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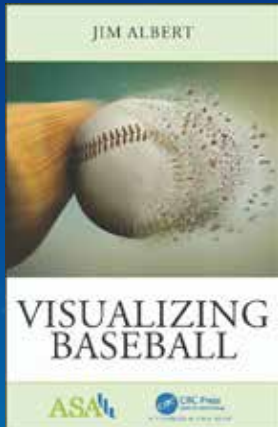
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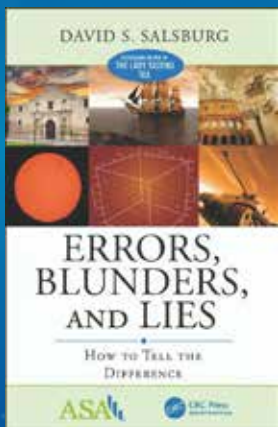


## Visualizing Baseball

**Jim Albert**, Bowling Green State University, Ohio, USA

ISBN: 9781498782753 ~~-\$29.95-~~ **\$23.96**

A collection of graphs will be used to explore the game of baseball. Graphical displays will be used to show how measures of batting and pitching performance have changed over time, to explore the career trajectories of players, to understand the importance of the pitch count, and to see the patterns of speed, movement, and location of different types of pitches.



## Errors, Blunders, and Lies How to Tell the Difference

**David S. Salsburg**, Yale University, New Haven, CT, USA

ISBN: 9781498795784 ~~-\$29.95-~~ **\$23.96**

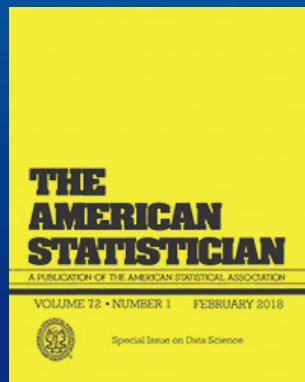
In this follow-up to the author's bestselling classic, "The Lady Tasting Tea", David Salsburg takes a fresh and insightful look at the history of statistical development by examining errors, blunders and outright lies in many different models taken from a variety of fields.

### JOURNALS



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

### 32 STATS4GOOD The (Higher) Power of Data for Good

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

### 34 PASTIMES OF STATISTICIANS What Does Steve Ascher Like to Do When He Is Not Being a Statistician?

This column focuses on what statisticians do when they are not being statisticians. If you would like to share your pastime with readers, please email Megan Murphy, *Amstat News* managing editor, at [megan@amstat.org](mailto:megan@amstat.org).



## Online Articles

The following articles in this issue can be found online at <http://magazine.amstat.org>.

**IN MEMORIAM** Sadly, **Prodyot Kumar Bhattacharya**, **Herman Rubin**, and **Eun Sul Lee** passed away recently. To read these members' obituaries, visit <http://magazine.amstat.org>.

**IN THE NEWS!** In April, **Bowling Green State University** recognized longtime ASA member **Jim Albert** for his lifetime of contributions to his discipline and Bowling Green State University by conferring the title of distinguished university professor on him. Albert was also honored at the 2018 Faculty Excellence Awards on April 9. More can be found at the Bowling Green website: [www.bgsu.edu/news/2018/04/distinguished-university-professor.html](http://www.bgsu.edu/news/2018/04/distinguished-university-professor.html).

The ASA's **Chris Barker** has agreed to serve as designated statistical reviewer for a new open-access journal, the *Journal of Patient-Reported Outcomes*, which is owned by the International Society for Quality of Life Research and managed by Springer.

Having a designated statistical reviewer contributes to the consistency in the methodological standards across all papers and importantly assists the editors.

View the journal online at [www.springer.com/medicine/journal/41687](http://www.springer.com/medicine/journal/41687).

### Make the most of your ASA membership

Visit the ASA Members Only site: [www.amstat.org/membersonly](http://www.amstat.org/membersonly).

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# You Can Count on Us

A new term entered our national vernacular last year: “alternative facts.” Although its use has provided new material for the comic stage and late-night talk shows, it has caused consternation among scientists (e.g., <http://bit.ly/2wPE44b>).

JSM 2017 featured no fewer than five sessions about government statistics, including one titled “Doomed Data ... When National Governments, Coerced Narratives, and Alternative Facts Override the Quality, Importance of Statistics” (see <http://bit.ly/2IN8FV6>). And earlier this year, the AAAS annual meeting featured a brainstorming session about ways to deal with or push

back against alternative facts shown to be false (see <http://bit.ly/2GqYuAm>).

Even before alternative facts became a reality (pun intended), ASA Board members had an interest in determining our membership’s views on official statistics and whether public confidence in them had been affected by public dialogue. We engaged Stanton Communications to conduct focus group interviews to this effect, and out of this initial data gathering grew an exciting ASA initiative: Count on Statistics.

In early May, I had the opportunity to interview Megan Berry from Stanton Communications about the initiative. Here is what she had to say:

## Why did the ASA decide such a project was needed?

**Berry:** Amid rising concerns about public confidence in US government statistics, the American Statistical Association commissioned Stanton Communications to conduct a study to determine the feasibility of a public outreach initiative to enhance awareness of the importance, reliability, and trustworthiness of government statistics.

We conducted more than a dozen interviews with key ASA leaders, members, and subject-matter experts with a perspective on this topic. One such interviewee stated, “We do not need to determine *if* there is a problem. There is a problem. The public doesn’t trust government statistics or understand where the data are coming from.”

Through these candid conversations, Stanton determined the opportunities, challenges, and objectives a strategic communications program may involve. Clearly, there was a need for a program with the mission to “distinguish federal statistics as absolutely essential to the functions of our democracy.” With the support of ASA leadership and the board, we created Count on Stats to do just that.



Lisa LaVange

Photo by Jon Gardiner/  
UNC-Chapel Hill



# COUNT ON STATS

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## Meet Erica Groshen

*Former BLS Commissioner and Leadership Institute Steering Committee Member*

A former director of the second-largest federal statistical agency, the Bureau of Labor Statistics (BLS), is the final member of the ASA Leadership Institute's Steering Committee to be in the President's Corner spotlight. We are privileged to have Erica Groshen, BLS commissioner from 2013–2017, advising the institute on the development of strong statistical leaders. Erica is currently a visiting senior scholar at Cornell University's School of Industrial and Labor Relations (ILR). Prior to leading the BLS, she worked in the Federal Reserve System. Throughout her career, she has maintained a focus on research, development, and outreach. As a labor economist, Erica's research taps into employer data to better understand the role of employers in the labor market and to gain insight into wage differences, rigidity, and the impact of recessions.

Regarding statistical leadership, Erica contributed one of my favorite quotes to date from the Institute's Steering Committee. When discussing the importance of leadership training for statisticians during our first meeting, she noted that, "People rise to leadership positions from different career paths, and CEOs were something else before becoming CEOs." Traditionally, she noted, these roles went to those trained in business or law, but with the increasing importance of data and analytics in all employment sectors, it is perhaps inevitable that statisticians should be tapped for these top posts and should not feel limited in pursuing them.

Regarding the Count on Statistics initiative, Erica commented that federal statistics are very much a public service and represent the baseline for methodological work seeking to improve the way data from surveys and other sources are used today. Thoughtful critiques of official statistics are valuable. Data sources and methods are evolving, and it is important that users understand the limitations of their use. But this is not the same as uninformed critiques, attacking without that understanding. Statisticians should be defending official statistics on a regular basis in their social and professional environments. Otherwise, we are missing an opportunity to defend our own work.

About the Leadership Institute, Erica noted that, "There is a role for professional associations like the ASA to help their members advance in their careers."

We are fortunate to have Erica and the other steering committee members guiding the planning and operation of the institute and look forward to their continued commitment.

## What approach has the campaign taken and why?

**Berry:** The campaign has focused on communicating the benefits of the federal statistical system—how we, as a society, "Count on Stats." To promote this message, we work to influence the influencers, engage the user base, and amplify agency and partner communications through a variety of channels. We have engaged our key audiences—our allies, the press, members of Congress, the business community, and statistical agencies—through social media, op-eds, blogs, media interviews, press releases and statements, monthly e-newsletters, and even articles in *Amstat News*.

## What has been accomplished thus far?

**Berry:** Our early efforts have focused on developing a social following, primarily on Twitter, responding to threats to the system (see <http://bit.ly/2INI4qH>), and building relationships with key members of the media. We have garnered direct mentions in *CQ Magazine*, *Associations Now*, and *City Lab*. ASA Executive Director Ron Wasserstein was also featured on the Consortium of Social Science Association's Why Social Science series, expressing how statistical agencies produce data essential for democracy. Last week, Count on Stats also sponsored a panel at SABEW18 (see <https://sabew.org/sabew18>) on accessing accurate government statistics and concerns about disappearing data.

## What is planned for the future?

**Berry:** In the coming months, we will be doing more to reach out to members of the media and policymakers. This will help us proactively influence the conversation and gain a further reach. We also plan to continue emphasizing the importance of the federal statistical system by featuring a statistical agency on Twitter every week. In addition, the Count on Stats team is working to develop and host a panel featuring speakers from Congress, the press, and the federal statistical community. With this integrative approach, we hope to better educate our audiences and rebuild the public's trust in federal statistics.

Learn more about the Count on Stats initiative at [countonstats.org](http://countonstats.org) or on Twitter @CountonStats.

Whether encouraging and training statisticians to fulfill their leadership potential or making sure official statistics are understood and valued, just remember—you can count on the ASA! ■



# Update from the ASA Task Force on Sexual Harassment and Assault

Leslie McClure, Task Force on Sexual Harassment and Assault Chair

Over the past few years, public acknowledgement of sexual harassment/assault has emerged as a critical workplace and professional issue in need of greater attention. No social environment is immune to it. Members of associations like the American Statistical Association deserve policies that preserve the dignity of members individually and professionally. In November of 2017, the ASA Board of Directors approved the formation of the Task Force on Sexual Harassment and Assault.

The charge of the task force is as follows:

1. Assess the extent of sexual harassment/assault in the ASA community.
  - Review surveys used by other professional organizations to assess the prevalence of sexual harassment/assault.
  - Develop an ASA membership survey to assess the frequency, location, and kinds of harassment/assault occurring.
  - Distribute the survey to ASA membership.
  - Summarize the findings from the survey.

2. Review the current best practices of professional organizations and academic institutions with respect to sexual harassment/assault.
3. Consider creation of a resource that allows victims of sexual harassment and assault to anonymously receive support.
4. Make recommendations to the ASA Board of Directors regarding sexual harassment/assault policy changes for the organization.

What follows is an update on our activities since the task force was approved by the board.

During the two months following the formulation of these charges, the ASA president, in consultation with the executive director, appointed task force members with the goal of including a diverse, representative cross-section of the ASA membership. The membership of the task force can be found at <http://bit.ly/2KjP7AW>.

The task force members convened for the first time at the end of January and have met a few more times since. There are regular meetings scheduled going forward and members

have begun addressing the charges above. Task force members are diverse and each brings different experiences to the table, thus enabling lively discussion with a variety of perspectives.

Following is the progress made on each of the four main charges:

## Survey of Sexual Harassment/Assault in the ASA Community

We are fortunate to have experienced survey statisticians among our task force membership who drafted a plan describing options for developing and implementing a way to gather information about our membership's experiences and perceptions of sexual harassment. As we reviewed the potential paths available for this effort (e.g., formal or informal survey, census), it became clear this was an undertaking larger than could be handled by the task force. The ASA has thus graciously agreed to fund a membership survey and has put out a request for proposals (RFP) to external organizations.

The chosen organization will contact all ASA members and give them an opportunity to answer a set of questions related to their

experiences and perceptions of sexual harassment. The responses will not constitute a probability sample, but will provide valuable information about the severity of these issues among our membership.

In addition to the obvious benefits of allowing professionals to manage this effort, it also allows the data to “live” outside of the ASA, which is important given the sensitive nature of the data collection.

The RFP was developed by the ASA staff and has been reviewed and revised by the task force. It was made publicly available on April 25, 2018.

Early in our discussions, we reached out to colleagues at the American Political Science Association (APSA), which recently published the results of its survey on sexual misconduct in their discipline ([www.apsanet.org/divresources/sexualharassment](http://www.apsanet.org/divresources/sexualharassment)). We received important and useful feedback from their executive director that helped guide some of our discussions about our approach.

### Review of Best Practices

We have been assembling information from other professional organizations regarding their policies on sexual assault and harassment, both for meetings and professional conduct. In this vein, we included a request for input (<http://bit.ly/2Gq8FVz>) from ASA members in the April 18 member e-newsletter.

### Resource for Anonymous Reporting

We have not yet directly addressed the development of a mechanism for anonymous reporting of incidents of sexual assault and harassment; however, for most of our discussions, reporting is an issue we have touched on. As we move forward with developing policy recommendations, discussions of a reporting mechanism will be the next step.

### Policy Recommendations to the ASA Board

With respect to policy recommendations to the ASA Board, we have started the process of examining the current meeting conduct policy (<http://bit.ly/2GrCu8s>) and are brainstorming ways to improve the policy and the means by which it is communicated to the ASA membership. This has led to discussions about policy for meeting conduct vs. policy for professional conduct. In addition, we have had much discussion about psychological, confidentiality, legal, and reporting issues that may arise through implementation of such policies, thus resulting in recommendations that the ASA employ an ombudsperson for the Joint Statistical Meetings. This would allow reporting to occur in a confidential manner and to someone who has training in the

psychological and legal actions necessary in these situations.

In addition to the topics described above, we have talked about how to engage the ASA community more broadly in our efforts. We have therefore reached out to the Committee on Women in Statistics, Committee on Professional Ethics, and Committee on Membership Retention and Recruitment to ensure we align our efforts. We are particularly interested in working with the Committee on Professional Ethics to ensure we address the professional conduct aspects of sexual misconduct. In addition, as described above, we have solicited input from the ASA membership regarding best practices for an inclusive meeting/organization and plan to solicit input on our draft policy recommendations.

We have made a decision to be proactive, rather than reactive, and to think about the long-term goals of our recommendations. It is our hope that the recommendations we make are approved by the ASA and make an impact on the health and happiness of our organization.

The ASA Task Force on Sexual Harassment and Assault welcomes your input. Visit [bit.ly/ASATaskForceContactUs](http://bit.ly/ASATaskForceContactUs) to provide feedback. ■



# Recognizing the ASA's Longtime Members

The American Statistical Association would like to thank its longtime members by continuing its tradition of honoring those who joined the association 35 or more years ago. This year, we recognize the members here for their distinguished and faithful membership.

If you are a longtime member and will be attending the Joint Statistical Meetings in

Vancouver, British Columbia, Canada, please join us for a reception in your honor. If your name is not below and you believe it should be, contact Amy Farris at [amy@amstat.org](mailto:amy@amstat.org) to correct your record.

Following this list is a Q&A with a few of our longtime members—find out why they have remained members of the ASA for so long.

## 50+ Years

Abdelmonem A. Afifi	Robert L. Brennan	Arthur P. Dempster	Joseph L. Gastwirth	Bruce Hoadley	Peter A. (Tony)
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John Neter	S. R. S. Rao Poduri	Robert A. Rutledge	Jon J. Shuster	James Tonascia	Gooloo S. Wunderlich
Anna B. Nevius	Ralph D. Pollard	Harold B. Sackrowitz	Nozer D. Singpurwalla	J. Richard Trout	Morty Yalovsky
S. Edward Nevius	Richard F. Potthoff	Susan T. Sacks	Betty J. Skipper	Bruce E. Trumbo	Donald E. Young
David S. Newman	John W. Pratt	David S. Salsburg	Armand V. Smith Jr.	Chris P. Tsokos	Douglas A. Zahn
Peter C. O'Brien	Ross L. Prentice	Charles B. Sampson	Dennis E. Smith	N. Scott Urquhart	Ann Graham Zauber
W. Michael O'Fallon	Philip J. Press	Innis G. Sande	William Boyce Smith	Willem R. Van Zwet	Calvin Zippin
Robert L. Obenchain	Bertram Price	Patricia D. Saunders	Ronald D. Snee	James R. Veale	
Jerry L. Oglesby	Charles H. Proctor	Richard L. Scheaffer	Mitchell Snyder	Ray A. Waller	
Anthony R. Olsen	Philip C. Prorok	Robert R. Scheer	Daniel L. Solomon		

## 45-49 Years

Judith Abrams	Kenneth N. Berk	Gerard E. Dallal	Stephen J. Ganocy	Karl W. Heiner	Robert M. Katz
Lee R. Abramson	Wayne F. Bialas	Robert L. Davis	Daniel J. Gans	Eugene R. Heyman	Myron J. Katzoff
Chris Adcock	Lynne Billard	Enrique de Alba	Turkan K. Gardenier	James J. Higgins	Sheryl F. Kelsey
Frances J. Adox	David S. Birkes	David L. DeMets	Alan E. Gelfand	Klaus Hinkelmann	James L. Kenkel
Robert A. Agnew	Lennart Bodin	Susan J. Devlin	David E. Giles	David C. Hoaglin	David L. Kimble
Alan Agresti	Robert J. Boik	Thomas F. Devlin	Edward J. Gilroy	Theodore R. Holford	Ignatius A. Kinsella
Per A. T. Akersten	Gordon J. Brackstone	Jay L. Devore	Phyllis A. Gimotty	David W. Hosmer Jr.	Roger E. Kirk
Arthur E. Albert	Ellen F. Brewer	Paula H. Diehr	Howard Seth Gitlow	David C. Howell	Nancy J. Kirkendall
Mir Masoom Ali	Richard K. Burdick	W. Erwin Diewert	Dennis R. Givens	Ina P. Howell	Rudolf G. Kittlitz Jr.
Mukhtar M. Ali	John A. Burkart	Dennis A. DuBose	John R. Gleason	Mark Hudes	Neal Koss
Francis B. Alt	Patricia L. Busk	Joseph W. Duncan	Prem K. Goel	Huynh Huynh	Helena C. Kraemer
Stan Altan	Lawrence S. Cahoon	Brenda Kay Edwards	Robert N. Goldman	Dar-Shong Hwang	S. David Kriska
Alfred Jerry Anderson	William L. Carlson	Janet D. Elashoff	J. Douglas Gordon	Ronald L. Iman	Robert Kushler
Dallas W. Anderson	Margaret D. Carroll	Eugene P. Ericksen	Louis Gordon	Peter B. Imrey	John M. Lachin III
Robert L. Andrews	Raymond J. Carroll	James W. Evans	Bernard S. Gorman	Allen E. Izu	Lynn Roy LaMotte
Lawrence Annable	Walter H. Carter Jr.	Milton C. Fan	David M. Grether	William E. Jackson III	Carol J. Lancaster
W. Tad Archambault Jr.	Raj S. Chhikara	Thomas B. Farver	William E. Griffiths	Sreenivasa Rao Jammalamadaka	Kenneth D. Lawrence
Jesse C. Arnold	Joan Sander Chmiel	Alan Fask	Joseph A. Guarnieri	David Jaspén	Sheila M. Lawrence
Ersen Arseven	William S. Cleveland	Robert E. Fay	Victor M. Guerrero	Clifford L. Johnson	Stanley A. Lemeshow
Taka Ashikaga	James J. Colaianne	Martin Feuerman	Shelby J. Haberman	Dallas E. Johnson	Russell V. Lenth
Corwin L. Atwood	John R. Collins	Alan C. Fisher	Hermann Habermann	Paul K. Jones	Donald Lewin
Agustin F. Ayuso	Kimion J. E. Constat	Nicholas I. Fisher	Timothy O. Haifley	David C. Jordan	Charles Lewis
Abdolrahman Azari	Margaret D. Copenhaver	Andrew J. Flatt	James L. Hall	Henry D. Kahn	David L. Libby
Vincent P. Barabba	Robert J. Costello	Nancy Flournoy	Nancy R. Hall	John H. Kalbfleisch	Gary L. Liberson
William A. Barnett	Brenda G. Cox	Mary A. Foulkes	R. Choudary Hanumara	John D. Kalbfleisch	Greta M. Ljung
Charles K. Bayne	Giles L. Crane	Martin D. Fraser	Frank E. Harrell Jr.	William D. Kalsbeek	Michael T. Longnecker
Richard A. Becker	John R. Crigler	Daniel H. Freeman Jr.	Robert M. Hauser	Howard S. Kaplon	Thomas A. Louis
Richard J. Beckman	Robert D. Curley	David Frontz	Richard M. Heiberger	Joseph D. Kasile	George W. Lynch
Mary S. Beersman	Gary R. Cutter	Mark C. Fulcomer	Lance K. Heilbrun	Daniel Kasprzyk	Bruce E. Mackey
Timothy M. Bergquist		Mitchell H. Gail			Dennis R. Mar
		Edward J. Gainer			

Mary A. Marion	Henry D. Muse	Kevin Price	Josef Schmee	Moon W. Suh	Joseph J. Walker
Donald L. Marx	Wayne L. Myers	Thomas W. Pullum	James Schmeidler	Richard A. Sundheim	Sylvan Wallenstein
Robert L. Mason	Subhash C. Narula	Alfred W. Rademaker	Friedrich W. Scholz	Ajit C. Tamhane	Stephen D. Walter
Takashi Matsui	Elliott Nebenzahl	Calyampudi R. Rao	Eugene F. Schuster	Ronald A. Thisted	Chao Wang
George P. McCabe	James W. Neill	Rose M. Ray	Neil C. Schwertman	Hoben Thomas	George H. Wang
James B. McDonald	H. Joseph Newton	William J. Raynor Jr.	Stuart Scott	John M. Thomas	James F. Ward
Joseph W. McKean	Earl Nordbrock	Benjamin Reiser	Joseph Sedransk	Carol B. Thompson	Stanley Wasserman
John D. McKenzie Jr.	Julia A. Norton	Kenneth J. Resser	Subrata K. Sen	Robert D. Tortora	William E. Wecker
Glen D. Meeden	Marija J. Norusis	Jeffrey A. Robinson	Jayaram Sethuraman	Ram C. Tripathi	William W. S. Wei
Jeff B. Meeker	Bernard V. O'Neill Jr.	Robert N. Rodriguez	Glenn R. Shafer	Alan R. Tupek	Lynn Weidman
Robert J. Meier	Morris Olitsky	John E. Rolph	Juliet Popper Shaffer	Bruce W. Turnbull	Sanford Weisberg
Gayle T. Meltesen	Leonard Oppenheimer	James L. Rosenberger	Paul Shaman	David L. Turner	K. Laurence Weldon
Roy Mendelssohn	Joyce Orsini	Bernard Rosner	Robert H. Shumway	Neil R. Ullman	Jon August Wellner
Mary-Jane Mietlowski	Albert C. Ovedovitz	N. Phillip Ross	Walter Sloboda	Richard L. Valliant	Roy E. Welsch
John A. Miller	Willis L. Owen	Donald B. Rubin	Robert D. Small	Gerald van Belle	Fredrick S. Whaley
Satish Chandra Misra	Maurice E. B. Owens III	Barbara J. Rutledge	Martyn R. Smith	Joseph G. Van Matre	James P. Whipple
John Francis Monahan	William J. Padgett	Julia Sabella	Murray H. Smith	Lonnie C. Vance	Owen Whitby
Douglas C. Montgomery	Leonard J. Parsons	Francisco J. Samaniego	William A. Sollecito	Kerstin Vannman	David G. Whitmore
Roderick Montgomery	Raymond C. Peck	Allan R. Sampson	Randall K. Spoeri	Niels H. Veldhuijzen	Howard L. Wiener
Katherine L. Monti	Peter H. Peskun	Douglas A. Samuelson	M. K. Srirama	Paul F. Velleman	William J. Wilson
David S. Moore	A. John Petkau	Thomas J. Santner	Robert R. Starbuck	Hrishikesh D. Vinod	Marvin Yablon
John K. Moore	Charles G. Pfeifer	Nancy K. Schatz	Allan Stewart-Oaten	R. Lakshmi	Eric R. Ziegel
David R. Morganstein	Philip J. Pichotta	James J. Schlesselman	Robert L. Stout	Vishnuvajjala	Stuart O. Zimmerman
Robb J. Muirhead	Dale J. Poirier	Joyce A. Schlieter	Donna F. Stroup	Kenneth W. Wachter	
	Stephen L. Portnoy		Perla Subbaiah	Howard Wainer	

## 40-44 Years

Robert D. Abbott	Paul P. Biemer	Aki N. Caszatt	David F. Cruess	Curtis S. Engelhard	A. Blanton Godfrey
Sandra C. Abbott	Robert H. Bigelow	Amrut M. Champaneri	Andrew Joseph Cucchiera	Thomas W. Epps	Avni Goeksel
John M. Abowd	Thomas E. Billings	Promod K. Chandhok	William G. Cumberland	Samuel M. Epstein	Richard F. Goldstein
Boxas Abraham	Richard A. Bilonick	John P. Chandler	Leonard A. Cupingood	Neil R. Ericsson	James H. Goodnight
Mohammad Ahsanullah	Herbert L. Bishop Jr.	Judith-Anne W. Chapman	Andrew I. Dale	Sylvia R. Esterby	Robert D. Gordon
James H. Albert	Richard M. Bittman	Yogendra P. Chaubey	Robin A. Darton	Michael J. Evans	Barry I. Graubard
Robert W. Aldred	Jan F. Bjornstad	Richard A. Chechile	Bruce M. Davis	David Fairley	Stephanie J. Green
Rich Allen	Mark M. Blanchard	Gina G. Chen	Charles S. Davis	John P. Fazio	Timothy A. Green
Wendy L. Alvey	Peter Bloomfield	William W. S. Chen	Roger B. Davis	Ronald S. Fecso	Joel B. Greenhouse
Clifford W. Angstman	Harvey Blumberg	Michael R. Chernick	Thomas M. Davis	G. Donald Ferree Jr.	John Vic Grice
Vincent C. Arena	Dan C. Boger	Vernon M. Chinchilli	Roberta W. Day	Christopher A. Field	Susan Groshen
Steve Ascher	James A. Bolognese	Jai Won Choi	Virginia A. de Wolf	David F. Findley	Marvin H. J. Gruber
Arlene S. Ash	Dennis Boos	Ronald Christensen	Angela M. Dean	Allen I. Fleishman	Leslie S. Grunes
Anthony C. Atkinson	David E. Booth	Peter D. Christenson	Pierre C. Delfiner	Hans-Theo Forst	Berton H. Gunter
Steven P. Bailey	Richard C. Borden	B. Christine Clark	Lorraine Denby	Peter E. Fortini	Perry D. Haaland
Stephen P. Baker	Victor Marek Borun	Cynthia Z. F. Clark	Wayne S. Desarbo	Janet F. Fowler	Michael Haber
Saad T. Bakir	Michael N. Boyd	Daren B. H. Cline	David A. Dickey	John D. Fox	William A. Halteman
James A. Baldwin	John E. Boyer	George W. Cobb	E. Jacquelin Dietz	Leroy A. Franklin	Katherine T. Halvorsen
Eileen J. Beachell	Norman M. Bradburn	Timothy C. Coburn	Ralph Digaetano	Larry D. Freese	Michael S. Hamada
Jay H. Beder	Mary-Lynn Brecht	Michael L. Cohen	David P. Doane	Stephen A. Freitas	David C. Hamilton
Steven Belle	James E. Breneman	Stephen H. Cohen	Joseph R. Donovan	Arthur Fries	Janet M. Hanley
Robert B. Bendel	J. Michael Brick	Steven B. Cohen	Bonnie P. Dumas	Barbara A. Gabianelli	John B. Hannon Jr.
James O. Berger	David R. Bristol	Salvatore V. Colucci	William D. Dupont	Paul Gallo	Robert C. Hannum
Roger L. Berger	Ron Brookmeyer	Richard S. Conway Jr.	Harold E. Dyck	Edward E. Gbur Jr.	David Hardison
James S. Bergum	Edward C. Bryant	Bruce K. Cooil	Jean L. Dyer	Cynthia D. Gentillon	William V. Harper
Catherine S. Berkey	Thomas J. Bzik	Kennon R. Copeland	L. Marlin Eby	Malay Ghosh	Stephen P. Harris
Nancy Berman	Patrick J. Cantwell	Charles D. Cowan	Marlene J. Egger	John A. Gillespie	Jeffrey D. Hart
Jose Miguel Bernardo	Lynda T. Carlson	John R. Crammer	Kathleen Louise Emery	Michael E. Ginevan	Kenneth R. Hartmann
Ernst R. Berndt	Arthur Carpenter	Keith N. Crank	Wil B. Emmert	Beth C. Gladen	Gary D. Hatfield
David J. Bernklau	Daniel B. Carr	James A. Creiman		Marcia A. Glaubergerman	Maurine A. Haver
Charles C. Berry	John F. Carter			Joseph Glaz	William D. Heavlin
	Frank C. Castronova			William J. Glynn	Harold V. Henderson

# Longtime members

Ellen Hertzmark	Edward Lakatos	Marianne E. Messina	John J. Peterson	Kenneth Schechtman	Hanspeter Thoeni
Thomas Herzog	Mansum A. Lam	Michael M. Meyer	Joseph D. Petruccelli	Mark J. Schervish	John H. Thompson
Richard P. Heydorn	Kuang-Kuo	Terry G. Meyer	Daniel Pfeiffermann	Brian R. Schlain	Mary E. Thompson
Steven C. Hillmer	Gordon Lan	Joel E. Michalek	John G. Phillips	Mark D. Schluchter	Theodore J. Thompson
Susan M. Hinkins	J. Richard Landis	Richard O. Michaud	Linda Williams Pickle	David C. Schmittlein	Anthony D. Thrall
Jerry L. Hintze	Stephen S. Langley III	Robert J. Mokken	Gregory F. Piepel	David A. Schoenfeld	Luke-Jon Tierney
Chihiro Hirotsu	Philip T. Lavin	George E. Morgan	Joseph G. Pigeon	Timothy L. Schofield	Richard B. Tiller
Douglas A. Hlavacek	Johannes Ledolter	June Morita	William E. Pollard	Charles B. Schriver	Naitee Ting
Lorrie L. Hoffman	Kelvin K. Lee	Max D. Morris	Chester H. Ponikowski	John H. Schuenemeyer	Ronald R. Titus
Thomas P. Hogan	Kerry L. Lee	Barbara G.	Darwin H. Poritz	Donald J. Schuirmann	Jerome D. Toporek
Larry R. Holden	Martin L. Lee	Mroczkowski	Randall W. Potter	Steven J. Schwager	David C. Trindade
Alan Hopkins	James D. Leeper	Lawrence H.	Manfred Precht	Michael Schwarzschild	L. Claire Tsao
Carol C. House	Greg M. Lepak	Muhlbaier	Dale L. Preston	David W. Scott	Kam-Wah Tsui
Berne Martin	James M. Lepkowski	Bengt Muthen	Louis H. Primavera	William L. Seaver	Gregory W. Ulferts
Howard III	Martin L. Lesser	Haikady N. Nagaraja	Howard M. Proskin	Teddy I. Seidenfeld	Thomas J. Uryniak
Marla L. Huddleston	Marcia J. Levenstein	John C. Nash	Lloyd P. Provost	Joanne B. Severe	Jessica M. Utts
Allen C. Humbolt	Bruce Levin	Reinhard Neck	Clifford R. Qualls	Thomas R. Sexton	Esa Ilkka Uusipaikka
Mohammad F. Huque	Richard A. Lewis	Margaret A. Nemeth	John N. Quiring	Arvind K. Shah	Pamela M. Vacek
David N. Ikle	Lawrence I-Kuei Lin	David Butcher Nolle	Tony K. S. Quon	Ramalingam	Richard Craig Van
John M. Irvine	Carol L. Link	Michael A. Nolte	Volker W. Rahlfs	Shanmugam	Nostrand
Alan J. Izenman	Robert E. Little	Robert M. Norton	Gopa Ray	Mohammed A. Shayib	Stephen B. Vardeman
Kirk A. Jackson	George A. Livingston	El-Sayed E. Nour	Domenic J. Reda	Gary L. Shoop	Denton R. Vaughan
Jean G. Jenkins	Roger Longbotham	Tom S. Nunnikhoven	Mark R. Reiser	Patrick E. Shrout	Joseph S. Verducci
Linda W. Jennings	Stephen W. Looney	Barry D. Nussbaum	William K. Rice Jr.	Stanley A. Shulman	Steve P. Verrill
Gary R. Johnson	Milton W. Loyer	Kevin F. O'Brien	Mark William Riggs	Andrew F. Siegel	Joseph G. Voelkel
Paulette M. Johnson	Jay H. Lubin	Ralph G. O'Brien	Paula K. Roberson	Richard S. Sigman	Joachim Vollmar
Gerald A. Joireman	James Lynch	Michael W.	Rosemary A. Roberts	Jeffrey S. Simonoff	Grace Wahba
Ian T. Jolliffe	Michael F. Macaluso	O'Donnell Jr.	Edwin L. Robison	Terry L. Sincich	Joel A. Waksman
Michael P. Jones	John MacIntyre	Judith Rich O'Fallon	David M. Rocke	Judith D. Singer	Katherine K. Wallman
Harmon S. Jordan	Kathleen S. Madsen	Thomas W. O'Gorman	Frank W. Rockhold	Joan H. Skurnick	Lars Walloe
David R. Judkins	Jay Magidson	Patrick D. O'Meara	Russell H. Roegner	Richard J. Smith	Sophronia W. Ward
Karen Kafadar	Linda C. Malone	Terence John O'Neill	Anthony M. Roman	Richard L. Smith	Herbert W. Ware
Lee D. Kaiser	Charles F. Manski	David Oakes	Robin L. Rose	Tom A. B. Snijders	William L. Weber
Leslie A. Kalish	Kanti V. Mardia	Walter W. Offen	Paul R. Rosenbaum	Francisco P. Soler	Thomas E. Wehrly
Bruce A. Kaplan	Ray L. Marr	Francis G. Ogrinc	Gary L. Rosner	Dan J. Sommers	David L. Weimer
John M. Karon	LeRoy T. Mattson	Thomas H. Oliphant	Lawrence V. Rubinstein	Terence P. Speed	Clarice R. Weinberg
Theodore G. Karrison	Frank Olken	Frank Olken	Andrew L. Rukhin	Bruce D. Spencer	Daniel L. Weiner
Barry P. Katz	John A. Ondrasik	John A. Ondrasik	David Ruppert	Clifford H. Spiegelman	Robert M. Wharton
Richard W. Katz	William J. Owen	William J. Owen	Estelle Russek-Cohen	Nancy L. Spruill	Andrew A. White
Jerome P. Keating	Albert Palachek	Albert Palachek	Carl T. Russell	Donald M. Stablein	David C. Whitford
James L. Kepner	Mari Palta	Mari Palta	Jim Rutherford	Edward J. Stanek III	Dexter C.
Meena Khare	William S. Pan	William S. Pan	Michael S. Saccucci	William M. Stanish	Whittinghill, III
Byung-Soo Kim	Deborah L. Panebianco	Deborah L. Panebianco	William H. Sachs	Richard M. Stanley	Priya J. Wickramaratne
Syed N. U. A. Kirmani	Swamy A. V. B.	Swamy A. V. B.	Jerome Sacks	Joel H. Steckel	Rand R. Wilcox
George J. Knafel	Paravastu	Paravastu	Thomas W. Sager	David W. Stewart	Christopher John Wild
Kenneth J. Koehler	Won J. Park	Won J. Park	John P. Sall	John A. Stewart	Leland Wilkinson
Edward L. Korn	Robert A. Parker	Robert A. Parker	William M. Sallas	Robert A. Stine	Jean F. Williams
Kenneth J. Koury	Robert E. Parson	Robert E. Parson	Gilles F. M. Santini	Sandra S. Stinnett	Michael A. Wincek
Abba M. Krieger	Van L. Parsons	Van L. Parsons	Robert L. Santos	S. Lynne Stokes	Lawrence C. Wolfe
Jeffrey P. Krischer	Sharon M. Passe	Sharon M. Passe	Miles M. Sato	Michael A. Stoto	Kirk M. Wolter
Alok Krishen	Jeffrey S. Passel	Jeffrey S. Passel	Nathan E. Savin	Miron L. Straf	Farroll T. Wright
Pieter M. Kroonenberg	Kevin Pate	Kevin Pate	John W. Sawyer Jr.	Walter W. Stroup	Tommy Wright
Katherine B. Krystinik	Charles L. Paule	Charles L. Paule	William G. Saylor	Robert D. Sutherland	Michael G.
Naoto Kunitomo	Karl E. Peace	Karl E. Peace	Patricia A. Scanlan	David A. Swanson	Yochmowitz
Alan H. Kvanli	N. Shirlene Pearson	N. Shirlene Pearson	Stephen Schacht	Robert M. Tardiff	Elizabeth R. Zell
James R. Lackritz	Jane F. Pendergast	Jane F. Pendergast	David J. Schaeffer	Robert L. Taylor	Daniel Zelterman
Nan Laird	David W. Peterson	David W. Peterson		Marcia A. Testa	



# 35–39 Years

Michael A. Adena  
Joseph Adwere-Boamah  
Dorothee P. Aepli  
Sung K. Ahn  
Christian M. Alaouze  
Adelin I. Albert  
Jeanne M. Aldred  
Melvin T. Alexander  
Paul D. Allison  
Dhammika Amaratunga  
Yasuo Amemiya  
Kathryn H. Anderson  
John Angle  
John E. Angus  
Thomas Arbutiski  
Stephan Arndt  
Sarah J. Arterburn  
Jenny A. Baglivo  
John Bailer  
David L. Banks  
Chris M. Barker  
Anna E. Baron  
Andrew Lewis  
Baughman  
Moraye B. Bear  
Mark P. Becker  
Edward J. Bedrick  
Alexander E. Belinfante  
Stephen S. Bell  
Michael E. Bellow  
Peter M. Bentler  
James Calvin Berry  
Jonas V. Bilenas  
Warren B. Bilker  
Bruce Steven Binkowitz  
Thomas R. Birkett  
David K. Blough  
Carol Joyce  
Blumberg  
Mary Ellen Bock  
Steven B. Boswell  
Robert D. Bowser  
Nancy J. Boynton  
Leonard E. Braitman  
Rollin F. Brant  
Pamela W. Broene  
Thomas W. Broene  
Roger L. Brown  
William J. Browning  
Judith A. Buchino  
Shelley B. Bull  
Christine M. Bunck  
Lawrence F. Burant  
Thomas E. Burk  
Carolee Bush  
Harry F. Bushar  
Kevin C. Cain  
Carol Veum Caldwell  
Charles A. Calhoun  
Richard J. Caplan

Richard Raymond  
Carlson  
Michael L. Carniello  
B. Thomas Carr  
Nancy J. Carter  
L. Douglas Case  
John V. Castellana  
Deborah A. Cernauskas  
N. Rao Chaganty  
Subhabrata Chakraborti  
Raymond L. Chambers  
Charles W. Champ  
Douglass S. Chapman  
Ching-Shui Cheng  
Richard P. Chiacchierini  
Yu-Kun Chiang  
Paul C. Chiou  
Christy Chuang-Stein  
Constance F. Citro  
Murray K. Clayton  
Mario A. Cleves  
Avital Cnaan  
Paul E. Coffman Jr.  
Mark E. Cohen  
Richard D. Cohn  
Michael Christopher  
Conlon  
Margaret Conomos  
Charles F. Contant Jr.  
Nancy R. Cook  
Peyton J. Cook  
Stephen R. Cosslett  
Patricia S. Costello  
Noel A. Cressie  
Douglas E. Critchlow  
David C. Cue  
Estella Bee Dagum  
Marie Davidian  
Richard A. Davis  
Thomas C. Dawe  
Richard D. De Veaux  
Roger L. Deaton  
Michael R. Delozier  
Dipak K. Dey  
James DiCanzio  
Marie Diener-West  
David M. Dillard  
John S. Dixon  
Thomas W. Dobbins  
Ken Grant Dodds  
Jeff F. Doerzbacher  
Gerald A. Dorfman  
Gaylen W. Drape  
Kevin Ward  
Drummey  
Kirk A. Easley  
Robert G. Edson  
Don Edwards  
Thomas Barry Edwards  
Bruce P. Ekholm

Ronald K. Elswick Jr.  
Brian John English  
Patricia A. English  
Eugene A. Enneking  
Kent M. Eskridge  
Mark A. Espeland  
Frederick W. Faltin  
Dean H. Fearn  
Michael B. Feil  
Gwyn R. Ferguson  
Luisa T. Fernholz  
Eric Jeffrey Feuer  
Denzil G. Fiebig  
Dianne M. Finkelstein  
Patrick E. Flanagan  
Dean A. Follmann  
Gosta Forsman  
T. A. Foster  
Floyd J. Fowler Jr.  
Anne E. Freeny  
Edward W. Frees  
Jerome Frieman  
Peter P. Gaccione  
Shayne C. Gad  
Lionel A. Galway  
Michael A. Gates  
Constantine Gatsonis  
Jeffrey J. Gaynor  
Philip M. Gbur  
James Connell Gear  
Joseph C. Gfroerer  
Subir Ghosh  
Alfred D. Godfrey  
Carl V. Gogolak  
Miguel A. Gomez-Villegas  
Nancy M. Gordon  
G. Jay Graepel  
J. Brian Gray  
Janis G. Grechko  
Edwin J. Green  
John W. Green  
Michael A. Greene  
Daniel A. Greer  
Timothy G. Gregoire  
Yves Grize  
David J. Groggel  
Miriam S. Grosf  
Antonio F. Gualtierotti  
Olivier J. M. Guilbaud  
Pushpa L. Gupta  
Ramesh C. Gupta  
Yesvy Gustasp  
Sam Gutterman  
Josue Guzman  
Alula Hadgu  
Michael D. Hale  
Marc Hallin  
J. Michael Hardin  
Rachel M. Harter

Nancy C. Hassett  
Trevor J. Hastie  
Nathaniel Alan Heckert  
Charles E. Heckler  
Donald R. Hedeker  
Daniel F. Heitjan  
Wolf-Dieter Heller  
Victoria Black Hench  
David H. Henry  
Keith Heyen  
Susan G. Hilsenbeck  
Joseph G. Hirschberg  
Edward C. Hirschland  
Myron Hlynka  
James S. Hodges  
Howard R. Hogan  
David B. Holiday  
Paul S. Horn  
Amelia Dale Horne  
Welling C. Howell Jr.  
Wei-Min Huang  
David L. Hubble  
Norma Faris Hubele  
Esther Sid Hudes  
Beverley Adams Huet  
Arthur L. Hughes Jr.  
Edward Hughes  
Clive A. Hunt  
Gerardo Ignacio  
Hurtado  
Luis H. Hurtado  
Shelley Hurwitz  
Linda S. Hynan  
Deborah D. Ingram  
Henry F. Inman  
Harald K. Iverson  
Patricia A. Jacobs  
Debra J. Jacobson  
Denis George Janky  
Guillermina Jasso  
Christopher Jennison  
Daniel R. Jeske  
B. Alan Johnson  
Robert E. Johnson  
Wesley Orin Johnson  
Albyn C. Jones  
Bradley A. Jones  
Robert I. Kabacoff  
Tzu-Cheg Kao  
Alan F. Karr  
Sri Haryatmi Kartiko  
Richard L. Kasul  
Charles R. Katholi  
Darryl Katz  
Sallie Keller  
Elizabeth J. Kelly  
Joan Kempthorne-Rawson  
Arthur J. Kendall  
Harry J. Khamis

Ravindra Khattree  
KyungMann Kim  
John E. Kimmel  
Robin Laurence Kirby  
Genshiro Kitagawa  
John C. Klensin  
John Miller Koester  
Sarah Hurwicz Kogut  
Henryka K. Komanska  
David P. Kopcso  
Samuel Koslowsky  
Kallappa M. Koti  
Ken G. Kowalski  
Lawrence Krasnoff  
Gregory A. Kruger  
Bertram Krumm  
Richard A. Kulka  
Joachim Kunert  
Lynn Kuo  
Jurate M. Landwehr  
Thomas P. Lane  
Jerry Langley  
Linda B. Lannom  
Edmund C. Lau  
Purushottam W. Laud  
Lisa M. LaVange  
Brian T. Leahy  
David J. LeBlond  
Barbara A. Leczynski  
Hyunshik J. Lee  
K. F. Lee  
Kwan R. Lee  
Lawrence M. Leemis  
John J. Lefante Jr.  
Robert M. Leighty  
Peter J. Lenk  
Hans Levenbach  
Martin S. Levy  
Donald K. Lewis  
Steven A. Lewis  
Wai K. Li  
Lillian S. Lin  
Anne S. Lindblad  
Ernst Linder  
Bo Henry Lindqvist  
Wayne S. Lindsay  
Barbara A. Lingg  
Charles L. Liss  
Regina Y. Liu  
Joseph J. Locascio  
Wei-Yin Loh  
Jeffrey A. Longmate  
James T. Love  
Joseph F. Lucke  
Helmut Luetkepohl  
Michael J. LuValle  
Esfandiar Maasoumi  
Donald Macnaughton  
Greg Maislin  
Michael K. Mara

Laurentius Marais  
James C. March  
David A. Marker  
Paul J. Marovich  
James Stephen Marron  
Adam T. Martinsek  
Joe Matsuoka  
Carl A. Mauro  
Charles Maynard  
Allen A. McIntosh  
Raymond E. McIntyre  
Gerald W. McLaughlin  
Gregory C. McLaughlin  
Kenneth B. McRae  
Robert W. Mee  
Shailendra S. Menjoge  
William S. Messina  
R. Daniel Meyer  
H. Andrew Michener  
Rosemarie Mick  
Ruth M. Mickey  
Steven P. Millard  
Eva R. Miller  
Michael F. Miller  
Renee H. Miller  
Margaret A. Minkwitz  
David H. Moen  
Leyla K. Mohadjer  
Brian C. Monsell  
Dirk F. Moore  
Leslie M. Moore  
Jorge G. Morel  
Walter T. Morgan  
Stephan Morgenthaler  
Elizabeth A.  
Morgenthien  
Christopher H.  
Morrell  
Michael Joe Morton  
Linda L. C. Moss  
Ronald P. Mowers  
Daniel H. Mowrey  
Robert A. Muenchen  
Nitis Mukhopadhyay  
Jurgen Muller  
Keith E. Muller  
Jeri Metzger Mulrow  
Jay Munson  
Daniel Najjar  
Jayalakshmi Natarajan  
William Navidi  
Barry L. Nelson  
Larry Alan Nelson  
Dean V. Neubauer  
Tie-Hua Ng  
Phillip N. Norton  
William I. Notz  
Douglas W. Nychka  
William P. O'Hare  
Yoshimichi Ochi

Longtime members

# Longtime members

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George Ostrouchov	Dabeeru C. Rao	David C. Schlotzhauer	Steven M. Snapinn	Brian J. Thelen	Donald B. White
Mark C. Otto	Richard F. Raubertas	Paul R. Schneeman	Karen L. Snowdon-Way	David M. Thissen	Glenn D. White, Jr.
Soo Peter Ouyang	Howard L. Rauch	John R. Schoenfelder	Ying C. So	Neal Thomas	David A. Whitney
Franz Christian Palm	David M. Reboussin	Loren T. Schoof	Joong Kweon Sohn	Ronald G. Thomas	Alice S. Whittemore
J. Lynn Palmer	Nancy Reid	John D. Schoolfield	Eric R. Sowe	Lori A. Thombs	John L. Wieting
Sastry G. Pantula	Wasima N. Rida	Donald E. Schreiner Jr.	Refik Soyer	David J. Thomson	William E. Wilkinson
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Jeffrey R. Parno	James S. Roberts	Lonni R. Schultz	John J. Spinelli	Terrence Tivnan	Christopher J. Williams
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Antonio Pascual-Acosta	Jack Rodgers	Sidney H. Schwartz	Gene D. Sprechini	Michael W. Trosset	Timothy H. Wilson
Steven C. Patch	Ward Rodriguez	John Weldon	Kadaba P. Srinath	Ruey-Shiong Tsay	William E. Winkler
Sudhir Ranjan Paul	John W. Rogers	Seaman Jr.	Cidambi Srinivasan	Clyde Tucker	Jeffrey A. Witmer
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David J. Pawel	Jorge Luis Romeu	Gilg U. H. Seeber	Leonard A. Stefanski	David M. Umbach	Luke G. Wolfe
Roxy L. Peck	Elvezio Ronchetti	Joseph Severs	David M. Steinberg	Leo T. Upchurch	F. Lennie Wong
Elgin S. Perry	Robert J. Rosati	Bahman Shafii	Seth M. Steinberg	Leslie A. Van Alstine	John R. Woods
Kimberly T. Perry	Mitchell J. Rosen	Steven J. Shapiro	Lorraine C. Steiner	Amelia S. Velasquez	Patricia Wozniak
John D. Pesek Jr.	Peter E. Rossi	Simon J. Sheather	Barbara Stevens	Robert L. Vogel	Lap-Ming Wun
Gerald L. Phillips	Peter J. Rousseeuw	Mack C. Shelley II	Maura E. Stokes	Stanley Von Hagen	John Charles Wurst
Walter W. Piegorsch	Don A. Royce	Mark R. Shenkman	Mark C. Strong	Edward F. Vonesh	Emmanuel Yashchin
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David Pollard	Roland T. Rust	Weichung J. Shih	Mark Lionel Suda	Paul G. Wakim	Cun-Hui Zhang
Michael J. Pomerantz	Pedro J. Saavedra	Lucy Shneyer	James J. Swain	Chih-Ming Wang	Georgia Ziemba
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Jamie K. Pugh	Adriano L. Sarmiento	Richard A. Smiley	Greg C. Taylor	William J. Welch	
William M. Pugh	Stephen M. Scariano	Charles Eugene Smith	Jeremy M. G. Taylor	Stefan Wellek	
Trivellore E. Raghunathan	Daniel J. Schaid	Elizabeth C. Smith	Timo L. Terasvirta	Alan H. Welsh	

# Highlights of the April 13–14, 2018, ASA Board of Directors Meeting

**A**SA President Lisa LaVange convened the first ASA Board meeting of 2018 at the ASA offices in Alexandria, Virginia. The highlights of the meeting follow.

## Discussion Items

- The board engaged in a lively strategic planning discussion, resulting in ideas that will find their way to the pages of *Amstat News* in the coming months.
- The board reviewed an ASA Statement on Conveying Forensic Findings. Board approval through the Board Executive Committee will follow after some minor changes.
- The board met with Juan Meza, the new director of the Division of Mathematical Sciences (DMS) at the National Science Foundation. Meza outlined areas of current and future investment for DMS. He emphasized the connection of funding to the NSF's "Ten Big Ideas."

## Action Items

- The following editorial appointments were made:
  - Tyler McCormick, University of Washington, *Journal of Computational and Graphical Statistics*, 2019–2021
  - Jeff Witmer, Oberlin College, *Journal of Statistics Education*, 2019–2021
  - Ricardo Cao, University of A Coruña, *Journal of Nonparametric Statistics*, 2019–2021
  - Jerome Reiter, Duke University, *Statistics and Public Policy*, 2019–2021
  - V. Roshan Joseph, Georgia Institute of Technology, *Technometrics*, 2020–2022

## 2018 Board of Directors

**Lisa LaVange**, President

**Karen Kafadar**, President-Elect

**Barry Nussbaum**, Past-President

**Kathy Ensor**, Third-Year Vice President

**David Williamson**, Second-Year Vice President

**Katherine Monti**, First-Year Vice President

**Paula Roberson**, Third-Year Council of Chapters Representative

**Julia Sharp**, Second-Year Council of Chapters Representative

**Don Jang**, First-Year Council of Chapters Representative

**Eileen King**, Third-Year Council of Sections Representative

**Jim Lepkowski**, Second-Year Council of Sections Representative

**Katherine Halvorsen**, First-Year Council of Sections Representative

**Cynthia Bocci**, International Representative

**Scott Evans**, Publications Representative

**Amarjot Kaur**, Treasurer

**Ron Wasserstein**, Executive Director and Board Secretary

- Journal prices were reviewed and an increase of 5% on institutional North American and international print and online prices for 2019 was approved, as was a 2% increase on ASA member rates for print. Online access for ASA members is free.
- The board approved a revision to the ASA's Guidelines for Ethical Statistical Practice. The revision addresses areas of professional misconduct not addressed in the current guidelines. The updated guidelines are posted at <http://bit.ly/2rPHv6e>.
- The board updated the policy for formation of ASA outreach groups to clarify the purposes for such groups.

## Reported Items

- Associate Executive Director and Director of Operations Steve Porzio updated the board on ASA financials for 2017. The year ended in the black. Also, Porzio and ASA Treasurer Amarjot Kaur presented the results of the ASA's annual audit. The board thanked Porzio and staff for another clean audit.
- Kaur also updated the board on the status of the ASA's investments. Investments gained about \$2.5 million in value in 2017. Market value at the end of March 2018 was about \$20.6 million.
- Kaur also presented proposed changes to the ASA bylaws to update the names and descriptions of some of the standing committees related to finance and budget. Those proposed changes are being published in this issue of *Amstat News*.
- The board received progress reports on the strategic initiatives launched by ASA President Lisa LaVange. All are well under way. In addition, ASA President-elect Karen Kafadar discussed with the board ideas she has for 2019. Further discussion of those ideas and detailed proposals to implement them will follow.
- The Council of Chapters Governing Board (COCGB) and the Council of Sections Governing Board (COSGB) reported on their

recent activities. The COCGB highlighted its work to monitor the “health” of chapters and noted the creation of a new chapter, the Columbus (Ohio) Chapter. On the “health” theme, the COSGB has been developing better ways to evaluate the well-being of sections, including fiscal status and services to section members.

- Vice President Williamson presented the annual report of the Membership Council. These council reports help the board stay connected with ASA committees, and vice versa. Board members learned of committee activities and plans and heard questions or concerns from committees.
- Amanda Malloy, ASA director of development, provided a brief update on the ASA's fundraising activities, and Steve Pierson, ASA director of science policy, updated the board on our advocacy work. Malloy noted that 2017 was our best year yet in terms of fundraising, continuing a multi-year string of best years. Pierson noted the launch of the ASA's Count on Stats program, concerns about statistical agency independence in Puerto Rico, the latest developments with the citizenship question being added to the Census, and numerous other items of importance to our community.
- ASA Executive Director Ron Wasserstein updated the board on the follow up to the successful Symposium on Statistical Inference, held in October 2017. Later this year, a special issue of *The American Statistician* on the topic of statistical inference will serve as a “work product” of the symposium, though papers were welcomed from everyone, not just symposium participants. This special issue will be online only and open access.

The full board meets again July 27–28 in Vancouver, immediately prior to the start of JSM 2018. The board will also have its annual budget meeting on June 8 at the ASA HQ in Alexandria, Virginia. ■



# Proposed Revisions to the ASA Bylaws

*Recommended by the Board of Directors April 13, 2018*

The ASA Board of Directors proposes the following modifications to the ASA bylaws. (<http://bit.ly/2Gsz19p>) The purpose of the changes is to ensure the ASA's finance-related committee charges are consistent with current best practices and to update some provisions that are either no longer applicable or not reflective of current best practices.

## Finance-related committee charges:

### Article IX. COMMITTEES

4.a. Audit Committee. The Audit Committee shall consist of the Treasurer, who acts as chair, the chair of the Budget Committee, and the Past President. It shall periodically recommend an audit firm to the Board of Directors; serve as the Board of Directors' liaison to the Association's auditors; represent the Board of Directors in discharging its responsibilities relating to the accounting, reporting, and financial practices of the ASA; have general responsibility for surveillance of internal controls, accounting, and audit activities of the ASA; ensure the audit is carried out in a fiscally sound manner; review with the audit firm their audit procedures, including the scope and timing of the audit, the results of the annual audit, and any accompanying management letters; assess the adequacy of internal controls and risk management systems; review the IRS Form 990, 990-T, and Virginia Form 500; review the document destruction and whistleblower policies; and review material about any pending legal proceedings involving the ASA. ~~recommend an audit firm to the Board of Directors. It serves as the Board of Directors' liaison to the Association auditors. It is responsible for seeing that the audit is carried out in a fiscally sound manner and that reports are prepared as needed by the Board of Directors.~~

4.b. Budget Committee. The Budget Committee shall consist of the three Vice Presidents and Treasurer, the latter ex officio without vote. The senior Vice President shall serve as chair of the committee. ~~It is responsible~~ The Committee shall annually recommend the operating budget for the coming fiscal year, including the Association staff compensation budget (salaries and fringe benefits), for action by the Board of Directors; periodically review the Association's financial results in compar-

son to the budget; and periodically assess the facilities needs of the Association home office. ~~for annually proposing the budget for the coming fiscal year. It is responsible for annually recommending a budget for action by the Board of Directors. It is also responsible for annually evaluating the capital budget, the salary classification structure, and the fringe benefits for the Association staff. It shall also periodically review the incomes, expenditures, and allocations during the year for consistency with the budget, the accounting system employed and the budgeting process, and the facilities need of the Association home office. If it so chooses, the Board of Directors as a group may serve as the Budget Committee.~~

5.d. Finance Investments Committee. The Finance Investments Committee shall recommend to the Board of Directors, and assess adherence to, investment guidelines that will improve the safety, return, reporting, or management of the investment accounts; periodically review the holdings in the investment accounts of the Association; assess appropriate benchmarks for investment performance; evaluate the performance of the investment managers and consultants; recommend to the Board of Directors, as appropriate, steps that will improve the safety, return, reporting, and/or management of the investment accounts; and such other matters related to the financial performance of the Association as the Board may assign from time to time. ~~recommend long-term financial planning, supervise the investments of the Association, and carry out other duties as determined by the Board of Directors.~~ The Finance Committee shall consist of the Treasurer as chair and six full members, each serving a three-year term, designated by the President-Elect.

## Other revision recommendations:

### Article X. PUBLICATIONS

~~4. Directory. At suitable intervals, the Association shall make available a directory of its members. At suitable intervals, the Constitution and By-Laws of the Association shall be published.~~

## Article II. FINANCE

3. Authority. All funds of the Association shall be deposited with the Treasurer, who shall make disbursement therefrom under regulations of the Board of Directors. The Treasurer shall have authority to purchase securities with funds that the Board of Directors has designated for investment and to sell such securities, but such purchases and sales shall be made only in accordance with such guidelines as the Board of Directors shall prescribe.

*The Board of Directors may appoint full members of the Association residing outside the United States to serve as depositories for funds.*

With the approval of the Board of Directors, the Treasurer may delegate the powers listed in the first paragraph of this section, as well as the power to sign checks and to access safe-deposit boxes.

4. *Surety Bonds. All persons who are responsible for the disbursement of funds shall be insured by a surety and performance bond in amounts and with companies approved by the Board of Directors. Fidelity: All persons who are responsible for the disbursement of funds shall be held as covered under a blanket Employee Dishonesty policy at limits approved by the Board of Directors.*

10. Indemnity. The Association shall indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative, by reason of serving at the request of the Association as a director, officer, employee, or agent of another organization, against all judgments, penalties, fines, and settlements, and against all reasonable expenses, including attorneys' fees, actually incurred in connection with such action, suit, or proceeding, to the fullest extent permitted by Massachusetts law, *except if the actual or potential liability is due to the person's own negligence or gross negligence, or criminal misconduct, or action in violation of ASA rules or policies.*

Note: In accordance with the bylaws, the membership shall have 75 days to review and respond to any proposed change. Please direct comments to the executive director and ASA secretary at [Ron@amstat.org](mailto:Ron@amstat.org) by September 15, 2018. Member comments will be shared with the ASA Board of Directors before further action regarding these changes is taken. ■

## THE AMERICAN STATISTICIAN HIGHLIGHTS

# May Issue Has Something for Everyone

The May 2018 issue of *The American Statistician* features 13 articles that span a range of methodology and application areas. There is something for everyone.

The General section begins with an article about identifiability and estimation issues that arise when parametric families are extended with extra parameters for increased flexibility. A second article investigates the effect of standardization on multicollinearity measures, and a third article discusses the construction of joint distributions from marginal distributions in such a way that constraints on the random variables are satisfied.

The lineup for Teacher's Corner includes an experience report on a curriculum design for a professional master's program of statistical practice. A second paper investigates incomplete data inference methods for "shaved dice." A third paper proposes a graphical display of type-2 errors when testing for a normal distribution, and the final paper in this section develops and compares methodologies when using regression analysis to detect aging trends.

You will find two Short Technical Notes. The first develops a fast algorithm for computing the expected value of sample central moments, and the second offers alternative proofs that a Laplace distribution can be represented as a Gaussian mixture.

There are also two papers in the Statistical Practice Section. The first is a discussion about Cochran's rule-of-thumb on the adequacy of the chi-square test for independence in a contingency table, and the second is an investigation of the effect population skew can have on sample size formulas.

Finally, there are two papers contributing to the Interdisciplinary and Statistical Computing and Graphics sections of the journal. The first studies high-school dropout rate and proposes correspondence analysis as a way to obtain additional insight. The second paper advocates for the use of symbolic computing tools and uses a context in which the efficient score test is of interest.

To read these articles or submit your work to *The American Statistician*, visit [www.tandfonline.com/toc/utas20/current](http://www.tandfonline.com/toc/utas20/current). ■

# Deans Offer Advice to Statistics Departments

R. W. Doerge, M. Fuentes, S. C. Morton, H. J. Newton, S. G. Pantula, and A. R. Sampson

**I**ncreasingly in academia, statisticians have been appointed to university administrative positions. Pioneers include W. Allen Wallis, president of the University of Rochester, 1962–1970; Albert Bowker, chancellor at the University of California, Berkeley, 1971–1980; Gertrude Cox, director of the Institute of Statistics at the Consolidated University of North Carolina, 1945–1960; and Lowell Reed, president of The Johns Hopkins University, 1953–1956.

During the past decade, there has been an acceleration of this process (see [www.amstat.org/asa/news-home.aspx](http://www.amstat.org/asa/news-home.aspx)). These more recently appointed academic administrators who are also statisticians can offer valuable perspectives about the current dynamic atmosphere for statistics. With this motivation, an invited panel discussion session was organized for JSM 2017 that included five distinguished deans

who are renowned statisticians in their own right: Rebecca Doerge, Montserrat Fuentes, Sally Morton, H. Joseph Newton, and Sastry Pantula. The breadth of their academic experiences gave them excellent perspective on statistics and the challenges now facing statistics departments.

The goal for the discussion was to provide insights for statisticians in the “trenches.” Allan Sampson of the University of Pittsburgh was the session organizer and moderator. To help focus the discussion, four broad areas were delineated:

1. Based upon their experiences as deans, what advice would the panelists offer to individuals in statistics departments who are dealing with the many challenges facing statistics departments in our current environment (e.g., managing growth, developing interdisciplinary programs (particularly with regards to data science), marketing and publicizing departments, and developing and mentoring personnel)?
2. How do the panelists’ academic backgrounds impact their relationships with the statistics departments in their setting?
3. What advice would the panelists as deans wish they could give their past selves as department administrators that would have been helpful to know at that time?
4. What advice would the panelist give to academic statisticians who would like to pursue a track in academic leadership, in particular, building an appropriate portfolio of experiences? Also, what are the panelists’ views about addressing the difficulties in balancing leadership responsibilities with both research and personal lives?



## Panelists

The participants and their affiliations (as of August 3, 2017) in the discussion included the following:



**Rebecca Doerge**  
Dean of the Mellon  
College of Science  
at Carnegie-Mellon  
University and earlier  
Head of Statistics at  
Purdue University



**Montserrat (Montse) Fuentes**  
Dean of the College  
of Humanities and  
Sciences at Virginia  
Commonwealth  
University and prior to  
that Head of Statistics  
at North Carolina State  
University



**Sally Morton**  
Dean of the College  
of Science at Virginia  
Tech and previously  
Chair of Biostatistics  
at the University of  
Pittsburgh



**H. Joseph (Joe) Newton**  
Dean Emeritus of the  
College of Science at  
Texas A&M University  
and earlier Head of  
Statistics at Texas A&M



**Sastry Pantula**  
Dean of the College  
of Science at Oregon  
State University  
and earlier Head of  
Statistics at North  
Carolina State  
University

While the panelists explored some of these areas in depth, other areas were addressed more tangentially. What follows is a summary of their discussion with a few additional observations.

The panelists broadly observed that successful university leaders have great communication skills and are flexible in their outlook and actions. Importantly, they have a passion for what they do. Their collective view was that being a department chair or head was one of the hardest jobs on campus, but also among the best jobs for making a real impact. Their advice for department chairs, as well as other leaders, is to think one level above where they are. Faculty, for instance, might consider the various concerns of the chair when proposing an idea or request.

More specific observations were that chairs need to get along with other chairs and deans. Chairs need, for example, to make “deals” and build collaborative enterprises that are mutually beneficial to multiple university units. And chairs are recommended to avoid unnecessary participation

in politics. Chairs are part of the dean’s leadership team and not just the department’s advocate. It was suggested a chair holds an unhelpful viewpoint if they find themselves saying, “I fought with the dean and here’s what I got.”

It is important for a chair to be able to make decisions. To be an effective decision-maker, panelists’ advice included “don’t persevere too much,” “be as transparent and ethical as possible,” “be clear about the criteria for the decision,” and “be collaborative.” Making hard decisions with faculty, students, and staff is a skill chairs must master because decisions are often made hard by difficult people. Some panelists thought chairs shouldn’t necessarily assume “the university has your back” in all situations. The panel agreed among themselves that deans should empower chairs and faculty to, as one panelist noted, “figure it out.”

It was strongly recommended that leaders of departments and programs should learn about the business/financial model used at their university. Growing a department requires knowing

how money is allocated and being creative within the given financial environment. It is important to understand the broad higher education landscape with particular attention paid to current demographics and technology change—older returning students and increased online education, for example. Panelists noted that as deans and provosts change at a university, policies and priorities will change, so chairs need to adapt accordingly.

In approaching deans about issues and concerns, the panelists recommended chairs should understand the constraints facing a dean and aspire to make the dean’s life easier. A way to accomplish this is to base solutions to problems upon evidence and, as a panelist observed, possibly offer three solutions to an issue—one that is free, one that is expensive, and one in between. Also suggested when scheduling a meeting with the dean is sending a written agenda and, ideally, a one-page executive summary in advance.

In regard to fundraising, for both deans and chairs, the panelists agreed philanthropy is



part of the job. For deans, it is not unusual for one-third of the dean's time to be devoted to fundraising. The panel strongly suggested it is best to focus on the donor's passions and interests, not the chair's, when a chair is talking to prospective donors. And as one panelist said, "It is always important to listen!"

To obtain funding from industry, a chair should be proactive in approaching a possible company by having the company identify in advance what their needs are so the statistics department can be appropriately responsive with the right faculty presenting. One panelist used this approach with local industry and noted it would often lead to research contracts. Caution was expressed about not spreading a department's resources too thinly, as making promises that can't be sustained is counterproductive for the department in the long run.

The panel uniformly advocated it is absolutely essential for statistics departments to be involved in the data science era. Even if the department's sentiment is that it is too late to do so, the panel urged it is never too late and the department should just start to get involved and not necessarily start big. Moreover, they said that for a statistics department not to be part of data science disadvantages the department's students. To facilitate statistics departments' involvement in data science, the panelists recommended that having joint appointments both sets the stage and advances the relationships. To further these relationships, the panel agreed it is imperative that a statistics department's faculty venture out from their offices and spend time interacting with other departments' faculties.

Within their universities and the broader community where they are located, the panelists believed statistics departments need to expend much more effort to "market themselves." Many colleges have good publicity people, and it should not be seen as "bragging" for a statistics department "to tell its story."

Several panelists urged statisticians to do more than "academic papers" and work on research that "matters" and make sure it's known. One panel member suggested a statistics chair should "empower" the more extraverted faculty to promote the department and that not every faculty member need "get onboard" to do this. Another offered that chairs should always have available three promotional "bullets," one for departmental research, one for teaching, and one for service and outreach.

An obvious suggestion, but one that is often missed, is for departmental faculty, staff, and students to include in their self-identification that they are a "member of the department of statistics" in any professional public setting where they are introducing themselves.

Prior to discussing some of the challenges faculty face in taking on administrative responsibilities, several panelists noted two specific challenges statistics chairs and statisticians in general face in an academic environment. One is the need to "constantly explain" why statisticians should have different promotion criteria than most of the physical and social sciences. Motivating this concern is that accomplished statisticians have portfolios with both basic statistical research and high-level collaborations in a variety of settings, including with researchers,

policy makers, and governmental organizations. The other challenge identified was the sense that when statistics is part of a university's science division, there are some in the sciences who hold a view that statisticians are not "really scientists." To counter these ideas, panelists remarked that having more national statistics awards would be excellent.

For academics taking administrative positions, the panel thought some of their colleagues criticized them for abandoning their departments when they should have been supportive of their "being an advocate of their discipline while serving in a broader leadership position." Further disconcerting to the panel was the "perception that faculty, especially women, go into administration in mid-career because their research wasn't successful." Contrary to this misperception, the panel collectively agreed that, as an administrator, one should maintain one's research career. Not only is this satisfying, it also makes it less difficult to deal with highly accomplished faculty in negotiating tough issues.

To have more statisticians move into administration, the panel reiterated that the discipline should support fellow statisticians who focus on administration, thereby benefitting statistics and other disciplines more broadly.

Overall, the panelists agreed that being a department chair or dean is both rewarding and personally gratifying. They concluded by strongly encouraging the audience to make use of their statistical backgrounds to be leaders in serving their departments and the broader academic community. ■

# GWU Alumni Revisit Campus to Share Insights, Give Career Tips



The George Washington University Student Chapter members mingle with alumni at The George Washington University in Washington, DC, March 3.

Although the school's official homecoming was a month prior, the American Statistical Association Student Chapter at The George Washington (GW) University hosted a homecoming redux of sorts on March 3, welcoming back five statistics and biostatistics alumni for a two-hour career panel so they could share their insights on entering the job market as newly minted graduates.

Roughly 50 graduate students from the statistics, biostatistics, and data science programs attended the event headlined by five alumni speakers: Cheung Li, National Cancer Institute; Wayne Woo, GlaxoSmithKline Vaccines; Guoxi Yan, American



From left: Cheung Li (at podium, National Cancer Institute), Bo Ye (student moderator), Wayne Woo (GlaxoSmithKline Vaccines), Guoxi Yan (American Society for Engineering Education), Yuqing Lu (Kaiser Permanente), and Haijun Wang (Arkansas Children's Hospital)

Society for Engineering Education; Yuqing Lu, Kaiser Permanente; and Haijun Wang, Arkansas Children's Hospital. They shared tips on writing résumés, preparing for interviews, and burnishing critical soft skills such as teamwork and effective communication. Afterward, the panelists "loosened their ties" and enjoyed pizza, drinks, and casual conversation with students during the closing networking hour.

"We are privileged to have such fantastic alumni willing to give back to the students following in their footsteps," noted event organizer **Xiaoyan Yin**. "That, combined with assistance of my team members—**Bo Ye**, **Jialu Wang**, and **Tian Pei**—and the support of the ASA national organization and the GW Statistics Department, were instrumental to the event's success." Chapter Co-Presidents **Xiaoyu Zhai** and **Arnold Saunders** agreed. They said these events drive home the value of ASA membership to students and pulling together a large event like this is a clinic in leadership skills that can't be picked up in a classroom. ■



AAAS Science and Technology Policy Fellowships Class of 2017–2018  
Photo courtesy of AAAS Science and Technology Policy Fellowships

## Boost Your Career in Washington

Kat Song, AAAS Communications and Digital Strategy Director

**M**athematicians and statisticians are in high demand in the federal government. With assignments in federal agencies, on Capitol Hill, and in the judicial branch, AAAS Science and Technology Policy Fellows are on the front line of vital issues affecting society. The AAAS Science and Technology Policy Fellowships (STPF) are the premier opportunity for outstanding mathematicians, statisticians, scientists, and engineers at any career stage to learn first-hand about policy-making while contributing their STEM mindset to American government.

STPF alumni leverage their fellowship experience in myriad ways. Carla Cotwright-Williams is now a scientist at the US Department of Defense. Karoline Pershell has become executive director of the Association for Women in Mathematics and research director at a tech company.

The yearlong fellowship runs annually from September through August and includes a class of close to 300 fellows representing a broad range of backgrounds and disciplines. Engaging with policymakers, administrators, and thought leaders, fellows broaden their networks and career paths. After the fellowship, fellows become members of a strong corps of 3,000+ alumni—policy-savvy STEM leaders in academia, government, industry, and the non-profit arena.

Currently, there is a particular need for statisticians among STPF ranks. Learn more and apply to become a fellow at <http://bit.ly/2IrOGMg>. Also, watch a video series about the benefits of being a fellow and how to apply at <http://bit.ly/2wMwsQ9>. ■



# 10 Win STATSKETBALL CHALLENGE, Prove Statistics Is Fun



## MORE ONLINE

Want to be ready for next year's Statsketball and other contests? Sign up for the *ThisIsStatistics* email list at <http://bit.ly/This-Is-Statistics-Email>.

Get details about Statsketball at <http://bit.ly/Statsketball>.

Statsketball 2018 pitted students in 189 teams against each other to predict the outcomes of the 2018 NCAA Men's Basketball Tournament using statistics.

The two contests included the "Pick 'Em": Upset Challenge to predict the winners of the first-round games and the "Build Your Own Bracket": Draft Challenge to select teams from 224 draft points and assemble a cohort from seeded participants to earn the most overall points.

The contest invited students to apply statistics—the science of learning from data—to one of the biggest sporting events of the year, proving that statistics can be fun and applied to any field.

## "Pick 'Em": Upset Challenge Winners

### High School:

- **First Place:** Sophie Mason, Senior, Valley Christian High School, San Jose, California
- **Honorable Mention:** Gino Assenmacher, Junior, Monroe High School, Monroe, Michigan
- **Honorable Mention:** Makendra Grubel, Senior, Mauldin High School, Simpsonville, South Carolina

### Undergraduate:

- **First Place:** Jake Oringel, Freshman, The University of North Carolina, Charlotte, North Carolina

- **Honorable Mention:** Ashley King, Senior, Anderson University, Anderson, Indiana
- **Honorable Mention:** Andy Li, Sophomore, Carnegie Mellon University, Pittsburgh, Pennsylvania

## "Build Your Own Bracket": Draft Challenge

### High School:

- **First Place:** Addie Morris, Senior, West Branch High School, Beloit, Ohio
- **Honorable Mention:** Savanna Triplett, Senior, West Branch High School, Salem, Ohio

### Undergraduate:

- **First Place:** Luke Benz, Junior, Yale University, Middlebury, Vermont
- **Honorable Mention:** Mitchell Collins, Senior, California Polytechnic State University, San Luis Obispo, California

"The ASA congratulates this year's Statsketball winners for their exceptional creativity and well-executed methodologies," said ASA Executive Director Ron Wasserstein. "All the participants showed that statistics can be applied to any field of interest and can be fun as well." ■



# Six Women Describe Their WiTNY Winternship Experiences

Rosa Basevich, Neeru Bhagirath, Maria Mahin, Noorulain Paracha, and Christina Sarcone

In 2018, 46 companies joined Women in Technology and Entrepreneurship in New York's (WiTNY) "winternship" program to pair undergraduate women pursuing technical majors from the City University of New York (CUNY) with internships during their winter break.

WiTNY is an initiative between CUNY, Cornell Tech, and industry with the mission to facilitate, encourage, and enable a significant increase in the participation of women in both higher education and entrepreneurship in fields related to technology in the New York market. Through strategic initiatives and purposeful integration with key institutions and programs in New York City, WiTNY targets high-school girls getting ready for college, as well as undergraduate and graduate women, preparing them to secure a rewarding and lucrative position in the technology industry.

This year, Pfizer—through the women's leadership network WOW (women owning the way)—hosted six winterns in a three-week program. The women were immersed in topics related to Pfizer's business, with an emphasis on how technology plays a role through applications of computer science, data science, and digital media.

## Rosa Basevich

*Undergraduate Student, Hunter College*

I am currently a junior at Hunter College, pursuing a bachelor's of computer science and a math and German minor. As part of the winternship program, I was paired with Pfizer in the Real-World Data and Analytics Center of Excellence. I was able to get familiar with the pharmaceutical industry and Pfizer through the means of a group project.

For our group project, we tried to find solutions to combat the opioid epidemic using machine learning. Though our project was mainly research based (we could not write algorithms that would analyze trends within groups that would identify



Women in Technology and Entrepreneurship in New York (WiTNY) "winterns" at Pfizer Inc. From left: Research Associate Shin Ah Oh, Technology Tour Guide Kelly H. Zou, and winterns Noorulain Paracha, Neeru Bhagirath, Christina Sarcone, Maria Mahin, Rosa Basevich, and Aisha Khoja.

Photo by Xuemei Cai.

opioid abuse for lack of time and experience), it was extremely informative. During the research stage of the project, we learned about many groups that have also found solutions through machine learning to identify trends in opioid abuse.

In addition to the group project, we had individual managers in the business technology department of Pfizer. Having never taken a statistics course before, working in data analytics was both challenging and rewarding. I was introduced to the software R and was able to use regression analysis and ROC curve to interpret and quantify large data sets.

Working with Kelly (my manager) has inspired me to take a big data course and learn more about data science. I also hope to take more advanced statistics courses in my academic future. I was also surprised to see the vast technological presence Pfizer has. Seeing apps like BeLive (meant to aid patients who have fibromyalgia) and the many emerging technology products was inspiring, since it shows code working in the real world, reaching and helping many people.

## Neeru Bhagirath

*Undergraduate Student, Macaulay Honors College at The City College of NY*

I am pursuing a biotechnology degree with a double minor in computer science and public policy at The City College of New York. I plan to use the combination of my studies to combine health care and technology to create a more accessible world.

Prior to this winternship at Pfizer Inc., I did not have much exposure to tech or business beyond college courses; however, I was able to gain an expansive overview of what measures are taken to make a pharmaceutical company successful.

Within my three weeks, I worked on a departmental project and a challenge project. The purpose of the departmental project was to create a game to promote inclusivity among the domestic and international offices, and the challenge project was to come up with a way to combine Pfizer's core health care values and with today's increased importance on technology and communication.

Through working on the challenge project, I learned about valuable lessons in teamwork, modern day epidemics, and—most of all—how important it is for a company to use their outreach to invoke change among the public.

## Maria Mahin

*Undergraduate Student, Hunter College*

I am a fourth-year student at Hunter College, studying computer science with an interest in technology, education, and health care. I spent my first three

years of college studying nursing, where I was able to see how technology critically shapes the way we prevent, diagnose, and treat diseases. Later, I taught myself how to program and fell in love with it. Since then, I've dreamed of one day using technology as a means of helping people live longer, healthier lives.

This winternship program provided an opportunity for me to learn from inspiring female leaders and see how technology and health care can be intertwined. During the three weeks of the program, I conducted research for the digital strategy team and worked with five other interns to devise a way in which Pfizer can use emerging channels of media and technology to better engage patients in their health.

What impacted me the most from my time at Pfizer was seeing firsthand the powerful role technology has in shaping patient health outcomes. From the use of wearable devices to monitor and communicate patient health information to the applications of machine learning in disease diagnosis and drug development, technology has become inseparable from health care. Specifically, my time at Pfizer has sparked my interest in data science and how analyzing increasingly massive amounts of health care data can help companies like Pfizer better understand and tailor life-changing treatments for patients.

This semester, I am taking a big data course and a machine learning MOOC (massive open online course). Moving forward, I hope to further explore this field, as well as other intersections between technology and health care.



WITNY "winternships" celebration in New York City. Front row, from left: Winterns Aisha Khoja, Rosa Basevich, Maria Mahin, and Noorulain Paracha. Second row, from left: Pfizer winternship managers Chris Kakkanatt, Wendy Mayer (organizer), Desiree Cika, Jessica Lakeman, Kelly H. Zou, and Roshni Sacks.

Photo by Yolande Morris.



**MORE ONLINE**  
Read more about  
the winternship  
program at  
[http://bit.ly/  
WiTNYWinternship](http://bit.ly/WiTNYWinternship).

Lab tour at Pfizer in Cambridge, Massachusetts. From left: “Winterns” Maria Mahin, Rosa Basevich, Shin Ah Oh (research associate), Aisha Khoja, Christina Sarcone, Neeru Bhagirath, Noorulain Paracha, and Michelle Clasquin (lab tour guide). Photo by Kelly H. Zou.

### Noorulain Paracha

*Undergraduate Student, Macaulay Honors College at Brooklyn College*

I am a sophomore in the Macaulay Honors Program at Brooklyn College. I am interested in combining my passion for medicine and technology. During this winternship, I was part of the Commercial Oncology Business Team. I had the ability to analyze the usability of an application and create usage cases for applications created for field representatives. Completing this task allowed me to witness how Pfizer uses technology on a daily basis to improve patient outcomes.

I was amazed to see the heavy importance placed on using data to determine what future steps needed to be taken by the company. From the different presentations we had on real-world data, I was shown the value of statistical analysis to understand the progress of a medication. Furthermore, as a group of interns, we focused on the opioid epidemic the United States faces. We created a model of an application that would help identify when a patient is at risk of addiction. This application would involve the use of machine learning that could determine how a patient may be affected by prescription opioids. By completing this project, we hoped to improve the quality of a patient’s life and lessen this national problem.

Through my experience at Pfizer, I aspire to continue to learn about the role technology has in advancing health care.

### Christina Sarcone

*Undergraduate Student, The City College of New York*

I am currently an undergraduate sophomore student at The City College of New York, pursuing a bachelor’s degree in computer science with a pre-medical studies focus. I hope to pursue a career that will combine both interests of medicine and technology.

As a data analyst intern during the winternship, I quickly learned the importance of data science within the health care sector. I was exposed to different projects within the department, one in particular being a rerouting system for sales representatives to improve their operations. The exposure to said projects has shown me that although the headquarters is not a clinical setting, they are still able to improve the lives of others behind the scenes with the help of technology.

This opportunity was unlike any other I have experienced. I am grateful for the individuals who have dedicated their time to exposing me to the benefits and potential of data science. This internship at Pfizer has expanded my knowledge on technology within health care and proving that although data yields one result on the surface, it is the key to solving many other problems as well. ■

# 2017 Audit Report for the American Statistical Association

Audited Financial Statements  
American Statistical Association  
December 31, 2017

## American Statistical Association

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# 2017 Audit Report for the American Statistical Association Continued

**TATE  
&  
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## Independent Auditor's Report

To the Board of Directors  
American Statistical Association

### Report on the Financial Statements

We have audited the accompanying financial statements of American Statistical Association (the Association), which comprise the statements of financial position as of December 31, 2017, and 2016 and the related statements of activities and cash flows for the years then ended, and the related notes to the financial statements.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Association's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Association's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of American Statistical Association as of December 31, 2017 and 2016, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

*Tate & Tryon*

Washington, DC  
March 16, 2018

## American Statistical Association

### Statements of Financial Position

December 31,	2017	2016
<b>Assets</b>		
Cash and cash equivalents	\$ 314,414	\$ 547,275
Investments	20,810,361	18,365,042
Accounts receivable, net	571,989	504,391
Prepaid expenses	201,716	190,994
Equity in joint venture	40,897	34,195
Property and equipment, net	6,755,595	7,107,481
<b>Total assets</b>	<b>\$ 26,694,972</b>	<b>\$ 26,749,358</b>

#### Liabilities and Net Assets

<b>Liabilities</b>		
Accounts payable and accrued expenses	\$ 937,097	\$ 993,715
Due to joint venture	44,014	32,399
Deferred revenue	2,421,141	2,298,475
Bonds payable, net	3,934,437	4,252,289
<b>Total liabilities</b>	<b>7,336,689</b>	<b>7,576,858</b>
<b>Net assets</b>		
Unrestricted - undesignated	18,304,431	16,267,481
Unrestricted - board-designated	1,381,407	1,434,182
<b>Total unrestricted net assets</b>	<b>19,685,838</b>	<b>17,701,663</b>
Temporarily restricted	873,919	682,331
Permanently restricted	796,526	788,526
<b>Total net assets</b>	<b>21,356,283</b>	<b>19,172,500</b>
<b>Total liabilities and net assets</b>	<b>\$ 26,694,972</b>	<b>\$ 26,749,358</b>

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## American Statistical Association

### Statements of Activities Years Ended December 31, 2017 and 2016

	2017					2016				
	Unrestricted Undesignated	Unrestricted Board- Designated	Temporarily Restricted	Permanently Restricted	Total	Unrestricted Undesignated	Unrestricted Board- Designated	Temporarily Restricted	Permanently Restricted	Total
<b>Operating Activities</b>										
Revenue and Support										
Meetings	\$ 3,698,589	\$ -	\$ -	\$ -	\$ 3,698,589	\$ 4,095,818	\$ -	\$ -	\$ -	\$ 4,095,818
Membership	2,131,415	-	-	-	2,131,415	2,207,117	-	-	-	2,207,117
Publications	1,805,413	-	-	-	1,805,413	1,775,923	-	-	-	1,775,923
Programs	676,798	-	83,693	10,000	770,491	638,123	-	82,693	1,500	722,316
Section income	58,391	643,677	-	-	702,068	74,526	631,435	-	-	705,961
Education	392,873	3,498	-	-	396,371	445,295	4,062	-	-	449,357
Administration	610,194	-	-	-	610,194	744,531	-	-	-	744,531
Grants and awards	341,175	-	-	-	341,175	261,788	-	-	-	261,788
Net assets released from restrictions	41,457	-	(41,457)	-	-	58,533	-	(58,533)	-	-
Total operating revenue and support	9,756,305	647,175	42,236	10,000	10,455,716	10,301,654	635,497	24,160	1,500	10,962,811
Expense										
Program Services										
Meetings	2,488,936	-	-	-	2,488,936	2,740,742	-	-	-	2,740,742
Membership	961,167	-	-	-	961,167	851,208	-	-	-	851,208
Publications	1,178,067	4,179	-	-	1,182,246	1,184,692	-	-	-	1,184,692
Programs	2,261,933	-	-	-	2,261,933	2,182,485	-	-	-	2,182,485
Section expenses	104,504	683,081	-	-	787,585	83,437	617,361	-	-	700,798
Education	531,660	12,690	-	-	544,350	471,560	15,258	-	-	486,818
Grants and awards	333,780	-	-	-	333,780	251,586	-	-	-	251,586
Total program services	7,860,047	699,950	-	-	8,559,997	7,765,710	632,619	-	-	8,398,329
Supporting services										
Management and general	1,385,983	-	-	-	1,385,983	1,343,460	-	-	-	1,343,460
Fundraising	221,525	-	-	-	221,525	212,837	-	-	-	212,837
Total supporting services	1,607,508	-	-	-	1,607,508	1,556,297	-	-	-	1,556,297
Total expense	9,467,555	699,950	-	-	10,167,505	9,322,007	632,619	-	-	9,954,626
Change in net assets from operating activities	288,750	(52,775)	42,236	10,000	288,211	979,647	2,878	24,160	1,500	1,008,185
<b>Nonoperating Activities</b>										
Unrealized gains on investments	1,748,220	-	149,352	-	1,897,572	557,546	-	50,716	-	608,262
Change in net assets	2,036,970	(52,775)	191,588	10,000	2,185,783	1,537,193	2,878	74,876	1,500	1,616,447
Net assets, beginning of year	16,267,461	1,434,182	682,331	788,526	19,172,500	14,730,268	1,431,304	607,455	787,026	17,556,053
Net assets, end of year	\$ 18,304,431	\$ 1,381,407	\$ 873,919	\$ 798,526	\$ 21,358,283	\$ 16,267,461	\$ 1,434,182	\$ 682,331	\$ 788,526	\$ 19,172,500

# 2017 Audit Report for the American Statistical Association Continued

## American Statistical Association

### Statements of Cash Flows

Year Ended December 31,	2017	2016
<b>Cash flows from operating activities</b>		
Change in net assets	\$ 2,185,783	\$ 1,616,447
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Depreciation and amortization	399,308	339,181
Amortization of bond issuance costs	6,637	6,637
Change in allowance for doubtful receivables	-	(10,548)
Equity in earnings from joint venture	(40,897)	(34,195)
Contributions restricted for investment in perpetuity	(10,000)	(1,500)
Unrealized and realized gains on investments	(2,245,096)	(1,132,699)
Changes in assets and liabilities:		
Accounts receivable	(87,598)	153,581
Prepaid expenses	(10,722)	165,105
Accounts payable and accrued expenses	(36,618)	116,944
Deferred revenue	122,666	83,995
Total adjustments	(1,902,280)	(313,469)
Net cash provided by operating activities	283,503	1,302,978
<b>Cash flows from investing activities</b>		
Purchases of investments	(3,375,431)	(3,761,836)
Proceeds from sale of investments	(6,575,694)	2,936,866
Purchases of property and equipment	(47,442)	(230,747)
Net cash used in investing activities	(247,705)	(1,055,717)
<b>Cash flows from financing activities</b>		
Principal payment on bonds payable	(324,469)	(315,678)
Principal payments on capital lease	-	(26,050)
Contributions restricted for investment in perpetuity	10,000	1,500
Equity distribution from joint venture	34,195	68,474
Due to joint venture	11,615	(62,644)
Net cash used in financing activities	(288,659)	(334,368)
<b>Net (decrease) in cash and cash equivalents</b>	<b>(232,861)</b>	<b>(87,137)</b>
Cash and cash equivalents, beginning of year	547,275	634,412
<b>Cash and cash equivalents, end of year</b>	<b>\$ 314,414</b>	<b>\$ 547,275</b>
Supplemental disclosure of cash flow information:		
Income taxes paid	\$ 60,150	\$ 100,700
Interest paid	\$ 115,777	\$ 125,060

See accompanying notes to the financial statements.

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## American Statistical Association

### Notes to Financial Statements

#### A. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**Organization:** The American Statistical Association (the Association) was founded in 1839 and incorporated in 1941 under the not-for-profit laws of the Commonwealth of Massachusetts as a professional association serving statisticians and all individuals interested in the study and/or application of statistics. The Association's objectives are to foster statistics and its applications, to promote unity and effectiveness of effort among all concerned with statistical problems, and to increase the contribution of statistics to human welfare. The Association conducts meetings, produces publications devoted to statistical methodology and its applications, makes available information concerning the science of statistics and its contributions, cooperates with organizations in the advancement of statistics, stimulates research, promotes high professional standards and integrity in the application of statistics to problems of science and of public policy, fosters education in statistics, and, in general, makes statistics of service to science and society.

**Basic of presentation:** The Association is required to report information regarding its financial position and activities according to three classes of net assets: unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets.

**Basic of accounting:** The financial statements are prepared on the accrual basis of accounting. Revenue is recognized when earned and expense when the obligation is incurred.

**Use of estimates:** The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Actual results could differ from estimates.

**Cash and cash equivalents:** For financial statement purposes, all highly-liquid investments with a maturity of three months or less at the time of purchase are considered to be cash equivalents, except for money market funds held in the investment portfolio. Cash and cash equivalents also include funds held in a bank account on behalf of a joint venture.

**Accounts receivable:** Accounts receivable consist of amounts due from the sale of subscriptions, publications, and conferences. Accounts receivable are presented net of an allowance for doubtful accounts. The allowance for doubtful accounts is provided based upon management's judgment, including such factors as prior collection history and type of receivable. As of December 31, 2017 and 2016, the allowance for doubtful accounts was \$10,000. The Association writes-off receivables when they become uncollectible, and payments subsequently received on such receivables are credited to the allowance for doubtful accounts.

**Equity in joint venture:** The Association has an investment in a joint venture to produce a journal called *Technometrics*. The Association accounts for its investment using the equity method due to its lack of control over the joint venture. Under the equity method, the original investment is recorded at cost and adjusted by the Association's share of undistributed earnings or losses of the joint venture. Distributions of approximately \$34,000 and \$68,000 were received during the year ended December 31, 2017 and 2016, respectively.

## American Statistical Association

### Notes to Financial Statements

#### A. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - CONTINUED

**Net assets:** Net assets are classified as unrestricted, temporarily restricted, or permanently restricted based on the existence or absence of donor-imposed restrictions. A description of each net asset group is as follows:

**Unrestricted, undesignated net assets:** Net assets whose use is not restricted by donors or internally designated for other uses.

**Unrestricted, board designated net assets:** Board designated net assets consist of accumulated, unspent unrestricted funds to be used for various section activities and board approved projects.

**Temporarily restricted net assets:** Net assets subject to donor-imposed stipulations that may be met by actions of the Association and/or passage of time.

**Permanently restricted net assets:** Net assets subject to donor-imposed stipulations that are to be maintained permanently by the Association. Generally, the donors of these assets permit the Association to use all or part of the income on related investments for general or specific purposes and prohibit the use of principal.

**Revenue recognition:** Membership dues are recognized ratably over the applicable membership period to which they apply. Payments for memberships, subscription sales, product sales, or services to be rendered and received in advance are deferred to the appropriate period.

Publication revenue is recognized upon delivery of the material.

All donor-restricted revenue is reported as an increase in temporarily or permanently restricted net assets, depending on the nature of the restriction. When a restriction expires (that is, when a stipulated time restriction ends or purpose restriction is accomplished), temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statements of activities as net assets released from restrictions.

**Functional allocation of expenses:** The costs of providing various programs and supporting services have been summarized on a functional basis in the statements of activities. Accordingly, certain costs have been allocated among the programs and supporting services benefited.

A description of the Association's programs and supporting services is as follows:

**Meetings:** The Association provides for various meetings and workshops that serve as a forum for the latest developments in statistical theory and application. These meetings offer a concentrated opportunity for the exchange of ideas and discussion of research findings among colleagues.

**Membership:** Costs related to member service maintenance.

**Publications:** The Association produces various publications and magazines. These publications represent the Association's commitment to the ongoing enhancement of statistical education and the public's understanding of statistics.

**Programs:** Various projects undertaken to further statistics among the public. This includes expenses for various awards presented, which increase the visibility of statistics and its methods with the general public, including science policy, various statistical outreach programs, a public awareness campaign, and online job advertising for statistics positions.

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## American Statistical Association

### Notes to Financial Statements

#### A. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - CONTINUED

**Section expenses:** Represent the Association's organization in groups by professional subject matter. These sections facilitate professional interchanges and research opportunities in statistics.

**Education:** The Association offers a wide range of continuing education opportunities, which represent a forum for emerging statistics research. These programs include workshops, lectures, and expenses related to the production and sale of educational materials. Additionally, the Association advocates and provides materials for statistics education at the K-12, community college undergraduate, and graduate levels, and provides leadership in the education community about statistics and data science.

**Grants and awards:** Represent expenses related to providing advice and technical assistance, which enhance statistical education through the support of federal, state, and local government agencies.

**Management and general:** Includes the functions necessary to secure proper administrative functioning of the Board of Directors, maintain an adequate working environment, and manage financial and budgetary responsibilities of the Association.

**Fundraising:** The expenditures associated with the Association's fundraising activities mainly consist of staff compensation and other costs associated with inducing potential donors to contribute to the Association's programs.

**Income taxes:** The Association is generally exempt from Federal income taxes under the provisions of Section 501(c)(3) of the Internal Revenue Code. In addition, the Association has been classified as an organization that is not a private foundation under Section 509(a)(2) of the Internal Revenue Code. However, the Association is required to report unrelated business income to the Internal Revenue Service and the state of Virginia, as well as pay certain other taxes to local jurisdictions. The Association incurred approximately \$90,000 and \$84,000 in income tax expense on unrelated business income related to net income earned on advertising sales for the years ended December 31, 2017 and 2016, respectively.

**Measure of operations:** The Association does not include unrealized gains and losses on investments in the change in net assets from operating activities.

**Subsequent events:** Subsequent events have been evaluated through March 16, 2018, which is the date the financial statements were available to be issued.

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## American Statistical Association

### Notes to Financial Statements

#### B. CONCENTRATIONS

**Credit risk:** The Association maintains demand deposits with commercial banks and money market funds with financial institutions. At times, certain balances held within these accounts may not be fully guaranteed or insured by the U.S. Federal government. The uninsured portions of cash and money market accounts are backed solely by the assets of the underlying institution. As such, the failure of an underlying institution could result in financial loss to the Association.

**Market value risk:** The Association also invests funds in various marketable securities. Such investments are exposed to market and credit risks. Thus, the Association's investments may be subject to significant fluctuations in fair value. As a result, the investment balances reported in the accompanying financial statements may not be reflective of the portfolio's value during subsequent periods.

#### C. INVESTMENTS AND FAIR VALUE MEASUREMENTS

In accordance with generally accepted accounting principles, the Association uses the following prioritized input levels to measure fair value. The input levels used for valuing investments are not necessarily an indication of risk.

**Level 1** – Observable inputs that reflect quoted prices for identical assets or liabilities in active markets, such as stock quotes.

**Level 2** – Includes inputs other than level 1 that are directly or indirectly observable in the marketplace, such as yield curves or other market data.

**Level 3** – Unobservable inputs which reflect the reporting entity's assessment of the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk such as bidask spreads and liquidity discounts.

Investments valued using Level 1 inputs include mutual funds, the fair values for which were based on quoted prices for identical assets in active markets. Investments valued using Level 2 inputs include corporate and government bonds which were based on the fair values of the underlying investments as determined by the fund managers. Management believes the fund managers' estimates to be reasonable approximations of the fair value of the investments. Investments recorded at cost include money market funds. Investments at cost are not required to be classified in one of the levels prescribed by the fair value hierarchy.

The following is a summary of investments at December 31:

	2017	2016
Investments, at fair value		
Mutual funds - equities (Level 1)	\$ 12,963,640	\$ 11,169,698
Mutual funds - fixed income (Level 1)	5,449,846	4,929,148
Corporate bonds (Level 2)	752,122	807,171
Government bonds (Level 2)	1,368,287	1,084,074
Investments, at cost		
Money market funds	278,466	374,951
	<b>\$ 20,810,361</b>	<b>\$ 18,365,042</b>

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## American Statistical Association

### Notes to Financial Statements

#### C. INVESTMENTS AND FAIR VALUE MEASUREMENTS - CONTINUED

Investment income, exclusive of amounts held in cash accounts, consists of the following for the years ended December 31:

	2017	2016
Unrealized gain	\$ 1,897,572	\$ 608,262
Interest and dividends	424,720	392,224
Realized gain	347,484	524,407
Investment fees	(74,488)	(67,254)
	<b>\$ 2,595,288</b>	<b>\$ 1,457,639</b>

#### D. PROPERTY AND EQUIPMENT

Property and equipment are stated at cost and depreciated on a straight-line basis over the estimated useful lives of the assets: 30 years for the building and improvements and 3 to 5 years for furniture and fixtures, equipment, and software. Equipment purchased through capital leases is amortized based on the straight-line method over the lesser of the estimated useful life of the equipment or the life of the lease. The Association capitalizes all property and equipment purchased with a cost of \$5,000 or more.

Property and equipment consists of the following at December 31:

	2017	2016
Building and improvements	\$ 8,541,220	\$ 8,514,420
Furniture and fixtures	211,869	211,869
Office equipment	202,772	202,772
Software	512,773	492,132
Computer equipment	166,321	166,321
Land	1,286,000	1,286,000
	10,920,955	10,873,514
Less: accumulated depreciation	(4,165,360)	(3,766,053)
	<b>\$ 6,755,595</b>	<b>\$ 7,107,461</b>

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# 2017 Audit Report for the American Statistical Association Continued

## American Statistical Association

### Notes to Financial Statements

#### E. JOINT VENTURE

The following schedule presents summarized financial information from the joint venture Technometrics, in which the Association has a 60% equity ownership, as of and for the years ended December 31:

	2017	2016
Condensed income statement information		
Revenues	\$ 129,937	\$ 120,555
Expenses	61,775	63,563
Net income	\$ 68,162	\$ 56,992
Condensed balance sheet information		
Total assets	\$ 89,877	\$ 73,431
Total liabilities	21,715	16,459
Net equity	\$ 68,162	\$ 56,992

The Association also has a maintenance agreement with the joint venture in which it provides management and collection services, office space, and editorial and administrative support. Amounts due to the joint venture as of December 31, 2017 and 2016 were \$44,014 and \$32,369, respectively. Maintenance agreement revenue earned by the Association was \$32,780 and \$33,194 for the years ended December 31, 2017 and 2016, respectively.

#### F. BONDS PAYABLE

On August 1, 2005, the Association entered into an agreement with the Industrial Development Authority of the City of Alexandria to issue \$5,500,000 of Industrial Development Revenue Bonds (the Bonds) on behalf of the Association to finance the purchase and renovation of a new headquarters building. During the year ended December 31, 2013, the Association refinanced its outstanding Industrial Development Revenue Bonds (the Bonds) that were due to mature on May 31, 2030. The Association paid the balance due on the Revenue Bonds and issued Revenue Refunding Bonds (the Bonds) for \$5,396,000 with SunTrust Bank, the holder of the Bonds, which have a maturity date of August 1, 2030. The Bonds are callable on May 1, 2028, by the bondholder with 120 days' notice. Interest on the Bonds is calculated at a fixed rate of 2.75%. The Bonds are collateralized by the land and building owned by the Association. In connection with the Bonds, the Association must be in compliance with certain specified covenants.

Interest expense incurred for the years ended December 31, 2017 and 2016, was \$115,777 and \$125,050, respectively. Annual principal payments on the Bonds at December 31, 2017, are due in future years as follows:

	Amount
2018	\$ 333,506
2019	342,793
2020	352,340
2021	362,152
2022	372,238
2023 - 2028	2,240,544
	\$ 4,003,873

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## American Statistical Association

### Notes to Financial Statements

#### H. ENDOWMENT - CONTINUED

In accordance with UPMIFA, the Association considers the following factors in making a determination to appropriate or accumulate donor-restricted funds: (1) duration and preservation of the fund; (2) purposes of the Association and the donor-restricted endowment fund; (3) general economic conditions; (4) possible effect of inflation and deflation; (5) expected total return from income and the appreciation or depreciation of investments; (6) other resources of the Association; (7) investment policies of the Association.

The Association has adopted investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to programs supported by its endowment while seeking to maintain purchasing power of the endowment assets. All earnings of the endowment are reflected as temporarily restricted net assets until appropriated for expenditure based on donor restrictions by the various Committees of the Association. The Board of Directors has assigned a Committee to each program for the purposes of selecting and recommending individuals for awards or grants.

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level that the donor or UPMIFA requires the Association to retain as a fund of perpetual duration. In accordance with GAAP, deficiencies of this nature that are reported in unrestricted net assets were \$0 and \$3,899 as of December 31, 2017 and 2016, respectively.

Endowment net assets consisted of the following at December 31:

	2017			
	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Noether Memorial Fund	\$ -	\$ 62,456	\$ 206,506	\$ 268,962
Sirken Award	-	19,899	150,000	169,899
Youten Award	-	81,366	61,082	142,448
Deming Lecture Fund	-	56,574	67,275	123,849
EC Bryant Fund	-	51,852	60,000	111,852
Wilks Memorial Fund	-	25,872	47,143	73,015
Walker Fund	-	13,739	45,000	58,739
Lings Lu Fund	-	13,932	41,270	55,202
Karl E. Peace Award	-	18,821	34,000	52,821
Marquardt Memorial Fund	-	19,030	26,250	45,280
Lester R. Curtin Award	-	14,439	25,000	39,439
Barfio Award	-	4,458	25,000	29,458
Links Lecture	-	10,000	10,000	20,000
	\$ -	\$ 394,437	\$ 798,526	\$ 1,192,963

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## American Statistical Association

### Notes to Financial Statements

#### F. BONDS PAYABLE - CONTINUED

Bonds are recorded on the statements of financial position net of the unamortized discount and debt issuance costs per the implementation of ASU 2015-03. Bonds Payable consist of the following as of December 31:

	2017	2016
Principal Amount	\$ 4,003,573	\$ 4,328,042
Less: Unamortized Debt Issuance Costs	(89,136)	(75,773)
	\$ 3,914,437	\$ 4,252,269

#### G. TEMPORARILY RESTRICTED NET ASSETS

Temporarily restricted net assets were available at December 31, 2017, for the following purposes, and net assets were released from restriction by incurring expenses satisfying the restriction purpose as follows:

	Balance December 31, 2016	Restricted Contributions	Investment Income	Released	Balance December 31, 2017
Cox Scholarship	\$ 138,189	\$ 405	\$ 13,448	\$ (2,000)	\$ 149,642
Youten Award	62,025	-	11,682	-	73,707
Deming Lecture Fund	64,602	-	17,714	(1,000)	81,316
EC Bryant Fund	44,408	-	15,706	(1,071)	59,043
Wilks Memorial Fund	39,727	1,500	14,027	(2,000)	53,254
Noether Memorial Fund	37,270	-	5,412	(2,188)	40,494
Bernard Harris Fund	34,006	5,200	33,944	(8,848)	64,302
Wiley Smith Scholarship Fund	33,814	-	4,980	(1,000)	37,794
Chen Award	29,106	-	4,024	(500)	32,630
MO Nabholz Scholarship Fund	28,119	-	4,048	(1,000)	31,167
Wilks Memorial Fund	25,845	-	9,546	(9)	35,382
Karl E. Peace Award	18,852	-	5,554	(508)	19,921
Lester R. Curtin Award	15,505	-	5,725	(2,000)	19,230
Walker Fund	8,361	-	7,413	(2,000)	13,774
Alinga Lu Fund	6,311	-	81	(1,000)	5,392
Other short-term funds	5,734	-	21,389	(1,602)	35,520
Sirken Award	3,014	-	3,687	(1,000)	5,691
Barfio Award	1,791	-	-	-	1,791
International Prize in Statistics	750	-	-	-	750
Julius Pearl Prize	-	10,000	-	(5,000)	5,000
Links Lecture	-	10,000	-	-	10,000
Student & Early Career Travel	-	1,558	-	-	1,558
	\$ 482,331	\$ 28,669	\$ 254,362	\$ (41,457)	\$ 723,915

#### G. TEMPORARILY RESTRICTED NET ASSETS - CONTINUED

Temporarily restricted net assets were available at December 31, 2016, for the following purposes, and net assets were released from restriction by incurring expenses satisfying the restriction purpose as follows:

	Balance December 31, 2015	Restricted Contributions	Investment Income	Released	Balance December 31, 2016
Cox Scholarship	\$ 128,442	\$ 684	\$ 11,317	\$ (2,024)	\$ 138,189
Youten Award	77,880	-	6,788	(2,000)	82,668
Deming Lecture Fund	85,559	-	10,143	(1,000)	94,602
EC Bryant Fund	38,776	-	9,185	(3,002)	44,959
Wilks Memorial Fund	34,684	-	8,124	(2,000)	40,808
Wilks Memorial Fund	34,071	3,750	3,041	(2,136)	38,727
Noether Memorial Fund	31,154	-	19,874	(8,860)	37,270
Bernard Harris Fund	31,154	200	2,741	-	34,006
Wiley Smith Scholarship Fund	29,887	-	2,751	(1,000)	31,638
Chen Award	28,108	-	2,431	(500)	29,039
MO Nabholz Scholarship Fund	27,754	-	2,863	(1,000)	29,617
Wilks Memorial Fund	25,104	-	1,741	(1,000)	25,845
Marquardt Memorial Fund	19,125	-	3,782	(1,000)	21,907
Lester R. Curtin Award	9,185	-	3,017	(1,000)	11,192
Walker Fund	5,817	-	3,915	(1,000)	8,732
Alinga Lu Fund	5,807	-	4,345	(2,000)	8,152
Other short-term funds	4,407	-	367	(14,779)	3,795
Sirken Award	-	-	10,488	(8,871)	1,617
Barfio Award	-	-	2,118	(1,000)	1,118
International Prize in Statistics	-	-	-	-	-
Julius Pearl Prize	-	10,000	-	(10,000)	-
	\$ 897,485	\$ 14,054	\$ 118,856	\$ (58,055)	\$ 961,340

#### H. ENDOWMENT

The Association's endowment funds have been established for the purpose of awards and grants supporting education and research in the field of statistics. The Association's policies for making appropriations for expenditures are to follow the directives of the donors and to comply with the regulations in the state laws for endowments. Under accounting principles generally accepted in the United States of America, net assets associated with endowment funds are classified and reported based on the existence or absence of donor-imposed restrictions.

Though management of the Association has not conducted a formal analysis of its compliance with the Uniform Prudent Management of Institutional Funds Act (UPMIFA), it has established policies regarding the preservation, investment and expenditure of permanently restricted net assets. Consistent with generally accepted accounting principles management believes that permanently restricted funds require the preservation of the fair value of the gifts, and that earnings on those funds should be classified in accordance with the donor's stipulations, if any, as either temporarily restricted or unrestricted.

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## American Statistical Association

### Notes to Financial Statements

#### H. ENDOWMENT - CONTINUED

	2016			
	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Noether Memorial Fund	\$ -	\$ 37,370	\$ 206,506	\$ 243,876
Sirken Award	-	3,514	150,000	153,514
Deming Lecture Fund	-	44,439	67,275	111,714
Youten Award	-	64,602	61,082	125,684
EC Bryant Fund	-	40,325	60,000	100,325
Wilks Memorial Fund	-	16,832	47,143	63,975
Walker Fund	-	8,326	45,000	53,326
Alinga Lu Fund	-	3,014	6,000	9,014
Karl E. Peace Award	-	12,825	34,000	46,825
Marquardt Memorial Fund	-	14,305	26,250	40,555
Lester R. Curtin Award	-	10,830	25,000	35,830
Barfio Award	-	7,791	25,000	32,791
	\$ -	\$ 263,626	\$ 788,526	\$ 1,052,152

For the years ended December 31, 2017 and 2016, the Association had the following endowment-related activities:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowment assets, January 1, 2017	\$ -	\$ 263,626	\$ 788,526	\$ 1,052,152
Contributions	-	10,000	10,000	20,000
Net appreciation and income	-	148,958	-	148,958
Appropriation of endowment assets for expenditure	-	(28,157)	-	(28,157)
Endowment assets, December 31, 2017	\$ -	\$ 394,437	\$ 798,526	\$ 1,192,963

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowment assets, January 1, 2016	\$ (3,890)	\$ 211,378	\$ 787,025	\$ 995,114
Contributions	-	-	1,500	1,500
Net appreciation and income	-	85,285	-	85,285
Appropriation of endowment assets for expenditure	3,890	(33,621)	-	(29,737)
Endowment assets, December 31, 2016	\$ -	\$ 263,626	\$ 788,526	\$ 1,052,152

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## American Statistical Association

### Notes to Financial Statements

#### I. RETIREMENT PLANS

The Association has a 401(k) profit sharing plan and a money purchase plan. Both plans cover substantially all full-time employees from date of hire. Under the terms of the 401(k) profit sharing plan, the Association will match 100% of the participating employee's contributions, up to 3% of the employee's salary. Under the terms of the money purchase plan, the Association contributes 6% of an eligible employee's compensation to the plan. Contributions to the plans were as follows for the years ended December 31:

	2017	2016
Money purchase plan	\$ 193,899	\$ 201,000
401(k) profit sharing plan	54,147	97,430
	\$ 248,046	\$ 298,430

#### J. COMMITMENTS AND CONTINGENCIES

**Hotel space:** The Association reserves hotel space for its conventions several years in advance. The contracts stipulate the number of rooms to be reserved and the time period for which they are to be reserved. As of the date of this report, contracts for hotel space had been entered into through 2023. However, due to the numerous variables involved, the Association's potential liability under these contracts cannot be determined.

**Legal matters:** From time to time, the Association may be subject to various legal proceedings, which are incidental to the ordinary course of business. In the opinion of management, there are no material legal proceedings to which the Association is a party.

**Employment agreement:** The Association has an employment agreement with its Executive Director, whereby, if the Association were to terminate the agreement without cause, the Association would be required to make certain payments to the Executive Director. The latest extension of the agreement is set to end in August 2021 unless further extended.

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STATtr@k

# The Local ASA Chapter Is My Justice League



**Scott McClintock** earned his PhD in statistics from the University of Kentucky. He has spent the 10 years since teaching statistics at West Chester University. His research interests include statistical education and financial statistics. He is the current president of the ASA's Philadelphia Chapter.

I still recall a comic that emphasized the tragic childhood of Superman. After a hard day playing with his super-dog, Krypto, a young, boyish Superman flies to the moon. Krypto is his best, in fact only, friend. He can only be himself with Krypto. He must hide his powers from everyone else to escape fear and persecution. He can't play sports with the other children because he might throw the football too hard and decapitate somebody. He can't make eye contact with a girl because he might accidentally incinerate her with his heat vision.

So, he sits on the moon instead.

And he gazes through the vast, empty, lonely depths of outer space. And he cries.

Of course, years later—after saving his beloved city dozens of times from tyrant dolphins and subterranean dinosaurillas and

Friday the 13th—he finally discovers others like him. Wonder Woman! Batman! And everyone else! Through larger-than-life collaboration, they can tackle problems on a grander scale. Instead of helping old ladies cross the treacherous freeways of Metropolis, they instead are empowered to topple galactic dictatorships and fight world hunger and poverty. In their unity, they find increased productivity. And fulfillment.

And, best of all, friendship.

Surely some of us can relate? The lone statistics professor embedded within a mathematics department. The company's single statistician. Or those who are "part" of a one-person statistical consulting team.

It's easy to feel alone.

I was a bit like that young Superman when starting my own career. I was lucky enough to be the third statistician in my

department, so loneliness was less of an issue. But I was myopic. And, perhaps this is something we might also be able to relate to, my entire statistical world for the first six years of my professional life was "The West Chester Math Building." Thankfully, my world view was immeasurably broadened when I discovered the ASA.

The ASA was my professional turning point. My Justice League. And, for the most part, when I talk about the ASA, I am referring to my local chapter, the Philadelphia Chapter. Through our chapter, I learned firsthand about the amazing educational work being done not just by "The West Chester Math Building," but by the dozens of surrounding colleges.

Through our chapter, I was humbled to learn about how our pharma colleagues are saving lives daily.

Through our chapter, I was astounded to learn about the





shrewd, innovative statistical techniques our financially oriented fellows use daily to keep our economy running smoothly.

Through our chapter, I've seen the amazing, altruistic work in artificial intelligence being done by statisticians who are not only high-level researchers, but also my neighbors. Work that is doubtlessly poised to change the world.

Most amazing of all, this is just the tip of the vast iceberg that is Philadelphia.

I wish I hadn't wasted those six years. I wish I could have discovered the ASA earlier in my career, much as—I would imagine—Superman wishes he could have met Batman and Wonder Woman on some toddler playdate. But! While it is too late for us as it is, it is never too late for you. And, with that in mind, I hope you will consider the following suggestions:

1. If you have not already, please consider joining your local ASA chapter.
2. If you have already joined, then please consider reaching out to those around you and encouraging them to also join. If you are a teacher/professor, consider advertising the ASA's astoundingly low (and perhaps financially irresponsible) student rates. Heck, consider asking your department or school to help pay for such memberships—if nothing else, through a raffle or data-thon. Ask professional colleagues to consider membership, as well. For those who are daunted by the nonstudent price tag of full-blown ASA membership, consider the possibility of chapter-only membership.
3. Consider reaching out to those who run your chapter. At the end of the day, we get out of life what we put into it, and we cannot discover the joys and benefits of a community without walking out of our own front door. What can the chapter do for

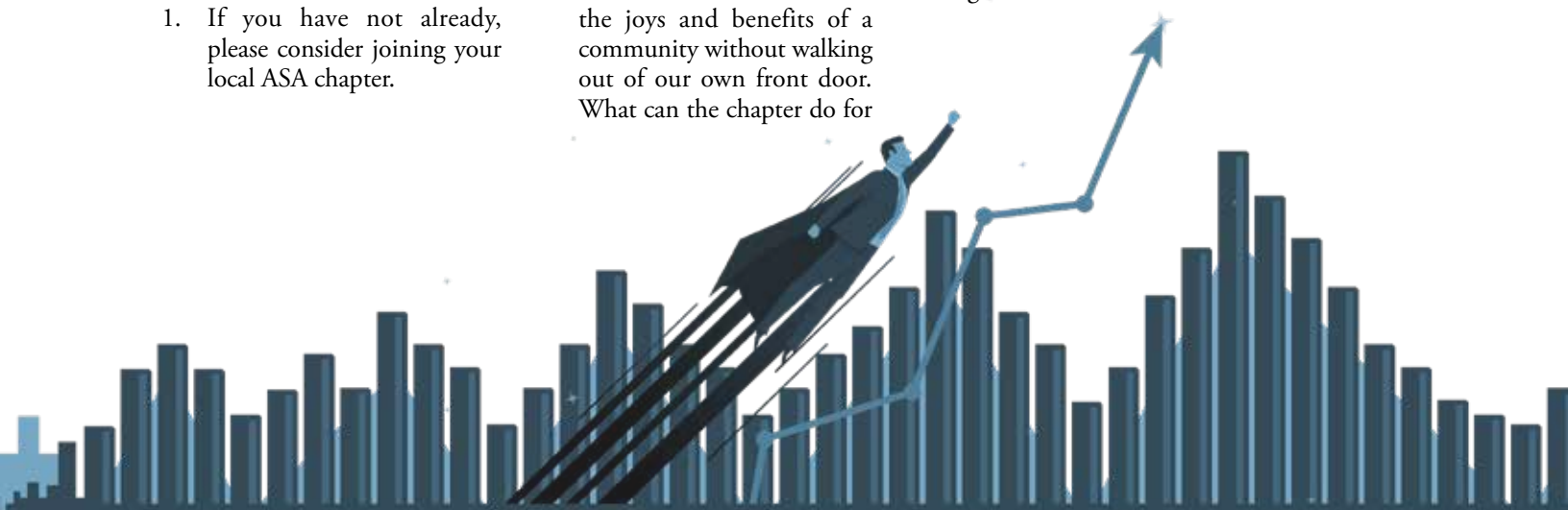
you that would be personally meaningful? Even more importantly, in your discussions with colleagues who are not currently ASA members, ask them what the chapter might do that would make enrolling worthwhile for them. At the end of the day, your chapter is your chapter. And, despite being part of a vast, national organization, chapters still have the flexibility and freedom to be whatever we want them to be.

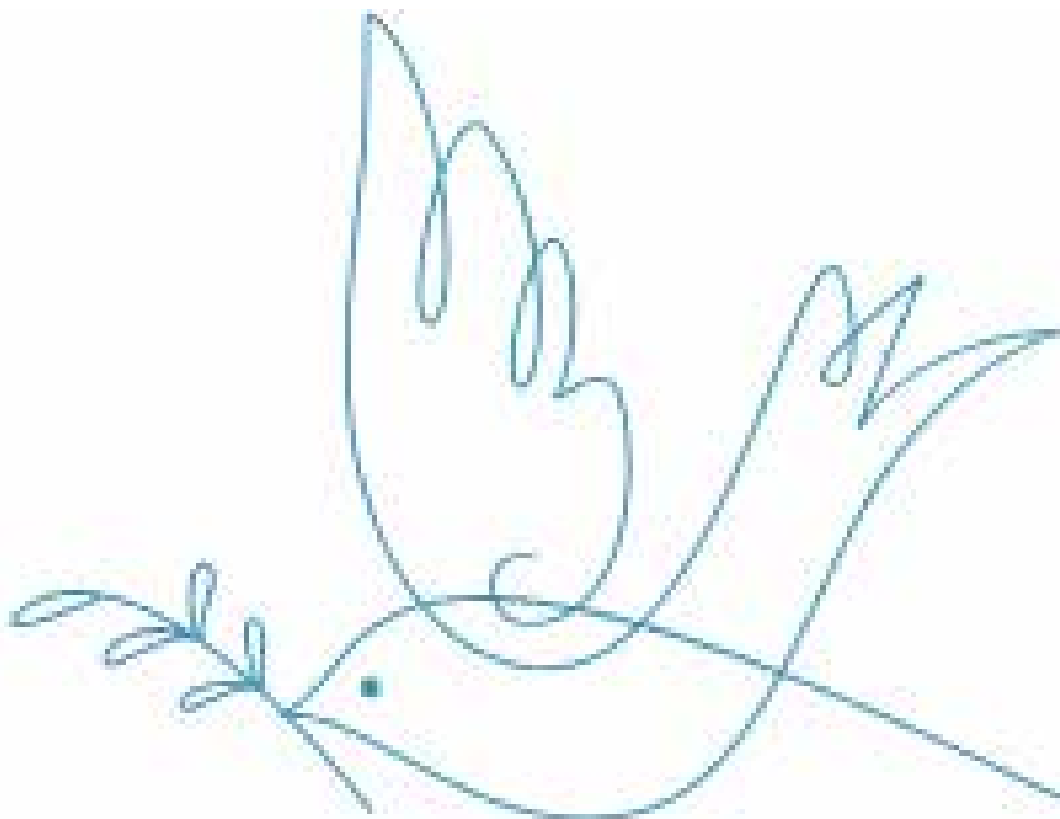
My hope as I started my tenure as chapter president was that we might find a way to unite, bringing together our unique powers and perspectives to best leverage our statistical super-heroism for the greater good.

Or, perhaps more humbly, to show the world our area has more to be proud of than sports teams and regional cuisine. ■

#### MORE ONLINE

Discover your local chapter at <http://bit.ly/ASACHapters>.





With a PhD in statistical astrophysics, **David Corliss** works in analytics architecture at Ford Motor Company while continuing astrophysics research on the side. He is the founder of Peace-Work, a volunteer cooperative of statisticians and data scientists providing analytic support for charitable groups and applying statistical methods to issue-driven advocacy in poverty, education, and social justice.

## STATS4GOOD

# The (Higher) Power of Data for Good

Data for Good volunteers can be found in many places and situations—at work, Data for Good organizations like Statistics without Borders, DataKind, and topic-driven organizations focused on a particular subject such as supporting a school. One area attracting volunteers for good causes are faith-based organizations. Obviously, Data for Good brings in people across the spectrum—from entirely secular to religiously motivated, from every faith and none. For those connected to a faith-based group in some way, Data for Good volunteers can be an invaluable resource.

Many faith-based groups have turned to statistics and data sci-

ence as critical components of achieving their mission of serving people and the community. Identifying drivers of poverty and homelessness, survey design and analysis, models to improve the effectiveness of refugee programs, discrimination and injustice research, and data-driven guidance for reform initiatives such as prisons and sentencing are a few examples of how faith-based groups are using statistical volunteers today. The most common use of statistics, however, is in operations research for the organization itself—surveys to understand the needs and interests of members, increasing membership and fundraising, and optimizing the use of space and other resources.

A great example of what can be done at a local level can be found at a synagogue in Chicago, Congregation Rodfei Zedek. Located near The University of Chicago and with many people having analytic experience in the congregation, Rodfei Zedek has formed its own informatics committee. Led by congregation member and statistician Andrea Frazier, the team's goals include building stronger relationships and fostering data-driven decision-making.

An important analytic use case for any membership organization is ... membership! The informatics committee at Rodfei Zedek needs to track both individual and group memberships—classes and activities, households, and

larger family associations. The informatics team digitized all the records, cleaned the data, established variables for various group memberships, and flagged special skills—for example, informatics! All members are matched to roles in which they possess the requisite skills to broaden the number of people participating. This database has resulted in more efficient program management, improved program participation, and better use of member resources.

The informatics team also evaluates programs. Surveys are conducted using one of the common online survey tools and the data analyzed and visualizations created to better understand how people feel about programs. Analysis produces data-driven insights to guide improvements. Predictive modeling is used to understand the key

in the civil calendar each year. Easter, for example, falls on the Sunday after the first full moon in spring, while Diwali falls on the new moon in the period from late October to early November.

Predictive analytics can describe the interaction of these “moveable feasts” with the civil calendar based on day of the week and other events. Analytics predicting attendance—and therefore required resources—can also address over-crowded holiday periods. Predictive analytics can support an answer to those who want to push one more event into an already over-crowded holiday period by giving solid estimates of the number of volunteers required and how many people will be able to participate.

Statistical science can analyze and identify the challenges facing

groups you are active in can be helped by a Data for Good team.

While the Rodfei Zedek informatics team was developed to use the analytic resources available within a particular community of faith, the model can be applied to many kinds of organizations. School support groups, service organizations (e.g., Rotary, Kiwanis, etc.), alumni organizations, and many more can benefit. As long as there is a large group of people, especially where there are many professions, there is likely to be a subset with the analytic and data skills needed to form an informatics team.

Does your community, civic, faith-based, or other organization use statistics and data science for projects in your community? Let us know! We are always looking for inspiring examples of Data for

factors driving member engagement and estimate the attendance to be expected for a given event. Events can be selected based of the level of interest within the group and planned with clear expectations of the amount of participation. An event that will attract dozens or more can be placed in a larger room and more volunteers recruited to support it.

As people involved with charity management will be familiar, some important activities will attract just a handful of people. Predictive analytics can direct these toward smaller meeting rooms, or even other locations such as people's homes.

Many important religious celebrations occur on different days

the wider community, enabling closer partnerships and helping to address the sadly common issue of congregations that have grown away from their surrounding community. Frazier emphasizes the diverse purposes Data for Good can serve, which can be used “to save the world, but it’s also valuable for enhancing your own community.... It’s a great tool for the greater good!”

Once an informatics team is developed, it can take on challenges well beyond the walls of the congregation. Assessing the needs of the community, fighting poverty and homelessness, supporting local schools—almost any objective of the community

Good to feature in this column.

For new Data for Good opportunities this month, consider having a look at Statistics without Borders (<http://bit.ly/2wSa5bW>). It’s a great organization with many wonderful opportunities to work in Data for Good. Also, Peace-Work is looking for people interested in homelessness solutions to study the Utah program that has reduced homelessness there by 91% in recent years and perform economic analysis of the feasibility of doing the same in the investigator’s home state. You can contact them at [www.peace-work.org](http://www.peace-work.org). ■

## PASTIMES OF STATISTICIANS

# What Does Steve Ascher Like to Do When He Is Not Being a Statistician?



Steve Ascher

## Who are you, and what is your statistics position?

I am Steve Ascher, 2017 president of the ASA New Jersey Chapter. I was vice president in 2011 and 2012, president in 2013 and 2014, and president in 2016 and 2017. I've been an ASA member for more than 40 years. I retired from Johnson & Johnson in May of 2016 after nearly 40 years as a professional statistician (five years teaching at Temple University, seven years at two contract research organizations, and 26 years for J&J). My last position at J&J was as senior director, managing a phase 4 statistics group.

## Tell us about what you like to do for fun when you are not being a statistician.

I have many hobbies that keep me busy (baseball memorabilia, coins, Beatles). A relatively new one, compared to those mentioned above, is horse show announcing. Riders compete in various disciplines at shows and the announcer—in concert with the judge and in-gate person—is responsible for letting the judge know who is in the ring for what is called the “over fences classes” (i.e., riders individually negotiate a series of eight jumps in a specific order).

I would say, “Now in the ring is number 121, Bonnie Ascher riding Chance Encounter.” (Bonnie, my daughter, did ride a horse called Chance Encounter. She is now an equine veterinarian.)

In what is called the under-saddle class, where all the riders are



Steve Ascher calls at a recent horse show.

in the ring together, the announcer on cue from the judge tells the riders what to do. For example, when the judge says, “Walk to me,” I then announce, “All riders are being judged at the walk; all walk please.” When the judge has the results, they are given to me and I will announce, “First place and our congratulations go to number 121 Bonnie Ascher, riding Chance Encounter.”

In a different category, called show jumping, horses enter the ring one at a time and negotiate a set course of jumps. In show jumping, there is no subjectivity, as horses receive four faults for each jump rail knocked down and time faults if they go over the allotted course time. The object is to get zero faults. My announcing in this competition also lets the judge know who is in the ring and then to announce the total faults for each rider as they complete the round. I then announce the final results.

Being behind the microphone gives me the opportunity to express myself in ways my friends and family would not necessarily

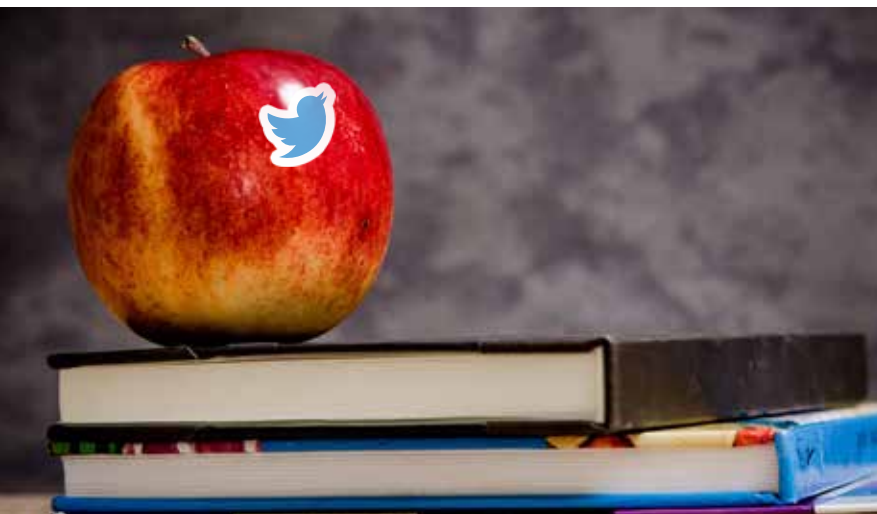
recognize! I try to make it exciting for the riders and spectators. In some larger events, I am provided with Olympic-style music, which I play as background while I announce the results. It lends a majestic air to the event!

## What drew you to this hobby, and what keeps you interested?

I was originally drawn to announcing when the regular announcer at the barn where my daughter rode was not available. I filled in and have been doing it ever since. This was a way to help at our barn (no pay) and keep me involved in the horse show beyond watching my daughter compete. Now that I am retired, I announce at several area shows and actually get paid for it!

Sitting next to judges has given me a new appreciation for how difficult the sport is. It also gives me the opportunity to watch a sport I love up close and personal. I plan to increase my horse show announcing career! ■





# Academic Twitter – Statistics Education

Many academics and fields use Twitter as a professional resource. As we all know, statistics education is a field filled with great ideas and wonderful people from all over the world. However, searches for posts relating to statistics education return few results, indicating a lack of presence of our field on Twitter. The information below should help academics and professionals who work at the intersections of statistics, education, and teaching to create and use Twitter accounts to help develop an active, informative social media network.

## Definitions

- **Microblogging:** Activity or practice of making short, frequent posts to a microblog (e.g., Twitter).
- **Hashtag:** A word or phrase preceded by a hash or pound sign (#) and used to identify messages about a specific topic.
- **List:** A curated group of Twitter accounts. You can create your own lists or subscribe to lists created by others. Viewing a list timeline will show you a stream of Tweets from only the accounts on that list.
- **Follow:** Following another user means that all their tweets will appear in your feed.

## Uses of Twitter for Academics

- **Build/maintain professional networks:** *during conferences; information sharing; literature recommendations; learn about academic/professional opportunities; career advice; microblogging*
- **Advertise:** *research; events; publications; other updates*
- **Increase visibility:** *individual; field*

## Academic Twitter Resources

- Using Twitter in Academia (<http://bit.ly/2IR7KTi>)
- Using Twitter in University Research, Teaching, and Impact Activities: A Guide for Academics and Researchers (<http://bit.ly/2IusJrQ>)
- 10 Commandments of Twitter for Academics (<http://bit.ly/2IOwR9q>)
- Twitter Glossary (<https://help.twitter.com/en/glossary>)

## Twitter Accounts to Follow

- **@AmstatNews**  
American Statistical Association
- **@RoyalStatSoc**  
Royal Statistical Society
- **@CAUSEweb**  
Consortium for the Advancement of Undergraduate Statistics Education
- **@NCTM**  
National Council of Teachers of Mathematics
- **@IntCSE**  
International Centre for Statistical Education
- **@ThisisStats**  
ASA project to raise awareness of careers in statistics
- **@signmagazine**  
Statistics magazine and website by the Royal Statistics Society and ASA
- **@DrSteveFoti**  
Me

## Common Abbreviations

Since a tweet is limited to 140 characters, abbreviations are used to replace commonly used phrases. This is a list of frequently used abbreviations, but you will likely encounter many more. Use your favorite search engine if you need help decoding one.

**RT:** retweet

**MT:** modified tweet

**FWIW:** for what it's worth

**BTW:** by the way

**IMO:** in my opinion ■

## RELEVANT HASHTAGS

#statistics  
#statistician  
#StatEd  
#StatisticsEducation  
#statliteracy  
#biostatistics  
#BiostatEd  
#data  
#dataliteracy  
#JSM2018  
#DataScience  
#rstats  
#NoticeWonder

## ABOUT THE AUTHOR

**Steven Foti** is a clinical assistant professor in the department of biostatistics and the director of the online MS program at the University of Florida. He earned his PhD in statistics education and his MS in statistics from the University of Florida, while earning his BS in applied mathematics and statistics and physics from Clarkson University. He teaches biostatistics courses to both undergraduate and graduate students in public health and medicine. Follow Foti on Twitter @DrSteveFoti.



# Come to WSDS

for Interaction, Knowledge, Community, Inspiration

## Not to Be Missed

### KEYNOTE

#### **Nancy Potok**

Chief Statistician of the United States, US Office of Management and Budget

### PLENARIES

#### **Aarti Shah**

Senior Vice President, Information Technology, and Chief Information Officer, Eli Lilly & Co.

#### **Claudia Perlich**

Senior Data Scientist, Two Sigma

#### **Alicia Carriquiry**

Distinguished Professor of Statistics, Iowa State University

### SHORT COURSES

#### **Mine Çetinkaya-Rundel**

Associate Professor, Department of Statistics, Duke University, and Data Scientist and Professional Educator, RStudio

#### **Shanthi Sethuraman**

Senior Director Global Statistical Sciences, Eli Lilly & Co.

The Women in Statistics and Data Science conference has become one of the ASA's most popular and positive conferences. Last year's WSDS welcomed more than 450 attendees, sponsors, and exhibitors. This fall's conference should be on your list of must-attend events.

Women in Statistics and Data Science will take place this October in Cincinnati, Ohio. When we convene, we will gather professionals and students from academia, industry, and

the government who are working in statistics and data science. WSDS offers unique opportunities to grow your influence, your community, and your knowledge, but—more importantly—to interact with other leading women in the field.

With a wide range of content—including engaging plenaries, poster sessions, short courses, and concurrent sessions about managing family-work balance, cutting-edge advances, and growing in your career—each attendee

**Women in** | **conference**  
Statistics and Data Science | October 18-20, 2018

will find enriching material to help them at any stage.

Leaders from academia, industry, and government will come together to present a world-class experience for attendees, from student and postgraduates to seasoned professionals. Aarti Shaah of Eli Lilly, Claudia Perlich of Dstillery/

NYU, and Alicia Carriquiry from Iowa State will give plenary talks. The technical content will again be top notch, but what sets this conference apart is the hands-on, warm, and engaging environment that proves particularly conducive to learning and growing in both professional and personal ways.

What do attendees say about WSDS? They call the meeting welcoming, inspiring, empowering, motivating, eye opening, and awesome!

Mark October 18–20 on your calendar and learn more by visiting [www.amstat.org/wds](http://www.amstat.org/wds). ■

**MORE ONLINE**  
Visit @AmstatNews on Periscope to view previous talks: <http://bit.ly/AmStatTalks>.



Ann-Marie Akiwumi



Sherry Chi Wen



Regina Nuzzo



## TWITTER HIGHLIGHTS

from WSDS 2017

**Emma Benn** @EKTBenn

"Never make a decision in the heat of the moment"—Great advice from #WSDS2017 networking & peer mentoring junior #statistician panel

**Christina** @canoodleson

Find a mentor who scares you just a little bit." Dr. Jo Hardin #WSDS2017

**Isabella R. Ghement** @IsabellaGhement

Kindness matters in the good times and especially in bad times." Dr. Anja Panorska at #WSDS2017

**Tawny B.** @tawnypaige10

#WSDS2017 Tip: Never say "oh that's be easy" it devalues our work #teamscience.

**Lucy** @LucyStats

Jeri Mulrow demonstrates that statisticians & data scientists are quite well-suited for leading change. #WSDS2017.

**Jennifer Thompson** @StatGirlAM My job is not to make mentees be like "me"; it's to make them be the best X they can be.

**Jennifer Thompson** @jent103

#WSDS2017 = the friendliest, most welcoming conference I've attended. Thanks to the organizers, and to attendees for sharing your work & selves!



Throughout the 2017 Women in Statistics and Data Science Conference (WSDS), we asked attendees to describe in a word or two—or 12—what WSDS means to them. Visit the ASA's Facebook page at <https://goo.gl/gMvK4j> to view their answers.



## Workshop Features Talk on Seasonal Adjustment in Identifying, Forecasting Economic Activity

The second Seasonal Adjustment Practitioners Workshop was held April 26 in the Janet Norwood Conference and Training Center at the Bureau of Labor Statistics. This one-day workshop emphasized practical problem-solving in seasonal adjustment and related time series methods. More than 65 people attended.

Many of the workshop attendees mentioned they were grateful for the topical forum and emerging network of experts in the area. The workshop was jointly sponsored by the Government Statistics Section (GSS), Business and Economic Statistics Section (B&E), and Washington Statistical Society (WSS). This shared sponsorship directly supports the ASA Strategic Plan theme to “ensure the future of our profession” via “organizational leadership development.”

The program featured opening remarks by **Brian Monsell**, representing the workshop organizers. **Jenny Thompson** (GSS and WSS) and **John Abowd** (B&E) made a few additional welcoming remarks, emphasizing the ASA’s support in general and the sections’ support in particular.

**Ataman Ozyildirim** of The Conference Board gave the keynote address. His presentation, “To Adjust or Not to Adjust: A User’s Perspective on Analysis of Economic Trends with Seasonal Data,” covered the benefits and limitations of seasonal adjustment in identifying and forecasting economic activity.

**Brent Moulton**, recently retired from the Bureau of Economic Analysis, followed as discussant, highlighting issues such as residual seasonality—a concern that fosters continuing research.

The workshop then broke out into concurrent sessions. The speakers for the 18 presentations came from four countries and represented the private sector and the realm of official statistics, including three US government agencies.

Papers and presentations from the workshop will be available through the GSS.

Planning is underway for a third workshop in late 2019. To be involved in planning and organizing, contact the team at [esmd.seasonal.workshop@census.gov](mailto:esmd.seasonal.workshop@census.gov). ■

## Two Selected for Natrella Scholarship

Will Guthrie, Natrella Scholarship Selection Committee Chair

The Quality and Productivity Section will award Mary G. and Joseph Natrella scholarships to **Anh Bui**, a PhD candidate in industrial engineering and management sciences at Northwestern University, and **Xiaowei Yue**, a PhD candidate in the department of industrial and systems engineering at the Georgia Institute of Technology, during the 2018 Joint Research Conference on Statistics in Quality, Industry, and Technology, which will be held June 11–14 in Santa Fe, New Mexico.

Both Bui and Yue will give a research presentation at the conference and receive a \$3,500 scholarship, plus \$500 for travel expenses and complimentary registration for the conference and pre-conference short course.

Bui was recommended for the award by Daniel W. Apley of Northwestern University and Chi-Hyuck Jun of Pohang University of Science and Technology in Pohang, South Korea. His presentation at the conference is titled, “Monitoring Stochastic Textured Surfaces.”



Bui



Yue

Yue was recommended for the award by Jianjun Shi and Chuck Zhang of Georgia Institute of Technology. The title of his presentation is “Engineering-Driven Data Analytics for Quality Improvement.”

The winners were chosen for their outstanding teaching, community service, mentoring, leadership, scholarship, and commitment to the pursuit of quality improvement through the use of statistical methods. ■

HAVE YOU  
MOVED?



Log in to your ASA account  
and update your address at  
<https://goo.gl/SMJvXh>.



# Statistics Association Presidents Establish Elizabeth L. Scott, F.N. David Lectureships

Amanda L. Golbeck

The Committee of Presidents of Statistical Societies (COPSS) announced in April the establishment of two lectureships named after women: The Elizabeth L. Scott Lecture and the F.N. David Lecture. The lectures will be given in alternate years at the annual Joint Statistical Meetings beginning in 2019.

This will be the first time JSM, which has been held annually since 1840, will have lectures named after women. JSM is the largest gathering of statisticians in North American and one of the largest in the world. Each year, there are more than 6,000 participants from more than 50 countries.

The Elizabeth L. Scott Lecture and F.N. David Lecture will be included in the COPSS portfolio, which already includes the Fisher Lecture. According to Nick Horton, chair of COPSS, “One of the main tasks for COPSS involves granting awards that highlight the work of notable statisticians. I’m proud that starting in 2019, at least one of the lectures at the JSM will be named after a woman. This is long overdue.”

The Caucus for Women in Statistics (CWS) spearheaded the effort to establish the lectureships. Horton reported the COPSS Executive Committee voted unanimously to approve the CWS proposal. CWS partnered with the ASA LGBT Concerns Committee, ASA Committee on Women in Statistics, Statistical Society of

Canada Committee on Women, International Statistical Institute Committee on Women, and International Biometric Society ENAR/WNAR.

The idea that too few women receive national recognitions for their research and scholarship is not new. The National Science Foundation in 2010 established an AWARDS project “to investigate and improve the process of granting awards and prizes for scholarly achievement” in disciplines like statistics. This project led to many association reforms.

Establishing a new named lecture slot at JSM for the Scott and David lectures is another significant step forward in advancing the statistics profession. It adds a face to the profession’s ongoing and growing commitment to diversity and inclusion. 2018 CWS President Shili Lin remarked, “I’m so excited and grateful that the long overdue recognitions for women in statistics in the form of two named lectures are finally here, and here to stay!”

The first lecture will be the F.N. David Lecture. It will be given at JSM 2019 in Denver, Colorado, from July 27 to August 1. ASA Committee on Women in Statistics Chair Kimberly Sellers said, “Already looking forward to JSM 2019!”

For more information about the lectureships, contact Lin at [shili@stat.osu.edu](mailto:shili@stat.osu.edu). ■



Elizabeth Scott



F.N. David

# Ann Arbor, Detroit Chapters Judge 2018 Michigan Science and Engineering Fair

Karry Roberts, Detroit Chapter Secretary



Promoting statistical analysis in high-school science projects, members of the Detroit and Ann Arbor Chapters enjoyed being professional awards judges at the Michigan Science and Engineering Fair (MSEF). This was the chapters'

The MSEF displays the best high-school-level posters from the regional science fairs throughout the state. The fair was held at Kettering University in Flint, Michigan, on Saturday, April 7. Winners in various science categories at this fair go

From left: ASA judges Karry Roberts, Rob Kushler, Nicholas Moloci, Xianggui (Harvey) Qu, and David Corliss with their Award of Excellence poster.

second year at the state level, extending a tradition the two chapters have maintained for many years at the regional level.

The team of seven judges for the statistical special awards included Anamaria Kazanis, District 3 Vice Chair; Karry Roberts, David Corliss, Xianggui (Harvey) Qu, and Rob Kushler from the Detroit Chapter; and Mary Ann Ritter and Nicholas Moloci from the Ann Arbor Chapter.

on to the Intel International Science and Engineering Fair (ISEF) in Pittsburgh.

This year, the MSEF had a total of 50 posters. At each poster, the student was present, giving judges the opportunity to interview him or her and learn about their scientific approach. Initially, the judges worked in review teams, but, later, all seven reviewed the best posters to determine the higher awards.



From left: ASA judges Mary Ann Ritter and Anamaria Kazanis, District 3 Vice Chair

At the end of the event, the judges kicked off the awards ceremony by calling all certificate and award winners onto the stage, where they encouraged the students to take statistical courses to ensure proper statistical analysis of their data for all college majors.

## Award Winners

### One \$200 Award of Excellence

- "The Effects of Commercial Pesticides Upon *Vanessa cardui*" by Mallory Snyder from Saginaw Arts and Sciences Academy

### Five \$50 Awards of Merit

- "The Effects of Boron Compounds on Amyloid-beta 42 Plaque Aggregation" by Zaid Haque, Saginaw Arts and Sciences Academy



ASA professional awards winners on stage at Kettering University  
Photos courtesy of Karry Roberts, Mary Ann Ritter, and Tim Fino

- “Genome-Wide Analysis of Histone Modifications in *Saccharomyces cerevisiae*” by Rohit Mital from Indus Center for Academic Excellence
- “Effectiveness of Homemade Activated Carbon Water Filter in Removing Pollutants” by Neha Narayan, an independent high-school student
- “Econometric Model of USGDP Through Artificial Neural Networks” by Shivan Prasad from Detroit Country Day Upper School
- “Quantifying the Effects of Novel Mutations in Putative T2D Regulatory Loci” by Collin Wang from Detroit Country Day Upper School
- Sai Anantapantula
- Melissa Beyrand
- Maria Fields
- Jared Freeman
- Samuel Maher
- Bhuvna Murthy
- Vihaar Nandigala
- Salena Prakah-Asante
- Akash Rathod

One of these students was Samuel Maher, who received a recognition certificate and will be attending the ISEF as a MSEF Grand Award recipient. ■

Students at all award levels received certificates and a copy of *Significance* magazine. The Detroit Chapter obtained reimbursement from the ASA Chapter Stimulus Funds for their contribution to this activity, which covered much of the award expenses. The Ann Arbor Chapter also contributed to the awards.

Eight of the ASA Professional Awards winners were recognized with MSEF category awards.

#### *Nine Recognition Certificates*

The following students received recognition certificates:

# sectionnews

## Quality and Productivity

### Q&P Initiates Mentoring Program

The Q&P Section is pleased to introduce a mentoring program for its members. The goal of this initiative is to help members enrich and enhance their professional experience through achieving personal and professional goals. The program's specific goals are to connect those wanting mentoring with those wanting to mentor and to facilitate those interactions.

Sharing knowledge, expertise, and experience can be mutually rewarding. A constructive mentorship relationship can take many forms and may occur at any career stage. Benefits for mentors and mentees include building connections and networks, passing on knowledge, and bridging the gaps among generations. It also matures the statistics profession, identifies emerging talents, and enhances professional relationships.

The program committee will facilitate face-to-face meetings between matched mentors and mentees at JSM 2018, but attendance is not necessary. Other interactions may take place either in person or via electronic means, depending on the mentor and mentee's preferences.

If you are interested in participating in the mentoring program, complete one of the forms below by June 30. The program committee will make every effort to find a suitable match for all applicants and notify applicants of the outcome by July 15.

Do you want to be a mentee? Go to <https://goo.gl/forms/OsovCR3IgNxRP7yh1>.

Do you want to be a mentor? Go to <http://bit.ly/QPMentoring>.

Otherwise, send an email to Reid Landes at [rdlandes@uams.edu](mailto:rdlandes@uams.edu) to receive the form.

For additional information regarding the program, visit <http://community.amstat.org/qp/home> or contact Daksha Chokshi at [daksha.chokshi@rocket.com](mailto:daksha.chokshi@rocket.com) or Landes. ■

## Statistics in Epidemiology

The Section on Statistics in Epidemiology (SIE) grants annual Young Investigator awards to new researchers for the best papers in statistics in epidemiology presented at JSM. Among the Young Investigator Award winners, the Breslow Award further recognizes the top paper.

The section presents the 2018 Young Investigator awards to the following individuals:

- **Maria Cuellar**, Statistics, Carnegie Mellon University (Breslow Award Winner)
- **Parichoy Pal Choudhury**, Biostatistics, The Johns Hopkins University
- **Kwonsang Lee**, Biostatistics, Harvard University
- **Maya Mathur**, Biostatistics, Harvard University
- **Ran Tao**, Biostatistics, Vanderbilt University
- **Kai Yang**, Biostatistics, University of Florida

An awards ceremony will be held at this year's JSM in Vancouver on Tuesday, July 31, at 6:30 p.m. in recognition of the awardees. The ceremony will be followed by a joint mixer with the Mental Health Statistics Section. Visit the JSM online program at <http://bit.ly/JSMProgram2018> for an up-to-date location. ■

## Survey Research Methods

The Proceedings of the Survey Research Methods Section (SRMS)

from the 2017 Joint Statistical Meetings in Baltimore is now available at <http://bit.ly/JSM17Proceedings>. It also includes the 2017 Proceedings of the American Association for Public Opinion Research. What is new to this year's edition is that if a speaker has submitted the corresponding presentation to the ASA, the presentation can also be accessible at this proceedings website. We hope you find this helpful if you missed the presentations at JSM 2017. If you discover any error or missing paper, please contact the SRMS publication officer, Tony An, at [tony.an@sas.com](mailto:tony.an@sas.com).

## 2018 Joint Statistical Meetings Update

Get ready for Vancouver! SRMS has put together a rich and exciting program. This year, SRMS sponsors one half-day short course, 11 invited sessions (including co-sponsored), one invited panel, 12 topic-contributed sessions, 10 contributed sessions, one poster session, three speed sessions, and two round-table luncheon discussions.

In memory of the prominent survey statistician Alastair Scott, an invited session will be held on Thursday, August 2.

Everyone is encouraged to attend our annual SRMS business meeting at 6 p.m. on Wednesday, August 1. Several awards will be given at the meeting, including the joint SRMS/GSS/SSS student paper awards, whose papers are presented in a session on Monday, July 30.

Here is a preview of the SRMS lineup at JSM 2018.

- Half-day course (added fee event) on Tuesday, July 31: *Applications of Hot Deck Imputation Methods to Survey Data*, led by Rebecca Andridge of The Ohio



State University College of Public Health and Katherine Thompson of the US Census Bureau. This course will provide an introduction to the use of hot deck imputation with survey data. Attendees will be exposed to both the theoretical and practical sides to hot deck imputation and examples will be illustrated using both SAS and R.

The invited papers and panel sessions sponsored or co-sponsored by SRMS include the following:

- *Statistical Analysis of Linked Data*, Sunday, July 29
- *Improving Survey Data Quality with Machine Learning Techniques*, Tuesday, July 31
- *Inference with Clustered Data: Lessons from Multiple Disciplines*, Wednesday, August 1
- *In Memoriam: Alastair Scott*, Thursday, August 2
- *Administrative Records for Survey Methodology and Evidence Building*, Monday, July 30
- *Transparency, Reproducibility, and Replicability in Work with Social and Economic Data*, Sunday, July 29
- *Ethical Implication of the Failure of Anonymization*, Monday, July 30
- *Seeing the World as a Missing Data Problem: Celebrating 40 Years of Multiple Imputation*, Monday, July 30
- *The Potential for Web-Scraping in the Production of Official Statistics: An Opportunity for Statistics to Lead?*, Wednesday, August 1
- *Using Surveys to Improve the Representativeness of Nonprobability Samples in Epidemiologic Studies*, Wednesday, August 1
- *Prospects for Combining Survey and Administrative Data for Income Measurement*, Thursday, August 2
- *Current Federal Research on Improving Measurement of LGBT Populations*, Thursday, August 2

A great way to obtain a large amount of information about new research in a short period is to attend the speed sessions. A speed session assigns four minutes for oral presentation to each presenter. Then, presentations are displayed as electronic posters at a later time so attendees can learn more. The three SRMS contributed speed sessions this year are the following:

- *Missing Survey Data: Analysis, Imputation, Design and Prevention*
- *Innovations in Survey Sampling Designs: Administrative Data, Record Linkage, Non-Probability Samples, and More*
- *Applications of Advanced Statistical Techniques in Complex Survey Data Analysis: Small Area Estimation, Propensity Scores, Multilevel Models, and More*

Two roundtable luncheon discussions (added fee events) sponsored by SRMS are the following:

- *Adaptive Design: Challenges in Practice*, led by Michael Yang of NORC. He will share his experience implementing adaptive designs, explore practical adaptive design options, and discuss future research directions.
- *Non-Probability Sampling*, led by Karol Krotki of RTI International. He will discuss real-world examples of non-probability sampling and touch on the future role of this methodology in survey research.

The topic-contributed sessions sponsored by SRMS are the following:

- *Recent Research on Current Population Survey*, Sunday, July 29

- *Survey Design and Data Adjustment Decisions in Mixed-Mode Surveys*, Monday, July 30
- *Best Student Papers Awarded by the ASA Consortium of GSS/SSS/SRMS*, Monday, July 30
- *Small Area Estimation with Small Samples*, Tuesday, July 31
- *Official Statistics and Small Area Estimation*, Tuesday, July 31
- *Probabilistic Record Linkage: Better Assumptions, Scalable Inference, and Accounting for Uncertainty*, Wednesday, August 1
- *Measuring Household Wealth in Europe: The Household Finance and Consumption Survey*, Wednesday, August 1
- *Statistical Explorations for the Post-Enumeration Survey of the US 2020 Census*, Wednesday, August 1
- *Using Para-Data to Analyze the Determinants and Impact of Interview Length*, Thursday, August 2
- *Statistical Challenges in Combining Survey and Administrative Data*, Thursday, August 2

The contributed sessions sponsored by SRMS are the following:

- *Advances in Sampling Techniques and Tools*, Sunday, July 29
- *Nonresponse Adjustment and Weighting*, Monday, July 30
- *Replicate Weights and Variance Estimation*, Monday, July 30
- *Statistical Models in Survey Sampling and Analysis*, Tuesday, July 31
- *Issues in Survey Design and Estimation*, Tuesday, July 31
- *Survey Modes and Measurement Error*, Wednesday, August 1
- *Advances in Small Area Estimation*, Wednesday, August 1

# chapternews



## North Carolina

### Chapter Hosts Recycled Poster Session

The North Carolina Chapter hosted a recycled poster session and social in late March. This social offered local statisticians a chance to practice an upcoming poster presentation or re-use an old poster while providing an informal setting for members to exchange ideas and learn about each other's work. More than a dozen posters were presented to an audience of nearly 50 over dinner and drinks at a local brewery. More information and pictures can be found on the NC ASA Chapter blog at <http://bit.ly/ASANCCchapter>.

- *The Use of Auxiliary Data in Frame Development, Coverage Assessment, and Field Data Collection*, Thursday, August 2
- *Practical Aspects of Survey Design and Analysis*, Thursday, August 2
- *Imputation and Analysis of Missing Survey Data*, Thursday, August 2

For the complete JSM program, including up-to-date times and locations for all sessions, visit <http://bit.ly/JSMProgram2018>. ■

## Physical and Engineering Sciences

Yili Hong, SPES JSM 2018 Program Chair

SPES has a slate of four invited and three topic-contributed sessions lined up for the upcoming JSM in Vancouver. SPES is also co-sponsoring multiple invited and topic-contributed sessions.

### Invited Sessions

- *Lead with Statistics in Uncertainty Quantification*, organized by Lulu Kang from Illinois Institute of Technology, with speakers Jeff Wu, David Steinberg, and David Woods
- *A Life Cycle View of Statistics*, organized by David Steinberg from Tel Aviv University, with panelists Laura Freeman, Ron Kenett, John Peterson, and Agus Sudjianto
- *Statistical Methods for Remote Sensing Data*, organized by Jonathan Hobbs from Jet Propulsion Laboratory, with speakers Amy Braverman, Matthias Katzfuss, and Andrew Finley
- *Experimental Design Thinking for Big Data*, organized by Xinwei Deng from Virginia Tech and Devon Lin from Queen's University,

with speakers Min Yang, John Stufken, and Peter Chien

### Topic-Contributed Sessions

- *New Approaches to Modeling and Inference for Complex Space-Time Data*, organized by Ta-Hsin Li from IBM T. J. Watson Research Center
- *Advancement in Statistical Methods for Reliability Data*, organized by Lu Lu from the University of South Florida
- *Statistical Aspects in Stochastic and Deterministic Simulation*, organized by Wei Xie from Rensselaer Polytechnic Institute and Qiong Zhang from Virginia Commonwealth University

### Co-Sponsored Invited and Topic-Contributed Sessions

- *Statistical Process Monitoring of High-Volume Data Streams*, with Quality and Productivity
- *New-Generation Experimental Design and Causal Inference in High-Tech Companies*, with Quality and Productivity
- *Field to Fork: Leading with Statistics in the Food Industry*, with Quality and Productivity
- *Novel Theory and Methods in Big Data Analytics*, with Statistical Learning and Data Science
- *Statistical Computing on Parallel Architectures*, with Statistical Computing

### Continuing Education Course

- *Topics in Design of Computer Experiment: Recent Advances in Latin Hypercube and Uniform Designs*, led by Dennis Lin of Pennsylvania State University (there is an added fee for this course) ■

## California

■ The Johnson and Johnson Medical Device (MD) Sector Clinical Research and Development Center of Excellence (CR&D COE) is recruiting for a principal biostatistician, to be located in Irvine, CA. Job Link: [jobs.amstat.org/jobs/10876465/principal-biostatistician](http://jobs.amstat.org/jobs/10876465/principal-biostatistician) EOE.

## Illinois

■ The Research Data Analyst Lead (Biostatistician) leads research data management and analysis team involved in querying, extracting, managing and analyzing multiple, complex data sets ensuring data integrity, quality, and timeliness of results. This position oversees the deployment of reporting and analytical solutions. For more information, visit <https://careers.northwestern.edu>. Keyword: 33174. EOE.

## Louisiana

■ Department Head/Chair of Experimental Statistics (Tenured). College of Agriculture - Department of Experimental Statistics, Louisiana State University. Louisiana State University A&M and LSU Agricultural Center, Baton Rouge, LA, seek candidates for department head of the department of experimental statistics (EXST). Applicants should have a PhD in statistics. Ad URL: <http://bit.ly/LSUstats> EOE.

## Nebraska

■ The Department of Biostatistics, College of Public Health at the University of Nebraska Medical Center, seeks outstanding faculty candidates for an assistant or associate professor. Preferred areas of emphasis include: big data, statistical analysis of high dimensional data, or statistical methodology for clinical trials or observational studies. For full description, qualifications, and to apply, visit [unmc.peopleadmin.com/postings/37857](http://unmc.peopleadmin.com/postings/37857). EOE.

## Pennsylvania

■ The Wharton Department of Statistics at the University of Pennsylvania seeks to hire full-time or part-time lecturers for the 2018–2019 academic year. Excellence in teaching is the primary criteria for the position. Applicants must have outstanding communication skills, along with a degree from an accredited institution; a PhD is preferred. Any questions may be sent to [stat.lecturer.hire@wharton.upenn.edu](mailto:stat.lecturer.hire@wharton.upenn.edu). URL: [statistics.wharton.upenn.edu/recruiting/lecturerpositions](http://statistics.wharton.upenn.edu/recruiting/lecturerpositions) EOE.

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

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

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

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- Effective biostatistical consulting skills

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## Rhode Island

■ The University of Rhode Island, Department of Computer Science and Statistics in the College of Arts and Sciences (A&S) invites applications for a tenure-track assistant professor of statistics position with appointment to begin the academic year 2018–2019. This is an open-until-filled search. URL: <https://jobs.uri.edu> (job posting F00083). EOE.

## Tennessee

■ The Department of Mathematical Sciences at the University of Memphis is recruiting for a tenure-track assistant professor in statistics to begin in August 2018. Qualifications include a PhD in statistics or biostatistics with research interests in data science and Bayesian inference. Details are available at <http://www.memphis.edu/msci/news/positions.php>. Application should be completed at <https://workforum.memphis.edu/postings/>. Email [eoGeorge@memphis.edu](mailto:eoGeorge@memphis.edu) for further questions. EOE.

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Faculty Search Committee c/o Vera Bennett  
Department of Biostatistics  
CB #7420, McGavran-Greenberg Hall  
University of North Carolina at Chapel Hill  
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**Frank Harrell** • @f2harrell

@d\_spiegel, @stephensenn, Doug Altman, Jim Berger, Don Berry would be five statisticians I'd like to interview for a start.

**Maarten van Smeden** • @

MaartenvSmeden

Great list. Additionally: Donald Rubin, Bradley Efron, Jerome Friedman, @NateSilver538



**Thomas Speidel** • @ThomasSpeidel

Doug Altman, Sander Greenland, David Spiegelhalter, Rob Tibshirani, Trevor Hastie, Bill Cleveland, Andrew Gelman, and Frank Harrell who's too modest to mention his own name 🙄



**Anna Gottard** • @annie\_corXY

David Cox!



**Geoff Shaw** • @StatGeoff

I would interview Box or Tukey. Both had interesting lives and would be fun to talk to.



**Kim Flagg Sellers** • @KimFlaggSellers

David Blackwell, were he still living.



**Wajdi Ben Saad** • @wajdi\_bs

Karl PEARSON, Thomas BAYES, Carl F. GAUSS...



**Kel Zou** • @kel\_zou

One of the wittiest, Dean Xiao-Li Meng!

#statistician #statistical #Statistics #statistics #Stats



**German M Altgelt**

Does Pascal count?

**Mazharul Islam**

The lady with the lamp  
[Florence Nightingale]

**Lee D. Witt**

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