldn't have otherwise met and expanded my horizons—not only in my career, but also in my life.

For personal reasons, I took a break from my career for multiple years. When I returned to life as a statistician in 2016, the ASA was waiting for me. When I became an assistant professor at Slippery Rock University (SRU) in 2019, one of my first goals was to help the statistics students start a statistics club. We had a very active student in the department of mathematics and statistics, Rebecca Nicholson, who was managing our Statistical Consultation Center. I asked her if she would help form the club and serve as its president; she was excited to do so!

Although the process for starting a club at SRU took most of my first academic year, the ASA's process for making that club into a student chapter was relatively painless. For our first meeting, Rebecca and the other new officers wanted me to give a talk, and so I did. It was titled "Inverse Probability and the 200-Year Journey to Team Bayesian" in honor of the "Team Bayesian" and "Team Frequentist" stickers the ASA had out during that year's JSM. I dressed up as Thomas Bayes to give the talk. We had a good 60 people at that event, and dozens of students joined the club!

I am now in my third year at SRU and my connection to the ASA is stronger than ever. Today, I worked on finalizing the invited session selections for the ASA's Survey Research Methods Section (Yes, I'm back on the program committee!) in between preparing classes, completing a peer review, ordering pizza for the next stat club meeting, and writing this article. The 20+ years of my career have been colorful and varied, but I know the ASA will be there with me no matter what comes next. ■

STATS4GOOD

Data for Good: The Year in Review

With a PhD in statistical astrophysics, **David Corliss** is lead, Industrial Business Analytics, and manager, Data Science Center of Excellence, Stellantis. He serves on the steering committee for the Conference on Statistical Practice and is the founder of Peace-Work, a volunteer cooperative of statisticians and data scientists providing analytic support for charitable groups and applying statistical methods in issue-driven advocacy.

Last year was quite a year! Looking back at 2021, the Data for Good community faced many challenges, including the ongoing pandemic, virtual conferences, increased globalization, and constantly changing technology. However, last year brought great opportunity and accomplishments, as well.

The COVID-19 pandemic has been the focus for many. And in addition to familiar topics such as climate change and the environment, education, and applying new technology to developing D4G solutions, we have seen an increased interest in equity, social justice, and ethics. Even as the challenges are great, opportunities to make an impact for the greater good with data and statistics are endless.

As the second year of a still ongoing pandemic, we have seen the tremendous impact hundreds of projects have had for the greater good. With the arrival once again of colder weather, the pandemic has become K-shaped—decreasing in high vaccination areas and worsening in places with substantial resistance to science—emphasizing how fostering adoption of statistical results is as important as performing the original analysis. It's a lesson that can be applied to many other areas.

As just one example, an agency working to address homelessness isn't likely to get more

Getting Involved

The 2022 Conference on Statistical Practice will be in person February 1–3 in New Orleans. As steering committee chair this year, I hope to meet many of you there. ASA President Kathy Ensor will give the keynote, and there will be several leading D4G presenters and an ethics panel.

people housed if they always do what they have always done. The pandemic has proven as perhaps never before that developing statistics is only part of the battle; driving the adoption of analytics requires a distinct set of skills and practices that allow one to develop relationships with stakeholders who sometimes act as gatekeepers.

The Laboratory for Interdisciplinary Statistical Analysis (LISA, *www.colorado.edu/lab/lisa*) at the University of Colorado, Boulder, led by ASA member Eric Vance, is a great place to get training and resources—for many things, actually, but especially for developing relationships of trust. Some people call these disciplines "soft skills." It's a phrase Vance hates. These skills are every bit as concrete and essential to sound analytic practice as programming, computation, and modeling. D4G can't deliver the actual good without them.

The ASA led many efforts in 2021, breaking new ground in Data for Good. It established an outreach group for justice, equity, diversity, and inclusion: JEDI. JSM—with its theme of *Statistics, Data, and the Stories They Tell*—provided many opportunities to share the stories of D4G. Particularly noteworthy was the presentation by biostatistician, teacher, and mentor Michael Kutner, who won the Karl E. Peace Award for Outstanding Statistical Contributions for the Betterment of Society.

Last year also saw a number of advances in the technology used in our work. As the pendulum continues to swing toward open-source tools and away from proprietary systems, analysts can struggle with choosing between a proliferation of packages designed for the same task. This is one area in which a thorough literature search can be helpful, especially when looking for peer-reviewed research answering the same analytic challenges, rather than in the same subject area.

One area in which the pendulum may be swinging back to is data visualization, a vital skill for almost any statistician. While the list of software options keeps changing, the principles of good visual design do not. Seek out input on your plots, slide decks, and presentations from experts in effective design and communication. One source of constant inspiration and guidance for me is the magazine you now hold in your hands; the design team at *Amstat News* presents serious statistical content communicated in a highly effective manner. It's truly a design tutorial for all of us!

The pandemic has proven ... that developing statistics is only part of the battle; driving the adoption of analytics requires a distinct set of skills and practices that allow one to develop relationships with stakeholders who sometimes act as gatekeepers.

Another great example of statistics applied to an ethical problem is a new study from Reshma Ramachandran, Joseph Ross, and Jennifer Miller on medium- to low-income countries that helped test COVID vaccines only to have trouble getting supplies of the life-saving vaccines they helped develop (*https://bit.ly/3s2RvJ6*).

I would like to express my deep thanks for all those who make Stats4Good possible. The entire staff at *Amstat News*, especially Managing Editor Megan Murphy, deserve highest praise for their great skill, care, and patience. To all of you, my dear readers, thank you for continued support for this column and your own efforts in Data for Good. In all your labors, be inspired and be an inspiration!

Please send me your inspiring stories of how you have seen Data for Good making an impact. ■

STAT*tr@k*

Grant Writing Takes a Village

By **Mark Daniel Ward,**
Purdue University
Professor of Statistics

Building on my article from the April 2021 issue of *Amstat News* about grant writing, I asked 13 friends to offer advice about all aspects of the grant writing process. Here is their combined wisdom.

Before even getting started with writing grants, Ben Baumer, associate professor at Smith College, recommends drawing from the expertise of your school's grants office. He says, "They know a lot about the process and a quick conversation with them can often help you understand the details that might otherwise take hours of poring over hundreds of pages of rules and regulations." Remember, most universities offer grant-writing workshops. These are often coordinated by the central university administration office that coordinates research activities. Most are free for faculty to attend.

Talitha Washington, a professor and director of the Atlanta University Center Data Science Initiative at Clark Atlanta University, says some universities enable the use of consultants. "Seek grant-writing support for the proposal development," she says. "Having weekly meetings and shared documents between the project leadership team and [consultants] helps map out key points to address, develop a timeline of items to complete, and refine and focus the project goals and objectives."

Along the lines of institutional resources, Duke University professor Mine Çetinkaya-Rundel provides this insight: "Don't overlook opportunities for internal grants in your institution. Not only can they be great opportunities for funding smaller and/or pilot projects, applying for them is a great way to improve your grant writing, particularly if you're able to work with collaborators and learn from them along the way."

Reed College associate professor Kelly McConville also urges looking broadly for potential funding opportunities. She says, "Look beyond the usual suspects (e.g., NSF, NIH) to the smaller grants or research support opportunities. In particular, cultivate relationships with the organizations for whom your work is most relevant. Once those relationships are established, ask about any potential funding support."

Friends Offering Advice

Ben Baumer

Mine Çetinkaya-Rundel

Kumer Das

Sat Gupta

Monica Jackson

Eric Laber

Bo Li

Kelly McConville

Reneé Moore

Sastry Pantula

Olga Vitek

Lance Waller

Talitha Washington

Ben Baumer, Associate Professor of Statistical and Data Sciences at Smith College

Mine Çetinkaya-Rundel, Professor of the Practice in Statistical Science at Duke University

Kumer Das, Assistant Provost and Assistant Vice President for Research, Innovation, and Economic Development at the University of Louisiana at Lafayette

Sat Gupta, Professor of Statistics at The University of North Carolina at Greensboro

Monica Jackson, Deputy Provost and Dean of Faculty at American University

Eric Laber, Professor of Statistical Science at Duke University

Bo Li, Department Chair and Professor of Statistics at the University of Illinois, Urbana-Champaign

Kelly McConville, Associate Professor of Statistics at Reed College

Reneé Moore, Research Professor and Director of the Biostatistics Scientific Collaboration Center at Drexel University

Sastry Pantula, Dean of the College of Natural Sciences at California State University, San Bernardino

Olga Vitek, Professor of Computer Sciences at Northeastern University

Lance Waller, Professor of Biostatistics and Bioinformatics at Emory University

Talitha Washington, Professor of Mathematics at Clark Atlanta University and Director of the Atlanta University Center Data Science Initiative

Early in the process, as you are identifying funding opportunities you are interested in, Kumer Das—assistant provost and assistant vice president for research, innovation, and economic development at the University of Louisiana at Lafayette—emphasizes the need to ask yourself if you are able and ready to commit to the potential grant project. He says, "Evaluate whether this is worth your effort. A project will only be successful if you are committed to it and have enough time to complete it."

> Don't chase funding. Pick projects you'd work on even if you didn't have grant support. Funding can accelerate progress and expand the scale and scope of a project, but it rarely makes the work more interesting.
>
> — *Eric Laber, Duke University*

Eric Laber, Duke University professor, has similar advice. "Don't chase funding," he says. "Pick projects you'd work on even if you didn't have grant support. Funding can accelerate progress and expand the scale and scope of a project, but it rarely makes the work more interesting." Likewise, University of North Carolina at Greensboro professor Sat Gupta says, "You need to have a great idea in mind and need to collect a strong team of collaborators."

Reneé Moore coordinates the BST567/867 class at Drexel University with several colleagues. She describes how statisticians and biostatisticians play a vital role in grant writing, often as part of a larger team of investigators. The planning for grant writing "should involve the statistician from the start," she says. For this reason, their class emphasizes that there is an art *and* a science to effective grant writing.

Kumer also says, "Program officers want you to be successful in your submission. Talk with them as early as possible. Make sure to do your homework (e.g., reading the solicitation, searching the award database, etc.) prior to the conversation."

Olga Vitek, a professor at Northeastern University, elaborates on this point: "Work to understand the mission of the funding agency, carefully read the RFA, and talk to program officers if possible. No matter how wonderful the proposal is, it will only be funded if it fits the agency's goals and mission."

Sastry Pantula is a former National Science Foundation (NSF) program officer. He says, "Program officers work hard to spread the dollars and invest in as many as they can." Sastry also says, "Hug a program officer, they are lonely and deserve the hugs. Give them some pats on their back."

Talitha suggests using Google to find examples of sample proposals, supporting documents, and checklists of items to include in the proposal submission. She says, "While the documents will be created by you, seeing examples provides ideas on how to structure elements of a successful proposal and will also provide clarifications on what is expected."

Once you start writing and are ready for feedback, Sat says, "It is extremely helpful to have your proposal read by a senior pro who has had success with grants." And Sastry says to "seek advice from others; have at least three people read the proposal before you submit; have your spouse or partner read it, too." (This is one of my secret weapons. My wife, Laura, has a PhD in English literature and carefully reads every grant proposal I write.)

For investigators who are already experienced at grant writing, Sat reminds us that, "If you have had prior funding, you need to highlight your success story in the section on prior funding."

My friend Bo Li, department chair and professor at the University of Illinois, Urbana-Champaign, shares insights about making grants more straightforward for reviewers. She says, "Try to describe the problem, the background, and your proposed research as clearly as possible. Please do not assume reviewers need to 'search' very hard in your proposal in order to find the new ideas, nor let reviewers 'investigate' what are the possible advantages of your proposed study compared to the previous research, because reviewers often do not have an infinite amount of time to deeply study each proposal and dig out the buried treasure." Sastry touches on this point too: "Don't challenge the reviewers to guess what you are thinking about."

To ensure the relevant parts of the proposal are easy to find, Talitha and I both like to get our section headers from the solicitation itself. Talitha

describes this process: "Use the request for proposal (RFP) document to guide your proposal development. The first task in proposal writing is to use the exact same language in the RFP to create an outline of headings in the proposal and the items that should be addressed as subheadings to ensure that the proposal is responsive to the call." (Talitha and I both believe drinking more coffee leads to better grant writing, as well!)

Reneé and her collaborators say it is imperative that the "aim adequately addresses a knowledge gap within the field." Additionally, Sastry reminds us that NSF wants to prioritize funding aimed at one or more of its 10 big ideas (*www.nsf.gov/news/special_reports/big_ideas/nsf2026.jsp*). He says, "It is also important to pay attention to the mission and vision of NSF and what it supports and what it doesn't. NSF is looking for innovative and big ideas, not marginal or incremental research. It is willing to take a chance on high risk with a high pay off proposals. Also, if your research is connected to the national priorities, connects research with education, or mentors undergraduates through grad students and postdocs, enhances diversity, and has broader impacts, you will have a higher chance of getting funded."

Many grant proposals require an assessment of the proposed activities. Even when assessment is not required, it can strengthen a proposal. Along these lines, Ben says, "Find an experienced assessment team to work with your project leadership. There are a lot of options, ranging from colleagues in academia with expertise in the learning sciences, to your own school's institutional research group, to private companies who will do the work for hire. Whichever route you take, these people are worth their weight in gold."

Sat and I have both had success with grants that support student research. Sat says, "The budget should be student-centered. This is obvious for student training grants but ask for student support even for other research grants."

Reneé's BST567/867 course also highlights the need for partners to work closely. "Collaboration among investigators (of *all* expertise) commences at the planning stage of the grant and continues through the publications," she says. "Such collaboration requires sufficient effort included in the budget for all collaborators."

Lance Waller, an Emory University professor, says, "Don't forget your audience: Write for the reviewers. Remember, your reviewers are reading many proposals at the same time. What main things will they remember about yours?"

In my April 2021 article, I said "my best tip is to offer to serve as an NSF reviewer." Monica Jackson, deputy provost and dean of faculty at American University, agrees with that advice. She says, "Try to serve on a grant review panel. It will help you learn how reviewers view grants."

> Try to describe the problem, the background, and your proposed research as clearly as possible.
>
> *— Bo Li, Duke University of Illinois, Urbana-Champaign*

Regarding the feedback in the review process, Lance says, "No one *likes* reading critiques of their own work, but you can always improve your proposal if you read them carefully." Monica adds, "If you are not successful the first time, then resubmit. Keep trying, but fine tuning the grant each time and making sure you are addressing all reviewer comments."

At NSF, reviewers rate every proposal on its intellectual merit and its broader impacts. (Some grants have solicitation-specific criteria, too.) Sastry says, "Each proposal should include the intellectual merit and broader impact—clearly labeled. You can't ignore either of them." This is perhaps obvious to everybody who applies to NSF, but I have often seen the broader impact aspects be marginalized. Both criteria must be emphasized and justified.

Statisticians have such an important role to play, across all areas of science and beyond. We should all continue to propose innovative, collaborative research projects with exciting impacts. ■

Natrella Scholarship

Applications for the Mary G. and Joseph Natrella Scholarship will be accepted until April 1. The scholarship will support the participation of two students at the Quality and Productivity Research Conference, to be held June 13–16 in Mountain View, California, and at San Francisco State University.

Scholarship recipients will each receive a $3,500 grant, a $500 travel stipend, complimentary registration for the conference and pre-conference short course, and an opportunity to present their research at the conference. The scholarships are presented annually by the ASA Quality and Productivity Section to honor the career of Mary G. Natrella, author of *Experimental Statistics*, along with her husband, Joseph.

Application is open to full-time students pursuing a master's or doctoral degree at an accredited college or university who have a demonstrated interest in applications of statistics to quality and productivity.

Further information about the scholarship can be found on the Quality and Productivity Section Community page at *https://bit.ly/3DWzfnh*. ■

Gertrude M. Cox Scholarship

Applications are being accepted for the Gertrude M. Cox Scholarship until February 23. This scholarship was established to encourage women to enter statistically oriented professions.

Application is limited to female permanent residents of the United States or Canada who are admitted to full-time study in a graduate statistics program by July 1 of the award year.

The award will be presented at the Joint Statistical Meetings.

The scholarship is sponsored by the ASA Committee on Women in Statistics and Caucus for Women in Statistics. Learn more and download an application packet at *https://bit.ly/3oSPBbZ*. ■

Ellis R. Ott Scholarship

The Statistics Division of the American Society for Quality has $7,500 scholarships available to support students who are enrolled in, or are accepted into, a master's degree or higher program with a concentration in applied statistics, statistical engineering, 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 2021–2022 scholarship winners are:

- **Camila Burne,** University of Texas at Austin, in the MS category
- **Venkata Varchasvi Vedula,** Columbia University, in the MS category
- **Anja Zgodic,** University of South Carolina, in the PhD category

During the last 24 years, scholarships totaling more than $360,000 have been awarded to 62 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 *https://my.asq.org/communities/files/177/6685*. Forms for the 2022–2023 academic year will be accepted until April 1.

For details, contact Lynne B. Hare at 55 Buckskin Path, Plymouth, MA 02360 or *lynne.hare@comcast.net*. ■

Ott Scholarship Governing Board

Lynne Hare
Mindy Hotchkiss
J. Stuart Hunter
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Joel Smith
Ronald Snee
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Neil Ullman

Mortimer Spiegelman Award

The Applied Public Health Statistics Section of the American Public Health Association (APHA) presents the Mortimer Spiegelman Award annually to honor a statistician below the age of 40 who has made outstanding contributions to health statistics, especially public health statistics.

The Spiegelman award recipient must be a health statistician who has made outstanding contributions to statistical methodology and its applications in public health (broadly defined).

The award is open to early-career investigators, regardless

of race, gender, sexual orientation, nationality, or citizenship. Specifically, candidates must meet at least one of the following criteria:

- Candidate must be under age 40 throughout the award calendar year
- Candidate must have earned a terminal degree in statistics or a statistics-related field in the last 10 years

For those earning a terminal degree after considerable professional experience or with extenuating life circumstances such as the birth of a child, the committee will make exceptions to the eligibility requirements. If extenuating circumstances affect the eligibility of your nominee, please include a description in your nominating letter.

A nomination should include the following:

- A letter that states the candidate's date of birth and describes the candidate's contributions to statistics for public health
- Up to three letters of support
- The candidate's detailed CV

Nominations should be submitted at *https://spiegelmanaward.github.io* by May 1.

The Spiegelman award was established in 1970 and is presented annually at the APHA meeting. The award serves the following three purposes:

- To honor the outstanding achievements of both the recipient and Spiegelman
- To encourage further involvement in public health by the finest young statisticians
- To increase awareness of APHA and the Applied Public Health Statistics Section in the academic statistical community ■

DEPARTMENT of BIOSTATISTICS EPIDEMIOLOGY & INFORMATICS

14th Annual Conference on
Statistical Issues in Clinical Trials
UPenn Perelman School of Medicine
Philadelphia, PA 19104

SAVE THE DATE: April 12, 2022

In-person or virtual to be determined

Subgroup Analysis in Clinical Trials: Opportunities and Challenges

Registration Opens: Mid-January 2022

MORNING SESSION
David Kent, MD (Tufts University) *Overview:* Overall average treatment effects and one-variable-at-a-time subgroup analysis: The Scylla and Charybdis of Evidence Based Medicine
Ellis Unger, MD (FDA) *An "unofficial" US Regulatory Perspective*
Tom Fleming, PhD (University of Washington) *Pitfalls of subgroup analysis*
Lisa McShane, PhD (NCI) *Finding the subgroup of patients who benefit from a novel therapy: no time for a game of hide and seek*
AFTERNOON SESSION
Noah Simon, PhD (University of Washington) *Adaptive Enrichment Trials: Identifying the 'right' subgroup*
Anastasia Ivanova, PhD (UNC) *Antimicrobial prophylaxis for vesicoureteral reflux: which children benefit the most?*
Ilya Lipkovich (Eli Lilly) *Comparison of recent approaches for subgroup identification from clinical and observational data*
Patrick Schnell, PhD (Ohio State) *Multiplicity considerations for analyses of non-exchangeable subgroups*
PANELISTS
Sylva Collins (FDA) Kosuke Imai (Harvard) Kit Roes (European Regulatory Perspective) Michael Rosenblum (Johns Hopkins) Janet Wittes (Statistics Collaborative, Inc.)

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

AWARD	DEADLINE	QUESTIONS & NOMINATIONS
Karl E. Peace Award	February 1	*awards@amstat.org*
W.J. Dixon Award for Excellence in Statistical Consulting	February 15	*awards@amstat.org*
Harry V. Roberts Statistical Advocate of the Year Award	February 15	*awards@amstat.org*
Waller Awards	February 15	*awards@amstat.org*
Samuel S. Wilks Memorial Award	February 15	*awards@amstat.org*
W.J. Youden Award in Interlaboratory Testing	February 15	*awards@amstat.org*
Statistics in Physical Engineering Sciences Award	February 20	*awards@amstat.org*
Gertrude M. Cox Scholarship	February 23	*awards@amstat.org*
Edward C. Bryant Scholarship Trust Fund	March 1	*awards@amstat.org*
Excellence in Statistical Reporting Award	March 1	*awards@amstat.org*
ASA Fellows	March 1	*awards@amstat.org*
ASA Mentoring Award	March 1	*awards@amstat.org*
Outstanding Statistical Application Award	March 1	*awards@amstat.org*
Statistical Partnerships Among Academe, Industry, and Government (SPAIG) Award	March 1	*awards@amstat.org*
Annie T. Randall Innovator Award	March 15	Sherri Rose (*sherrirose@stanford.edu*)
Biopharmaceutical Section Scholarship Award	March 15	Biopharmaceutical Community Website(*community.amstat.org/biop/awards/scholarship*)
Founders Award	March 15	*awards@amstat.org*
ASA Pride Scholarship	March 31	Donna LaLonde (*donnal@amstat.org*)
Government Statistics Section Wray Jackson Smith Scholarship	April 1	David Banks (*banks@stat.duke.edu*)
Causality in Statistics Education Award	April 5	*awards@amstat.org*
Links Lecture Award	July 1	*awards@amstat.org*
Health Policy Statistics Section Achievement Awards	September 15	*www.asahealthpolicy.org/for-students*
Lester R. Curtin Award	October 15	*awards@amstat.org*
Deming Lecturer Award	October 15	*awards@amstat.org*
Lingzi Lu Memorial Award	October 15	*awards@amstat.org*

UConn Honors Mary W. Gray at Pfizer Colloquium

The department of statistics at the University of Connecticut held its 27th Distinguished Statistician Colloquium October 20, 2021. Mary W. Gray, distinguished professor of mathematics and statistics at American University, was the honored guest speaker and gave a talk titled, "Statistics and Human Rights."

Gray opened her talk by telling the group, "I like to think that statistics can open the world." She discussed her career in academia, the challenges of working as a woman in the math field in the '60s, and her experience learning different computer languages throughout the years.

> I like to think that statistics can open the world.

"I saw an exhibit about Justice Ginsburg at the New York Historical Society over the weekend," she said. "I noticed the quotation of hers, that I've always liked. 'Fight for the things that you think about, but in a way that will lead others to join you.' And that's, I think, what has made the progress since women in science,

Mary W. Gray, distinguished professor of mathematics and statistics at American University, gave a talk titled, "Statistics and Human Rights."

women in mathematics, women in statistics."

Following the lecture was a session titled Conversation with Distinguished Statisticians in Memory of Professor Harry O. Posten.

The purpose of the colloquium is to provide a forum for a distinguished statistician to share and disseminate their unique perspective and work in the theory and/or application of statistics. Starting from 2018, the series has been co-sponsored by Pfizer, the American Statistical Association, and the Department of Statistics at the University of Connecticut. Past colloquia have featured C. R. Rao, Bradley Efron, D.R. Cox, and Grace Wahba. For a complete list of speakers and to view the lecture, visit *https://stat.uconn.edu/pfizer-colloquium*. ■

Viatris Wins 2021 Pharma Award

Submitted by Kelly H. Zou, PStat®, Head of Global Medical Analytics and Real World Evidence, Viatris

Viatris recently won the Excellence in Pharma: Digital Innovation award and was a finalist for the Excellence in Pharma: Regulatory Procedures and Compliance award from CPhI Pharma, which recognizes a set of projects that harness real-world evidence (RWE) and artificial intelligence (AI) for regulatory use over a three-year period. RWE can be useful for patient centricity, medicine regulation, digital innovation via eHealth, and sophisticated algorithms such as machine learning and deep learning.

There were two components to Viatris winning the digital innovation award:

- RWE/Digital/AI with peer-reviewed publications on RWE for regulatory purposes and innovation; RWE for noncommunicable diseases; AI, machine learning, and deep learning
- A set of electronic survey studies for regulatory uses with associated publications that illustrated the importance, value, and applicability of such digital innovation

The Viatris team focused on patient-centric approaches to examine patients' medication uses, treatment pattern and adherence, and journey.

The 18th CPhI Pharma Awards recognize the innovation and dedication of companies and individuals who are driving the pharmaceutical industry forward through their innovations, technologies, and strategies. ■

MORE ONLINE
Read about CPhI Pharma Awards at *https://bit.ly/3DYnsog*. For more information about Viatris, visit *www.viatris.com/en*.

Patel

The Emory University Department of Biostatistics and Bioinformatics announces the 2021 winner of the Kutner Award to be **Rajan Patel**.

The Michael H. Kutner Alumni Award for Distinguished Service to the Discipline is given annually to a former Emory University Department of Biostatistics and Bioinformatics graduate student.

Patel earned his BS and MS degrees in computer science from Rice University in 2000 and 2002, respectively. He entered Emory's doctoral program in biostatistics in 2002 and earned his doctoral degree from Emory in 2006, working under his adviser, DuBois Bowman. He developed novel statistical methods to analyze functional connectivity of the brain using functional magnetic resonance imaging (fMRI) data. Patel was selected by the department of biostatistics to be Emory's first recipient of a Merck Company Scholarship in 2003.

Over the course of more than 14 years at Google, Patel has used his combination of statistical and computer science training to transform many of the products used across the world today. With Google Search, Patel developed the suite of experimentation tools we use thousands of times each year to make improvements to the core algorithms that power Search. From there, he led teams responsible for the freshness and topicality of search results. When you type a query to Google such as [who won the last Kutner award for distinguished service], the work he did to improve the freshness and topicality of Search is why we're able to find the result showing the recent winner. This work affects more than a billion users every day.

Patel has always been unique in being able to combine his deep statistical understanding with his background in computer science to solve hard technical challenges, like understanding natural language in Search, or understanding images with Google Lens to build beautiful and simple products that have affected billions of users around the world. Beyond Search, he also applied these ideas to kick-off products like Gboard, the Android keyboard that autocorrects billions of words a day for hundreds of millions of users, and Google Podcasts, the best way to find and listen to audio on your phone.

What Patel has delivered doesn't happen alone. Over the last 10 years, he has become an excellent leader of junior engineers, analysts, and product managers, growing and leading teams of more than 300 people to help build Search, Google Lens, ARCore, Gboard, Google Podcasts, and now consumer shopping experiences. For his contributions, Patel has been promoted through the ranks at Google, from a level 4 research scientist to the vice president of engineering in the consumer shopping group.

Prior to joining Google in 2007, Patel worked at Amgen, Inc. as a senior biostatistician and then a biostatistics manager for 2006 and 2007. At Amgen, he conducted statistical analyses for early-phase clinical trials and pre-clinical trials and wrote statistical analysis plans; contributed heavily to clinical trial protocols; and worked with physicians, data managers, and clinical trial specialists to run early-phase clinical trials. ■

Calyampudi Radhakrishna (C.R.) Rao was recently awarded honorary membership in the Institute of Electrical and Electronics Engineers (IEEE) for 2022. Each year, the IEEE Awards Board recommends a select group of recipients to receive IEEE's most prestigious honors. These are the men and women whose exceptional achievements and outstanding contributions have made a lasting impact on technology, society, and the engineering profession.

Rao was honored for his contributions to fundamental statistical theories and their applications to engineering and science, particularly in signal processing and communications.

For more information about the award, visit *https://bit.ly/3dWDrsk*. ■

Daksha Chokshi, a statistician at Aerojet Rocketdyne and one of the ASA's longtime members, was recognized recently with a Rotary National Award for Space Achievement (RNASA) Late Career Stellar Award.

The RNASA Stellar awards are given annually to recognize heroes of the American space program at all stages of their careers. The winners are selected based on which accomplishments hold the greatest promise for furthering future activities in space.

Chokshi was recognized for her exceptional leadership and contributions to variation reduction and statistical evaluations for manned and unmanned rocket propulsion hardware over a long and illustrious career. To learn more about RNASA and the Stellar awards, visit *www.rnasa.org/index.html#*. To view the winners, see *https://bit.ly/3pSyDtK*. ■

Obituary

Brian D. Marx

Brian D. Marx, an outstanding professor in the department of experimental statistics at Louisiana State University, passed away November 25, 2021, at his home in Baton Rouge, Louisiana, surrounded by his wife, Alexandra; his son, Leopold; and his mother, Diana.

Born in Detroit, Michigan, in 1960, Brian earned a BS in physiology from Michigan State University in 1982, an MA in statistics from Penn State in 1984, and a PhD in statistics from Virginia Tech in 1988. He joined the department of experimental statistics in 1988 as an assistant professor and climbed swiftly and steadily through the ranks to become professor of statistics in 1999. During his tenure, he was the major professor to more than 60 MA students. At the same time, he was the recipient of two awards for teaching excellence.

Brian had a distinguished career with important and lasting contributions to statistics, particularly in nonparametric smoothing and signal regression. He is one of the two co-founders of penalized B-splines (also called P-splines), a powerful and flexible smoothing tool and signal regression method widely used in areas such as chemometrics. According to Google Scholar, the landmark paper by Paul Eilers and Brian Marx (1996) has been cited more than 3,800 times.

In working with Brian, one would soon realize he was an early bird, doing his share of the work on time or earlier than expected. It seems to us he also left this world way too early.

Brian was active in all aspects of the statistical community, including teaching, consulting, researching, mentoring, refereeing papers, doing editorial work, and sometimes taking over administrative duties. He also exercised the duties of secretary, vice president, and president of the Louisiana Chapter of the American Statistical Association. His vita references 80 refereed journal articles and 25 refereed proceeding publications in which he was a primary author or co-author. He was the author of three books, the latest one being *Practical Smoothing: The Joys of P-splines* (2021, Cambridge University Press), a jewel that just appeared in print. He is also one of the leading contributing authors for the JOPS (Joys of P-splines) R package, a companion to his latest book.

Brian was a passionate speaker. He was a visiting lecturer at Stanford University (1994–1995) and Utrecht University, Netherlands (1995). He gave talks and taught short courses at numerous meetings and colleges in the US. He also traveled extensively to Europe, where he gave lectures and taught short courses in most EU countries.

Brian was an initiator and an editor and coordinator editor of the journal *Statistical Modelling* since 2000. He was a strong supporter of the International Workshop on Statistical Modelling and faithfully attended the yearly event since 1989, organizing the 1998 workshop held in New Orleans. In acknowledgment of his contributions to statistics, Brian was named an elected member of the International Statistical Institute in 2017 and a fellow of the American Statistical Association in 2018.

In working with Brian, one would soon realize he was an early bird, doing his share of the work on time or earlier than expected. It seems to us he also left this world way too early. We will miss him immensely as a friend and as a collaborator.

Obituary

Ron LaPorte

ASA member Ronald E. LaPorte, age 72, died on October 30, 2021.

Ron's epidemiologic career was accidental, rather than a carefully planned process. While completing his PhD in psychology at the University of Pittsburgh in 1976, his chair—who Ron had never met—informed him of an opportunity for a post-doc fellowship in epidemiology under the tutelage of Lew Kuller, who was building a research program. Though knowing nothing about epidemiology upon meeting Kuller, Ron was entranced by his inquisitive, stimulating nature and the somewhat chaotic appearing office cluttered by books, papers, and assorted travel items. It was a perfect match for Ron, enabling him to pursue his thirst for acquiring and spreading knowledge. He immediately delved into epidemiologic research with a fervor that never diminished.

Focusing first on Lew's CVD interests, Ron examined the benefits of not only activity (Ron was himself a regular jogger) but also alcohol showing the positive effect on the emerging "good" HDL cholesterol. He proposed to the American Heart Association Epidemiology Council in the early '80s at its annual meeting that alcohol intake should be considered a possible cardiovascular preventive strategy. While he was pilloried for such a brash suggestion at the time, most authorities have since accepted the cardiovascular benefits of low-moderate alcohol consumption.

Ron later challenged the physical activity world when he proposed that duration of moderate intensity activity might be more beneficial to the public's health than high-intensity workouts. These were examples of Ron being ahead of his time, another being his early recognition of the imminent decline of printed medical journals with his prophetic 1995 *BMJ* paper, "The Death of Biomedical Journals."

In his retirement and before his terminal illness (idiopathic pulmonary fibrosis, a condition as rare as Ron) prevailed, Ron remained active with his life's mission of spreading knowledge. For example, he worked with Ismail Serageldin, the founding director of Bibiotheca Alexandrina, the Library of Alexandria, to establish a research methodology component for which he again asked scientists across the world to donate epidemiology/statistical textbooks not currently being used and arranged for them to be shipped to Egypt. They are now made available by various means to any needing African student.

> Ron was the role model of mentors, and his students gained because of it. He gave it his all and required that his mentees did the same as they worked to develop their careers.

Ron was the role model of mentors, and his students gained because of it. He gave it his all and required that his mentees did the same as they worked to develop their successful careers. In return, he desired nothing more than that his mentees pay it forward when training their own students.

Ron is survived by his loving wife, Jan Dorman, of 24 years and a sister, Susan Bennett, along with her husband, Jerry, and their children, Timothy and Jennifer Bennett.

Read more about LaPorte at *www.epiresources.pitt.edu/laporte*.

TAIG Competition Winners Describe Research

Tommy Jones and Yeseul Jeon were recently named winners of the 2021 Text Analysis Interest Group (TAIG) presentation competition for talks they gave at the 2021 Joint Statistical Meetings.

Jones is a PhD candidate at George Mason University, a senior member of the technology staff at In-Q-Tel, and vice president of Data Community DC. Here, he summarizes his research:

Tommy Jones is a PhD candidate at George Mason University.

Yeseul Jeon is a PhD student at Yonsei University.

> My research is developing some statistical theory for analyzing language, focused on latent Dirichlet allocation (LDA). Statistical theory for language, which I call "corpus statistics," can allow us to measure linguistic phenomena with the same rigor that we use to measure, for example, economic phenomena like unemployment and prices. Then, businesses, researchers, and policymakers can incorporate cultural zeitgeist into their analyses in a principled way. LDA is a great model for corpus statistics because it's a Bayesian probability model, allowing us to leverage existing best practices and embedding language into a probability space where relationships between points are interpretable and well-defined.

Jeon is a PhD student at Yonsei University. She investigated effective estimation and visualization of topic interactions in the context of COVID-19 research. She describes her research below:

> I have been interested in text data mining and modeling. Since late 2019, under guidance of my adviser, Dr. Ick Hoon Jin, and Dr. Dongjun Chung, both of whom have considerable experience and research in statistical modeling and biomedical big data mining, I had investigated COVID-19 using text data mining and modeling. This was a really exciting problem for me because of its worldwide importance and a large inflow of researchers across the globe to publish numerous papers on the subject.

Jones and Jeon were invited to elaborate on their prize-winning research during an upcoming Data Science DC (DSDC) Meetup (*www.meetup.com/Data-Science-DC*), sponsored by the TAIG and Washington Statistical Society.

TAIG serves as the bridge between the mainstream statistical community represented by the ASA and the growing field of text analysis, defined broadly (e.g., text mining, natural language processing, computational linguistics, web scraping, sentiment analysis, topic modeling, GAN text generation, automated translation, etc.).

For more information about TAIG or to join, visit *https://bit.ly/3dZM0m8*. Questions can be emailed to the executive committee at *asataig@gmail.com*. ■

EDITOR'S NOTE
The views expressed here are the authors' and do not necessarily represent those of their organizations.

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

California

■ The Department of Mathematics and Statistics at San Diego State University seeks applicants for a tenure-track assistant professor position in statistics starting in Fall 2022. PhD in Statistics/Biostatistics required. Applications should be sent to *http://apply.interfolio.com/97995*. See *https://bit.ly/3E9809a* for full posting. SDSU is a Title IX, equal opportunity employer.

■ USC Department of Mathematics seeks to fill one tenure-track or tenured position at the Assistant or Associate Professor level. All areas of Mathematics are welcome, including Mathematical Statistics and Data Science. Anticipated start date August 2022. See MathJobs *www.mathjobs.org/jobs/list/18373* for further information. EOE

Minnesota

■ The Division of Biostatistics, School of Public Health, University of Minnesota seeks applicants for a non-tenure track Assistant Professor with expertise in deep learning/machine learning, statistical genetics/omics and neuroimaging. The successful candidate will play a major role in an NIH-funded project on developing statistical methods and applications of deep/machine learning for Alzheimer's disease neuroimaging and genetics. Please visit *https://hr.myu.umn.edu/jobs/ext/344434* for additional information or to apply.

■ The Division of Biostatistics, School of Public Health, and Masonic Cancer Center at the University of Minnesota seek applicants for a tenured associate/full professor to serve as the director of the biostatistics shared resource for the Masonic Cancer Center. The candidate will lead a team of biostatisticians in collaborative research with investigators in the cancer center. Please visit *https://hr.myu.umn.edu/jobs/ext/344386* for additional information or to apply.

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■ Geospatial Biostatistician or Epidemiologist: College for Public Health and Social Justice at Saint Louis University is seeking applicants for a 9-month, tenure-track position at the rank of professor or associate professor for fall 2022. Applicants must hold a PhD in biostatistics, epidemiology or a related field with a substantive research focus on geospatial health. Salary is dependent on qualifications and experience. Apply at *https://bit.ly/31roZGq.*

Pennsylvania

■ The Wharton Statistics and Data Science Department, University of Pennsylvania, seeks a Postdoctoral Researcher. The position is for two years beginning in Summer 2022, with a possible extension to three. The primary focus is for the scholar to develop her or his research. A light teaching load is involved. A PhD is required. Please visit our website to apply: *https://whr.tn/3DsvdTh*. Direct questions to *stat.postdoc.hire@wharton.upenn.edu*. The University of Pennsylvania is an EOE. Minorities / Women / Individuals with disabilities / Protected Veterans are encouraged to apply.

Texas

■ Rice University's Department of Statistics is seeking applications for an open-rank tenure-track or tenured faculty position in the area of applied probability. The successful candidate will be expected to teach undergraduate and graduate-level courses, conduct high-quality research and publish research findings. Requirements - PhD in statistics or a related field by July 1, 2022. Apply to *https://apply.interfolio.com/99567.*

Virginia

■ The Department of Statistics at George Mason University invites applications for multiple open rank tenure-track, tenured, and term faculty positions beginning fall 2022. Applicants must receive a PhD in

statistics, biostatistics, or related field by the start date. Candidates from traditionally underrepresented groups are especially encouraged to apply. Apply at *http://jobs.gmu.edu* using position number F683AZ for tenure/tenure-track and F685AZ for term positions, or search statistics.

International

■ Applications are invited for regular faculty positions at any level in data science/statistics. A PhD in statistics or a related field is required. Applicants should send an application letter, a CV, a research and a teaching statement and arrange for 3 reference letters to be sent to: Search Committee, Dept. of Statistics and Applied Probability, National University of Singapore, email: *muslihah@nus.edu.sg.* More information at website: *https://nus.edu/3DwX5FI.* ■

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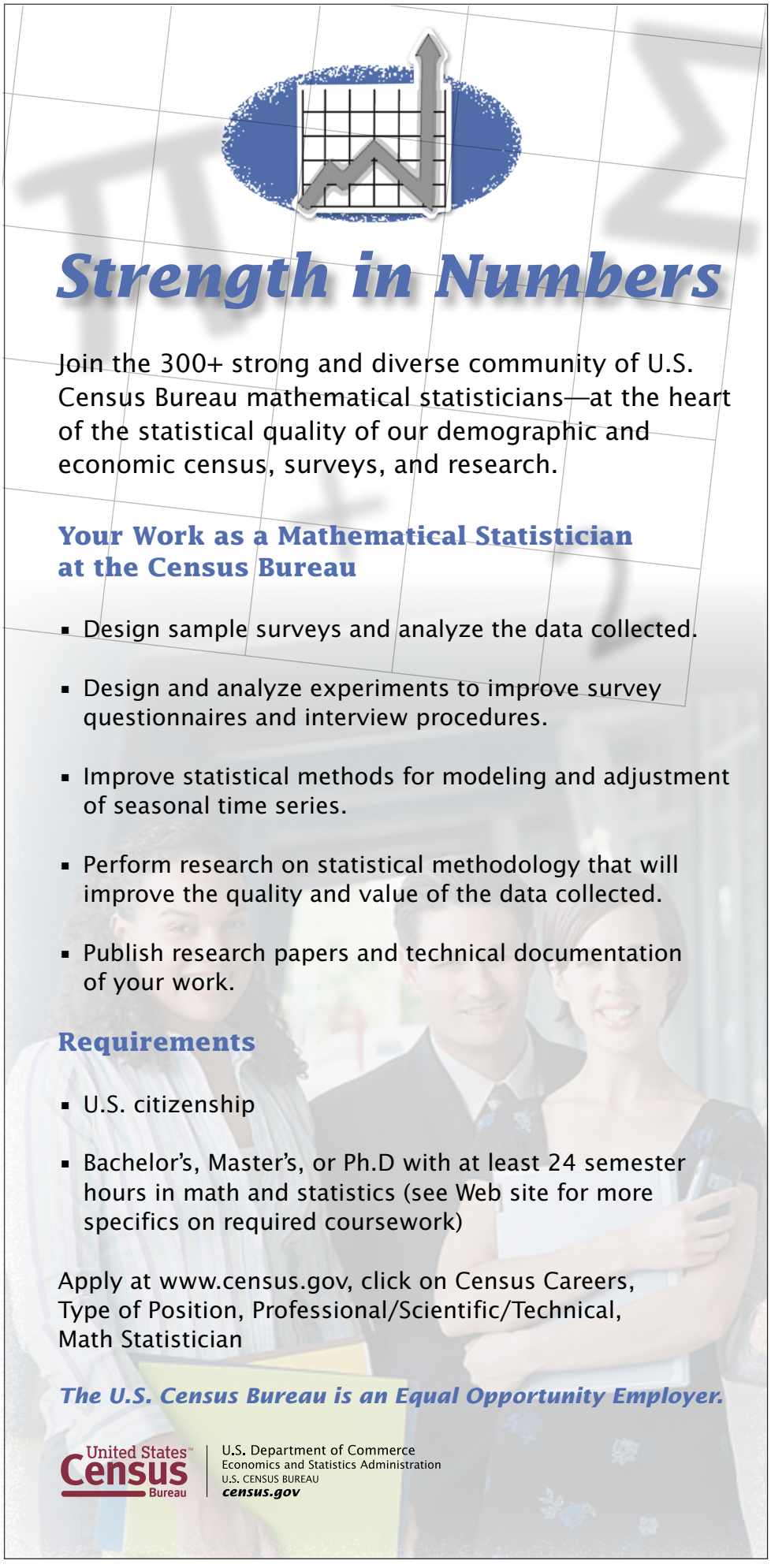

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X Bar

Elizabeth Penn
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Susi Osti
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David Donato
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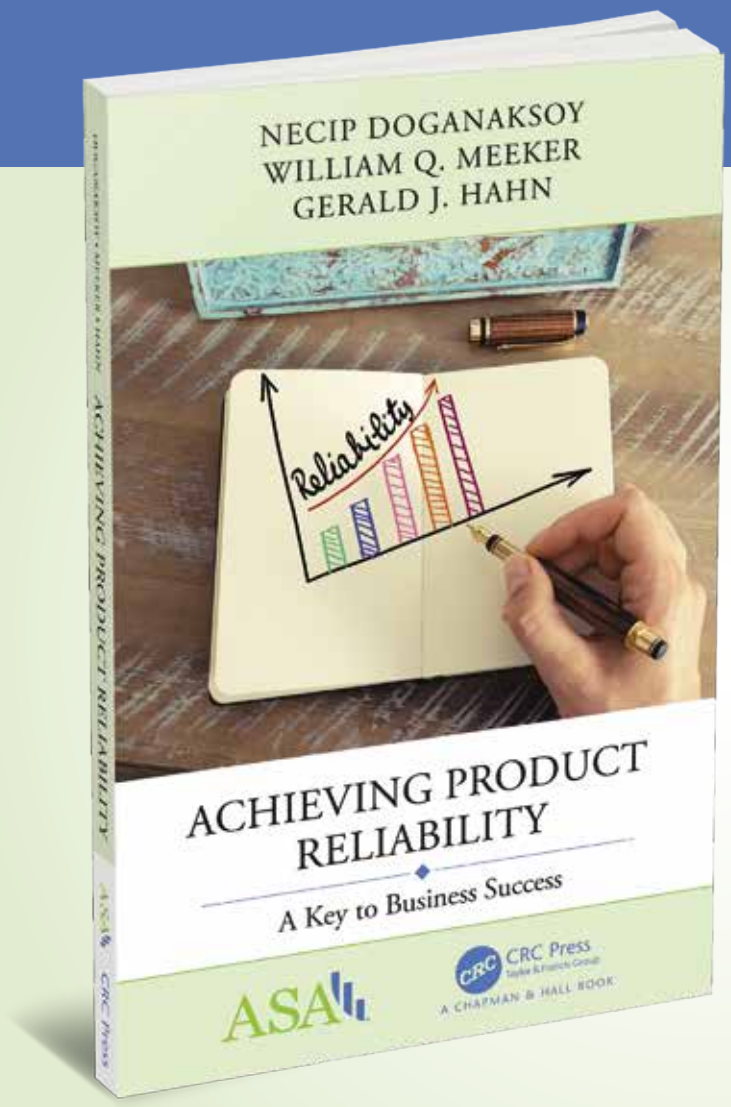

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