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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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Computational and Data-Enabled Science and Engineering in Mathematical and Statistical Sciences

This column highlights research activities that may be of interest to ASA members. This article includes information about new research solicitations and the federal budget for statistics. Comments or suggestions for future articles may be sent to the *Amstat News* managing editor at *megan@amstat.org*.



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Stark



TRIVIA CHALLENGE

The ASA's Trivia Challenge is a fun way to read *Amstat News* and learn about the ASA. Every month, there will be three questions asked here, with the answers scattered throughout the magazine. Search for those answers while you're reading the issue and input your answers at *www. amstat.org/asa175/triviachallenge.cfm.* Whoever has the most correct answers at the end of each quarter will be entered into a drawing to win a 175th anniversary T-shirt!

- 1. Who is chairing the workgroup charged with developing a prototype for the statistics portal?
 - A. Harold and Kumar
 - B. David Banks
 - C. Nathaniel Schenker
- 2. Who wrote the book Mathematics, Magic, and Mystery?
 - A. Robert L. Devaney
 - B. John Conway
 - C. Martin Gardner
- 3. By 1989, the year of the ASA's 150th anniversary celebration, ASA membership exceeded 18,000.

 True

False

This quarter's winner will be announced in the May issue.



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columns

29 **175**

Council of Chapters: History, Organization, and Objectives

This year marks the ASA's 175th birthday. To celebrate, the column "175"—written by members of the ASA's 175th Anniversary Steering Committee and other ASA members—will chronicle the theme chosen for the celebration, status of preparations, activities to take place, and—best yet—how you can get involved.



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Hanlon



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Cochran

31 STAT*tr@k*Dana Mackenzie on How to Tell a Story About Statistics

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.



Mackenzie

Contributing Editor

Dana Mackenzie is a science writer, mathematician, and author of several books, including The Universe in Zero Words, The Big Splat, or How Our Moon Came to Be, and What's Happening in the Mathematical Sciences. He has won several awards for his writing and been published in such magazines as Scientific American, Discover, Science, Smithsonian, and New Scientist.

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A Statistical Commons

relcome to the second in my series of interviews with the workgroup leaders for my 2014 presidential initiatives. My guest this month is David Banks of Duke University. In mid-2013, I appointed David as chair of a workgroup charged with developing a prototype for the long-discussed statistics portal, an enhanced repository for important statistical information that would not ordinarily reside in a journal. The goal was to explore possibilities for the portal and test its feasibility. David and I recruited a terrific group of people to work on this task with him.

NS: David, I appreciate your having taken on this project. What's a portal?

DB: It's what we used to call the Statistical Commons. Extensive market testing showed that "portal" conjured negative associations with the movie "Poltergeist." Statistical Commons is more positive, evoking a sense of sharing.

NS: OK, then what's the Statistical Commons?

DB: I hope it will grow into a space where members can share material and provide feedback. Potentially, it could be a place where educational materials, gray literature from the federal government, open source books, ASA discussion threads, software, and data could be deposited or linked.

NS: Please elaborate.

DB: Sure! One of the many dull jobs I do is generate test and quiz questions for introductory statistics classes. Each semester, thousands of 101 teachers attempt to breathe fresh phrasing and cool examples into t-tests and probability problems. If I had access to a high-quality question bank, with worked solution keys, it would probably save me about six hours a week. Similarly, it would be nice to have a repository for lecture notes, educational data sets, and so forth.

Regarding federal gray literature, I have a parable. Senior statisticians in the government work force are a dwindling species. Each year, many retire, and few advance to replace them. Somewhere in the bowels of the Department of Transportation, there is an elderly, pallid statistician preparing for her farewell party, and, on her desk, is a binder containing the only available copy of the weighting scheme for the 1980 Commodity Flow Survey. It would be in everyone's best interest if that document, and others like it, could be posted online so future surveys could be cross-walked against earlier results.

Collaborative publication and freeware books are important social experiments and I hope the ASA will step up and participate. I would love to break the stranglehold that paper publishers have maintained on intellectual property, and the commons may provide a vehicle to achieve that.

The ASA has recently provided the capacity for online discussions among section members, and in doing so, they have created a monster. I like the concept, but it has become intrusive. Recently, someone posted a question to the ASA Section on Statistical Consulting thread about whether SAS code would persist into the future. This spawned a spasm of spam that engulfed all the section members (some people get their discussion bundled in daily, weekly, or monthly bursts, but, even so, there



Nathaniel Schenker



David Banks

A Historical Preface

David Banks

I want to embarrass Nat a little with my gratitude. In 2008, I urged the ASA Board to consider implementing a new service to the members by creating an electronic community in which people could share documents and discuss ideas. I explained the advantages of such a service cogently, articulately, and concisely, and the board listened politely. Tony Lachenbruch was the president that year, and he had been my boss at the FDA a few years previously, so he was overfamiliar with my spiels. He listened with the Christian patience of a suffering saint, and when I was done, the room was stone-cold silent and Tony started upon the next agenda item. At that point, Nat spoke up. Like Hector before the gates of Troy, Nat is a defender of lost causes, and he said, "Maybe we should discuss this a little." And so the board did.

I think the discussion opened a few minds to new possibilities. There was no groundswell of support, but at least the ground had been prepared. Several critical issues were identified: oversight, costs, and the possibility that an electromagnetic pulse event would erase all statistical knowledge. In the years following 2008, the concept of this sort of community—the Statistical Commons—was raised with the board on one or two occasions (think Cato the Elder declaiming "Carthago dalenda est"). And each time, a little progress was made, some of the issues got sorted out, and the ASA Board became more comfortable with the idea that electrons are not a wild-eyed usurpation of professional discourse.

Last year, as incoming ASA president, Nat appointed workgroups. One of them was charged with creating a small proof-of-concept commons. I am honored to chair that, and the other task force members are Will Guthrie (NIST), Richard Levine (San Diego State), Victoria Stodden (Columbia), Ken Van Haren (Square) and Larry Wasserman (Carnegie Mellon). We are making progress, albeit slowly, and this column lays out some of the possibilities and challenges.

was quite a lot of it). The commons could automatically shunt such discussion to a private room. Members would know about the topic from the first post and then choose to follow up or not.

The value of shared code and data is obvious.

NS: Hasn't much of this been done before?

DB: Yes, certainly. StatLib provides some curated data sets, but very little code. Michael Lavine has a free online book, titled *Introduction to Statistical Thought*; Jay Kadane has made *Principles of Uncertainty* freely available; and the new COPSS book, *Past, Present, and Future of Statistical Science* is also freely available. But it would be nice to have these, and others, indexed in one place, with short reviews to guide ASA members about their content and level. I don't know of any central archive for federal statistics documents, but the ASA Section on Teaching Statistics in the Health Sciences has already created a small, specialized portal for educational material.

The advantage of the Statistical Commons is that it puts all of this kind of material in one place, making it easy to curate, update, and propagate.

NS: You mentioned some potential difficulties, such as cost and oversight ...

DB: Certainly. Any enterprise of this kind will require volunteer labor to generate content and volunteer editors to moderate that content. This isn't new—the ASA has been orchestrating such services for many other projects, especially publications. We know how to do this. Whether it will catch on is a key question, but I've talked to a lot of statisticians who are younger, smarter, and cooler than us, and they are enthusiastic.

The cost should be minimal. The ASA already has IT experts on staff, and if this is built properly, it should not put a large footprint on their time.

NS: Thanks, David. This is an exciting experiment, and I hope it pans out.

DB: Thanks, Nat. I really appreciate your help and friendship in this effort. Frankly, I've always regarded us as the Harold and Kumar of the ASA—you, of course, are Harold.

Nathaniel Schenker

Recognizing the ASA's Longtime Members

he 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 following members for their distinguished and faithful membership.

If you are a longtime member and will be attending JSM 2014 in Boston, Massachusetts, please join us for a reception in your honor. If your name is not below and you believe it should be included, contact Amy Farris at amy@amstat.org to correct your record.

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Stephen J. Ganocy

Turkan K. Gardenier

Daniel I Gans

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Ina P. Howell

Elizabeth T. Huang

Lawrence J. Hubert

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John M. Lachin

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J. Richard Landis	John A. Miller	Stephen L. Portnoy	Stuart Scott	Joseph Van Den Reysen
Per Lange	Satish Chandra Misra	Frank J. Potter	William L. Seaver	Kerstin Vannman
Kenneth D. Lawrence	Roderick Montgomery	Dale L. Preston	Joseph Sedransk	
Sheila M. Lawrence	Katherine L. Monti	Kevin Price	Subrata K. Sen	Niels H. Veldhuijzen Paul F. Velleman
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Kerry L. Lee	John K. Moore	John N. Quiring	Glenn R. Shafer	
James D. Leeper	Thomas F. Moore	Alfred W. Rademaker	Juliet Popper Shaffer	Frederic A. Vogel Kenneth W. Wachter
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Heryee H. Leong	Michael L. Mout	Rose M. Ray	Shingo Shirahata	Joseph J. Walker
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Bruce Levin	Krishnan Namboodiri	Richard D. Rippe	Robert D. Small	George H. Wang
Donald Lewin	Subhash C. Narula	Paula K. Roberson	Stephen C. Smeach	James F. Ward
Charles Lewis	Elliott Nebenzahl	Rosemary A. Roberts	Martyn R. Smith	Sophronia W. Ward
David L. Libby	James W. Neill	Jeffrey A. Robinson	Murray H. Smith	James H. Ware
Lawrence I-Kuei Lin	Margaret A. Nemeth	Frank W. Rockhold	William A. Sollecito	John Warren
Greta M. Ljung	H. Joseph Newton	Robert N. Rodriguez	Bruce D. Spencer	Stanley Wasserman
Michael T. Longnecker	Kai Wang Ng	Russell H. Roegner	M. K. Srirama	Christine M. Waternaux
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Charles F. Manski	David Oakes	N. Phillip Ross	Allan Stewart-Oaten	Lynn Weidman
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Michael J. Margreta	Michael W. O"Donnell	Estelle Russek-Cohen	Miron L. Straf	Sanford Weisberg
Mary A. Marion	Bernard V. O'Neill	Carl T. Russell	Robert F. Strahan	K. Laurence Weldon
Donald L. Marx	Leonard Oppenheimer	Barbara J. Rutledge	Donna F. Stroup	Jon August Wellner
Robert L. Mason	Joyce Orsini	Thomas P. Ryan	Perla Subbaiah	Roy E. Welsch
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Takashi Matsui	Willis L. Owen	John P. Sall	Richard A. Sundheim	James P. Whipple
Victor M. Matthews	Maurice E. B. Owens	Francisco J. Samaniego	Robert Sutherland	Owen Whitby
Clement J. Maurath	William S. Pan	Allan R. Sampson	Gerald R. Swope	David G. Whitmore
Timothy A. Max	Swamy A.V.B. Paravastu	Douglas A. Samuelson	Ajit C. Tamhane	Howard L. Wiener
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35-39 Years

Dennis Aaron Phyllis D. Abbott Sandra C. Abbott John M. Abowd Bovas Abraham Dennis P. Affholter Mohammad Ahsanullah Donald R. Akin James H. Albert Jeanne M. Aldred Robert W. Aldred Melvin T. Alexander Rich Allen Wendy L. Alvey Keaven M. Anderson Michael E. Andrew Bengtung Ben Ang Clifford W. Angstman Thomas Arbutiski Susanne Aref Vincent C. Arena Arlene S. Ash Anthony C. Atkinson James C. Aubuchon Steven P. Bailey Stephen P. Baker James A. Baldwin Thomas A. Bass Michael P. Battaglia Eileen J. Beachell Moraye B. Bear Mark P. Becker Patricia C. Becker Jay H. Beder Steven Belle Robert B. Bendel George Benson Peter M. Bentler James O. Berger James S. Bergum Catherine S. Berkey Nancy Berman Ernst R. Berndt David J. Bernklau

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Richard A. Chechile

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Susan M. Hinkins	Elizabeth J. Kelly	Barbara A. Lingg	Marianne E. Messina	William J. Owen
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Edward C. Hirschland	Rawson	Jen-Pei Liu	Joel E. Michalek	Alberto Palloni
Douglas A. Hlavacek	Arthur J. Kendall	George A. Livingston	H. Andrew Michener	Mari Palta
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Lorrie L. Hoffman	Andre I. Khuri	Roger Longbotham	Eva R. Miller	Won J. Park
Thomas P. Hogan	Byung-Soo Kim	Stephen W. Looney	Michael F. Miller	Corette Breeden Parker
Larry R. Holden	Ellen E. Kirkman	Milton W. Loyer	Renee H. Miller	Mary R. Parker
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Arthur L. Hughes	Kenneth J. Koury	Jay Magidson	Michael J. Morton	Karl E. Peace
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Mohammad F. Huque	Jeffrey P. Krischer	Linda C. Malone	Barbara G. Mroczkowski	Jane F. Pendergast
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Elizabeth R. Zell ■

2014 NSF-CBMS Regional Research Conferences in the Mathematical Sciences

he National Science Foundation recently announced support for eight NSF-CBMS regional research conferences to be held during 2014. These eight bring to 353 the total number of such conferences since the NSF-CBMS Regional Research Conference Series began in 1969.

The conferences are intended to stimulate interest and activity in mathematical research. Each five-day conference features a distinguished lecturer who delivers 10 lectures on a topic of important current research in one sharply focused area of the mathematical sciences. The lecturer subsequently prepares an expository monograph based upon these lectures, which is normally published as part of a regional conference series. Depending on the conference topic, the monograph is published by the American Mathematical Society, the Society for Industrial and Applied Mathematics, or jointly by the American Statistical Association and Institute of Mathematical Statistics.

Support for about 30 participants is provided, and the conference organizer invites both established researchers and interested newcomers—including postdoctoral fellows and graduate students—to attend. Information about an individual conference may be obtained by contacting the conference organizer.

A listing of all past conferences and published monographs is available at www.cbmsweb.org/NSF. Information about submitting proposals for future conferences may be found at www.cbmsweb.org/NSF/2015_call.htm. Institutions interested in increasing their research activity and profiles are especially encouraged to apply. Proposals for conferences to be held in 2015 are due by April 25. Questions should be directed to Ronald Rosier at rosier@georgetown.edu.

The eight conferences to be held in 2014 are the following:

Combinatorial Zeta and L-Functions

math.byu.edu/cbms

Wen-Ching Winnie Li, lecturer May 12–16 at the Sundance Resort, Utah Organizers: Jasbir S. Chahal, jasbir@math.byu.edu, and Michael D. Barrus, barrus@math.byu.edu

Inverse Scattering and Transmission Eigenvalues

fermat.uta.edu/cbms2014

David Colton, lecturer

May 27–31 at The University of Texas at Arlington *Organizer:* Tuncay Aktosun, *aktosun@uta.edu*

Mathematical Foundations of Transformation Optics

www.coas.howard.edu/mathematics/cbms2014.html

Allan Greenleaf, lecturer

June 10–15 at Howard University Organizers: M. F. Mahmood, mmahmood@ howard.edu, and Anjan Biswas, abiswah@desu.edu

Quantum Spin Systems

www.uab.edu/cas/mathematics/events/nsf-cbms-conference-2014

Bruno Nachtergaele, lecturer

June 16–20 at the University of Alabama at Birmingham

Organizers: Shannon Starr, slstarr@uab.edu; Paul H. Jung, pjung@uab.edu; and Gunter Stolz, stolz@uab.edu

Fast Direct Solvers for Elliptic PDEs

www.math.dartmouth.edu/-fastdirect

Gunnar Martinsson, lecturer

June 23–27 at Dartmouth College

Organizers: Alex H. Barnett, ahb@math.dartmouth.edu; Min Hyung Cho, Min.H.Cho@dartmouth.edu;

Adrianna Gillman, adrianna.gillman@

dartmouth.edu; and Leslie F. Greengard,
greengard@courant.nyu.edu

Mathematical Phylogeny Conference

www.birdnest.org/phylogeny
Mike Steel, lecturer
June 28–July 2 at Winthrop University
Organizers: Joe Rusinko, rusinkoj@winthrop.edu,
and Trent Kull, kullt@winthrop.edu

Higher Representation Theory

www.math.ncsu.edu/-jing/conf/CBMS/cbms14.html Raphael Rouquier, lecturer July 6–10 at North Carolina State University Organizer: Naihuan Jing, jing@unity.ncsu.edu

Problems of PDEs Related to Fluids

www.math.okstate.edu/nfs-cbms_constantin

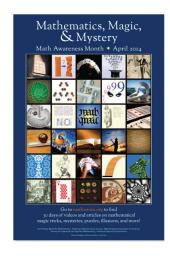
Peter Constantin, lecturer

July 21–25 at Oklahoma State University Organizer: Jiahong Wu, jiahong@math.okstate.edu ■

Mathematics Awareness Month 2014: Mathematics, Magic, and Mystery

rom magic squares and ≺ Möbius bands to magical card tricks and illusions, mysterious phenomena with elegant "Aha!" explanations have permeated mathematics for centuries. Such brain-teasing challenges promote creative and rational thinking, attract a wide range of people to the subject, and often inspire serious mathematical research.

The theme of Mathematics Awareness Month 2014 echoes the title of a 1956 book by renowned math popularizer Martin Gardner, whose extensive writings introduced the public to hexaflexagons, polyominoes, John Conway's "Game of Life," Penrose tiles, the Mandelbrot set, and much more. For more than half a century, Gardner inspired enthusiasts of all ages to engage deeply



with mathematics, and many of his readers chose to pursue it as a career. The year 2014 marks the centennial of Gardner's birth.

The Mathematics Awareness website, mathaware.org, features 30 magical and mysterious topics-a new one will be unveiled each day in April. Contributors include professional mathematicians and magicians. Each topic is introduced by a short video and includes supporting materials at various levels of mathematical sophistication. Mathematics departments at the secondary and college levels should find a month full of interesting activities to use in their programs.

Visit the math awareness month website for details and to download the official poster.

Mathematics Awareness Month is sponsored each year by the Joint Policy Board for Mathematics to recognize the importance of mathematics through written materials and an accompanying poster highlighting a particular area. ■

2014 SUMMER INSTITUTES

at the University of Washington, Seattle, Washington, USA

19th Summer Institute in Statistical Genetics

7-25 July 2014, sisg.biostat.washington.edu

6th Summer Institute in Statistics and Modeling Infectious Diseases

7-23 July 2014, depts.washington.edu/sismid/

Summer Institute in Statistics for Clinical Research

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ASA, MAA Develop Guidelines for **Teaching Introductory Statistics Course**

Principles targeted to nonstatistics departments

Jeffrey Myers, ASA Public Relations Coordinator



Promoting the Practice and Profession of Statistics

The ASA and Mathematical Association of America (MAA) have developed recommended qualifications for an instructor teaching a modern introductory statistics course.

In the joint statement, titled "Qualifications for Teaching an Introductory Statistics Course," the two groups encourage effective teaching in undergraduate statistical education and offer a series of qualifications and resources that will assist nonstatistics departments at universities and colleges with hiring qualified candidates or training existing instructors in the necessary skill set.

The statement was developed by the ASA-MAA Joint Committee on Undergraduate Statistics to address the rapidly growing interest in statistics at the undergraduate level—both in introductory classes and in majors—and to recognize that statistics is taught in many departments where sufficient experience teaching statistics may be lacking.

"The importance of statistical thinking and knowledge is rising across the entire collegiate educational spectrum," says ASA President Nathaniel Schenker. "To meet this growing demand, more and more colleges and universities are offering introductory statistics courses in nonstatistics departments. These ASA-MAA guidelines will help faculty leaders create the best course to prepare students for using solid statistical reasoning in their chosen career fields."

"Mathematics faculty, even those who lack formal training in statistics, are often called upon to teach introductory statistics courses," says MAA President Robert L. Devaney. "These guidelines offer concrete directions to departments seeking to improve the quality of their statistics courses."

Among the qualifications cited by the ASA and MAA are the following:

- Experience with data and appropriate use of technology to support data analyses
- Deep knowledge of statistics and appreciation for the differences between statistical thinking and mathematical thinking

- · Understanding the ways statisticians work with real data and approach problems and experiencing the joys of making discoveries using statistical
- · Mentoring by an experienced statistics instructor for an instructor unfamiliar with the data-driven techniques used in modern introductory statistics courses

The ASA and MAA further recommend nonstatistics department faculty leaders hire an instructor who has at least a master's degree with a strong concentration in statistics. However, since this objective often is not possible, the individual hired should have at minimum the equivalent of the following qualifications:

- Two statistical methods courses, including content knowledge of data-collection methods, study design, and statistical inference
- Experience with data analysis beyond material taught in the introductory class (e.g., advanced courses, projects, consulting, or research)

The ASA and MAA also strongly encourage statistics instructors to avail themselves of the many resources provided by the statistics education community, including workshops, minicourses, or conferences on teaching statistics; web resources; and articles exploring the key pedagogical differences between the two fields. For a complete list, download the joint statement at www.amstat.org/education/pdfs/ TeachingIntroStats-Qualifications.pdf.

The ASA/MAA Joint Committee on Undergraduate Statistics created a new web page of resources for department chairs at www.amstat.org/ education/resourcesfordeptchairs.cfm. Intended for mathematics departments that bear primary responsibility for the teaching of statistics at their institutions, it contains information about qualifications for teaching an introductory statistics course; statistics courses for mathematics majors; statistics majors and minors; and hiring, nurturing, and evaluating statisticians in a mathematics department.

Questions or comments can be directed to Ron Wasserstein, ASA executive director, at ron@amstat. org or Michael Pearson, MAA executive director, at pearson@maa.org.

Writing Workshop Planned for JSM 2014

The ASA, National Institute of Statistical Science (NISS), and Institute of Mathematical Statistics (IMS) will hold a writing workshop for junior researchers (subject to the availability of funds) August 3 and 6 during JSM in Boston.

The goal of the workshop is to provide instruction for writing journal articles and grant proposals. Participants will be required to provide a recent sample of their writing, which will be reviewed by a senior mentor. The sample could be a current draft of an article to be submitted for publication, or it could be an early version of a grant proposal. Submission of the manuscript will be required as part of the registration process. Prior experience suggests the best results come from submitting an early draft of something written solely or primarily by the participant.

Mentors will be former journal editors and program officers, who will critique (a portion of) the submitted material. Individual feedback will be provided as part of the opening session, and participants will be expected to prepare a revision in response. The workshop will open with a one-day session of general instruction in effective writing techniques and close with discussion and debriefing at a follow-up lunch.

The full-day session is scheduled for August 3. At the close of the formal activities, mentors will meet individually with participants to go over the writing samples they submitted. Each participant will then prepare a revision of a critiqued portion of the paper and return this to the mentor by the evening of August 5. Mentors and participants will meet again in conjunction with a lunch on August 6 to discuss the success of the revisions. The lunch program also will include general feedback to participants, mentors, and organizers.

Attendance will be limited and depend on the number of mentors available. To apply, go to www. amstat.org/meetings/wwjr/registration. Applications are due by June 1, and successful applicants will be notified by June 30. Applications received after June 1 will be considered if space is available. There is no fee for participation. Participants will receive lunch on August 3 and 6. Participants must agree to attend both the full-day session on August 3 and the lunch on August 6. Partial travel support also may be available.

This workshop is designed for researchers with a recent PhD in either statistics or biostatistics. Top priority will go to those who have held a PhD for fewer than three years. The limited available funding

will be used to support attendance by researchers at U.S. institutions. Current PhD students who are completing their degree before the end of the summer and who will be at U.S. institutions in the fall will be considered. If space is available, researchers at institutions outside the United States will be admitted to the workshop, but will not be provided with travel support.

Committee on Career **Development Sponsors** Panel at JSM 2014

rganized and chaired Devan Mehrotra of Merck Research Laboratories, the ASA Committee on Career Development will sponsor a panel session titled Career Development: Challenges and Opportunities for Statistical Innovation and Impact August 3 from 2-4 p.m. at JSM in Boston.

Some undergraduate and graduate students, as well as faculty in statistics or related

Panelists

Jim Koehler of Google, Inc., koehlerstats@ amail.com

Kary Myers of Los Alamos National Laboratory, karymyers@gmail.com

Stephanie Pickle Dehart of Dupont, Stephanie.pickle@gmail.com

Frank Rockhold of GlaxoSmithKline, frank.w.rockhold@gsk.com

Nancy Petersen of the Department of Veterans Affairs, petersen.nancyj@va.gov

departments, are interested in exploring potential career opportunities outside academia (e.g., industry, government, research organizations). Choosing from an ever-widening menu of non-academic career choices can be daunting. This is also true for experienced statisticians who are in various stages of their statistical careers and contemplating switching jobs and/or application domains. What are the challenges and career opportunities for statisticians in this world of both "small data" and Big Data problems? What types of skill sets or innovation are employers looking for to maximize impact within their organizations?

The goal of this panel discussion is to help address practical questions like these and help session attendees with their career planning and development. All the panelists are rising or established leaders in their respective organizations, with a strong record of interdisciplinary collaboration and a penchant for innovation and mentoring. Their backgrounds and experiences cover a diverse array of statistical applications, which they will describe in their short presentations prior to the panel discussion.

Spanish Society of Statistics and **Operations Research: An Introduction**

eandro Pardo, SEIO President



ased in Madrid, Spain, the Spanish Society of Statistics and Operations Research, originally called Sociedad Española de Investigación Operativa (SEIO), was launched on February 12, 1962, in the facilities of the Consejo Superior de Investigaciones Científicas (Spanish Research Council). At that time, there was a need to promote the theory and practice of operations research in Spain. On June 30, 1976, the scope of the society expanded to include statistics and computer science under the new name Sociedad Española de Investigación Operativa, Estadística Informática. However, due to the rapid development of several other societies related to computer science, the activities of the society focused on statistics and operations research, and on December 20, 1984, the current name, Sociedad de Estadística e Investigación Operativa, was adopted.

Today, the SEIO is a scientific society that aims to promote the advancement of the theory, methodology, and applications of statistics and operations research. In pursuit of this mission, SEIO organizes meetings and workshops; edits scientific journals, books, and newsletters; and encourages national and international scientific exchange. Furthermore, it encourages ties between academic, business, and government institutions, as well as the dissemination of the science and methodology of statistics and operations research.

Organization

The society president is elected for three years in accordance with the SEIO bylaws. Once the election is held, he/she serves as presidentelect for a year and a half (the time between two consecutive national SEIO conferences). And after three years as president, he/she serves as the past president for a year and a half. Currently, the past president is José Miguel Angulo.

SEIO is organized into two sections-Statistics and Operations Research—and governed by an executive committee made up of the president, either the president-elect or the past president, the vice president of statistics, the vice president of operations research, the secretary general, and five other members. All are elected for three years by SEIO's members, except for the secretary general, who is nominated by the president. The executive committee is advised by two academic committees, one for statistics and the other for operations research. Each academic committee is composed of the

corresponding vice president and two representatives elected by the SEIO's members for three years.

Members of the executive committee create commissions to promote activities in different fields of interest for the society. Currently, the SEIO has five: Cooperation and Development, Universities, Education, Business, and Women. In the SEIO, working groups are also important because they promote exchanges between members who do research on related topics in statistics and/ or operations research. At present, SEIO has the following research groups: Game Theory, Location Theory, Multicriteria Decision Theory, Classification and Multivariate Analysis, Functional Data Analysis, and Teaching of Statistics and Operations Research.

The Society of Statistics and Operations Research promotes training at the high-school level in statistics and operations research and organizes a program of student competitions called Incubator of Surveys and Experiments, in which students present statistical studies on a topic they have selected. The goal is for students to value the role of statistics in daily life and the experimental and social sciences. Regional competitions lead to a national competition coordinated by the SEIO. The Incubator of Surveys and Experiments initiative has become a benchmark for statistics among high-school students and teachers in Spain and could possibly grow into an international program.

Since 2013, SEIO has participated in the organization of the Spanish Statistics Olympiad, joining other national and international Olympiads such as the Mathematics, Linguistics, Mindsport, Chess, Computer, Physics, and Chemistry.

Publications

The SEIO edits two scientific journals: TEST and TOP. Members of the executive committee appoint the two editors-in-chief of each journal for a period of three years, which can be renewed for another three years. Since 2007, these journals have been published and distributed by Springer, though they continue to be the two official journals of the SEIO.

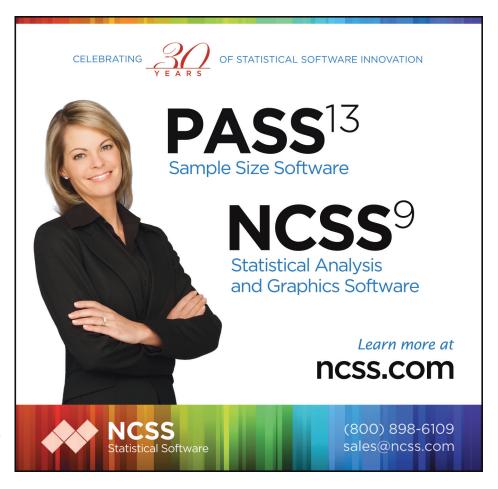
TEST is a journal of statistics and probability. Its scope includes both established and emerging areas, and English is the journal's official language. TEST focuses on papers that offer original theoretical contributions and have demonstrated or potential value for applications. Methodological content is crucial for publication in the journal. In addition to regular peer-reviewed contributions, each issue of TEST features an invited paper covering a current and challenging topic that is authored by an internationally recognized statistician. Comments on the invited paper and a rejoinder also are included in the same issue. One volume is published annually in three issues.

TOP publishes original findings in operations research and management sciences. Contributions investigate either mathematical issues or applications to real-world decisionmaking problems. The topics covered are continuous and discrete optimization, games, decision theory, logistics, production planning, stochastic models, simulation, and operation research applications. Each year, a volume of the journal is published in three parts. All three parts also include



an invited article with discussion and articles accepted after a meticulous peer-review process.

SEIO also produces an electronic bulletin, called *InfoSEIO*, which can be found at www. seio.es/InfoSEIO/2.html. This is a quarterly publication that informs members about news and developments in statistics and operations research. It includes information about events, meetings, conferences, competitions, appointments,



History of TEST and TOP

1950: Sixto Rios founded *Trabajos de Estadística*.

1963: Trabajos de Estadística changed its name to Trabajos de Estadística e Investigación Operativa and became the official journal of the SEIO.

1986: Trabajos de Estadística e Investigación Operativa was separated into two journals. Trabajos de Estadística focused on statistics, and Trabajos de Investigación Operativa focused on operations research.

1992: *Trabajos de Estadística* was renamed *TEST* and began to be published in English.

1993: *Trabajos de Investigación Operativa* was designated *TOP*.

In the 2012 Journal Citation Reports, produced by Thomson Reuters, TEST has an impact factor of 1.271 and is ranked 36th in the list of 117 journals of statistics and probability, whereas TOP has an impact factor of 0.843 and is ranked 44th in the list of 78 journals of operations research and management science.

More information about TEST and TOP is available at their Springer pages, http://link. springer.com/journal/11749 and http://link.springer.com/journal/11750, respectively.

> and prizes; summaries of doctoral theses; and interviews and review articles.

SEIO also publishes BEIO (Bulletin of Statistics and Operations Research), a quarterly journal that includes expository articles and reviews on statistics and operations research. These articles are written in a way that makes topics accessible to the majority of professionals in statistics and operations research, without sacrificing scientific rigor. The journal has sections on statistics, operations research, official statistics, history and teaching, and opinions about the profession.

Conferences and Meetings

SEIO holds a national conference every year and a half, with about 400 participants. The annual general meeting of the society also takes place at this conference. The 35th conference was celebrated in Castellón in September 2013 (www.seio2013.com). The XXXVI Congreso Nacional de Estadística e Investigación Operativa y las IX Jornadas de Estadística Pública will take place in Navarra in May 2015, organized in collaboration with the Public University of Navarra.

At every SEIO meeting, an award is given for the best research work presented by a young statistician or operations researcher. The award, called "Premio Ramiro Melendreras," was established in 1984 in memory of Ramiro Melendreras.

On December 20, 2013, the SEIO held a closing ceremony for the International Year of Statistics. There were more than 200 participants from universities, government agencies, and business organizations throughout Spain. The event was organized with the following three objectives:

- Acknowledge former SEIO presidents for their fundamental contributions to creating a healthy and sound society
- Showcase the work of the society and its members

Demonstrate the society's interest in collaborating with companies and institutions to meet their needs

A keynote talk, titled "Is the Statistics Profession Prepared for the World of Big Data?" was delivered by Robert Rodriguez, 2012 ASA president and senior director of statistical research and development at SAS Institute. He pointed out that Big Data presents us with a paradox: high demand for statistical tools, yet low visibility for the field of statistics. The future of our field depends on how well we serve the needs of emerging areas of application and how well we equip our students to solve problems with new types of data. Statisticians must also improve their ability to communicate and lead within their organizations. After the keynote talk, a diverse panel of distinguished experts offered their perspectives on the present and future of statistics as they relate to the emergence of Big Data. This discussion was followed by a ceremony during which medals were presented to the former presidents of the society.

SEIO Presidents

Leandro Pardo (2013-present)

José Miguel Angulo (2010–2013)

Ignacio García-Jurado (2007-2010)

Domingo Morales (2004–2007)

Pedro Gil (2001-2004)

Rafael Infante (1998–2001)

Jesús T. Pastor (1994–1998)

Elías Moreno (1992–1994)

Daniel Peña (1989-1992)

Marco A. López (1986–1989)

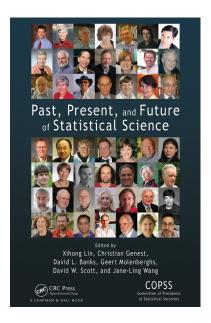
Pilar Ibarrola (1984–1986)

Sixto Ríos (1969-1984)

Fermín de la Sierra (1962–1969) ■

COPSS 50th Anniversary Volume: Past, Present, and Future of Statistical Science

Xihong Lin, Christian Genest, David Banks, Geert Molenberghs, David Scott, and Jane-Ling Wang, Co-Editors



he book Past, Present, and Future of Statistical Science was commissioned in 2013 by the Committee of Presidents of Statistical Societies (COPSS) to celebrate both its 50th anniversary and the International Year of Statistics. Hard copies will be published in April, 2014 by Chapman & Hall/CRC (Discount code AJL01 to obtain a 20% discount on the list price). See www. crcpress.com/product/isbn/9781482204964. With the publisher's authorization, an electronic version of *Past*, Present, and Future of Statistical Science is freely available at www.copss.org.

The 50 contributors to this volume are all past winners of at least one of the awards sponsored by COPSS: R.A. Fisher Lectureship Award, Presidents' Award, George W. Snedecor Award, Elizabeth L. Scott Award, and F.N. David Award.

This volume is not only about statistics and science, but also about people and their passion for discovery. It contains expository articles by distinguished authors on a broad spectrum of topics of interest in statistical education, research, and applications. Many of these articles are accessible to not only professional statisticians and graduate students, but also undergraduates interested in pursuing statistics as a career and to all those who use statistics to solve real-world problems.

Topics include reminiscences and personal reflections on statistical careers, perspectives on the field and profession, thoughts about the discipline and future of statistical science, and advice for young statisticians. A consistent theme among all the articles is the passion for statistics enthusiastically shared by the authors. Their success stories inspire; give a sense of statistics as a discipline; and provide a taste of the exhilaration of discovery, success, and professional accomplishment.

This volume has five parts. In Part I, Ingram Olkin gives a brief overview of the 50-year history of COPSS. Part II consists of 11 articles by authors who reflect on their own careers and the lessons they learned. Part III has nine articles describing the challenges of statistical science in science and society, statistical education, equity and diversity in statistics, and the opportunities of statistical science in the era of Big Data science. Part IV has 24 articles on past developments, current challenges, and future opportunities for statistics in which authors provide insight on past developments, current challenges, and future opportunities in statistical science. Part V has seven articles, in which senior statisticians share their experiences and provide career advice for the next generation.

COPSS consists of five member societies: the American Statistical Association (ASA), Institute of Mathematical Statistics (IMS), Statistical Society of Canada/Société statistique du Canada (SSC), and the Eastern and Western North American Regions of the International Biometric Society (ENAR and WNAR). COPSS is best known for sponsoring prestigious awards given each year at the Joint Statistical Meetings.

This book project was supported by COPSS and its member societies, as well as several of COPSS friend societies—including the International Chinese Statistical Society, the International Indian Statistical Association, and the Korean International Statistical Society—and substantial in-kind support provided by the Institut des sciences mathématiques du Québec.

We hope this volume will inspire you and help you develop the same passion for statistics that we share with the authors. Happy reading!

Excitement and Momentum Follow ASA's Conference on Statistical Practice

LeAnna G. Stork, CSP Steering Committee Chair



ASA Executive Director Ron Wasserstein helps set up a common area in which the CSP attendees and exhibitors will gather.



sion in the main area, filled with participants and exhibitors.

Tampa, Florida February 20-22

nother successful Conference on Statistical Practice is in the books! Warm and sunny Tampa, Florida, was the location for this year's conference that took place from February 20-22, at the Hilton Tampa Downtown (www. amstat.org/meetings/csp/2014). Four hundred participants enjoyed the short courses, oral sessions, poster sessions, tutorials, and keynote address provided by 2014 ASA President Nathaniel Schenker.

Each year thus far, participation at CSP has grown, which highlights the importance of a conference dedicated to serving the needs of statistical practitioners by providing a forum to learn, share, and discuss statistical techniques, innovations, and best practices. Unique to CSP is the conference theme dedicated to "Communication, Impact, and Career Development." This theme continues to be one of the most popular at CSP and provides participants with tools that can be used to enhance communication with customers, have a positive impact on their organization, and develop leadership skills.

CSP attendees are strongly encouraged to be active participants during the conference sessions by asking questions and engaging in discussion about how the work presented can be used to help them be better statistical practitioners in their organizations. In all the sessions I attended, participants took advantage of this opportunity by asking great questions and engaging in lively and relevant conversation.

By design, the CSP conference space is focused around one main common area in which the exhibitor booths, opening mixer, poster sessions, continental breakfasts, and breaks are shared. The short courses and concurrent sessions are located in adjacent meeting rooms. We have received overwhelming feedback from participants that this physical arrangement, along with the small conference size, provides a great opportunity for continuous networking. It is very likely you will run into many of the same people throughout the conference during the breaks and poster sessions. This is a great opportunity to enhance networking skills in a small, intimate conference environment.

New this year was the CSP Mentoring Program, which was designed to establish and facilitate a 1:1 mentoring relationship between junior and senior statistical practitioners and provide an opportunity to enhance personal and professional development goals. Mentor/mentee pairs were matched prior to CSP based on technical areas of expertise and career development goals. This program has received a lot of positive feedback already and is likely to grow in size next year.

New Orleans, Louisiana, will host CSP 2015. We hope to see you there! ■



Lori Thombs and Cihan Caglayan take a break during the afternoon poster sessions.



ASA President Nathaniel Schenker gives his keynote address—The ASA, the CSP, and Career Lessons: A Buffet.



Ron Snee leads a discussion during the short course Enhancing Big Data Projects Through Statistical Engineering. The course was instructed by Snee, Dick De Veaux, and Roger Hoerl.



Wenjin Wang and Wenting Xie mingle during continental breakfast.



Rashida Washington (left) and Nola McDaniel share a laptop during a break between concurrent sessions.



David M. Kline, a graduate student in the PhD biostatistics program at The Ohio State University, accepts the first Lester "Randy" Curtin Award from Sally Curtin.

CSP Attendee Finds Place in ASA's Big Tent

Ashleigh Rhodes, University of West Florida



Ashleigh Rhodes will graduate with her MS in mathematics and statistics from the University of West Florida in May, when she'll be relocating to the Philadelphia area. She has an MAT from American University and a BS in metallurgical and materials engineering from Colorado School of Mines.

I went to CSP worried I would feel overwhelmed and inexperienced. Instead, I left feeling confident and inspired . . .

> hen I tell people I'm about to finish my master's degree, they often ask, "Doesn't it feel good to be almost done?" Until recently, I shook my head, because I was so unsure of the next step. All I knew about statistics was from my online courses, and the only statistician I knew personally was my graduate advisor.

> Last fall, I started searching for opportunities to meet statisticians face to face. I wanted to see whom these people are and get an idea about what they like or don't like about their professional situations. That's how I found the Conference on Statistical Practice in Tampa. I particularly liked that it was designed to "strengthen relationships ... for those practitioners not necessarily part of an academic community or a large statistical organization." That certainly was how I felt. It didn't hurt that it was a reasonable day's drive from my home in Destin, Florida.

> I signed up, telling myself if everyone I met were a PhD or well into his career, at least I'd get a feel for what my future might look like. In case all the presentations were over my head, I started the conference with an introductory short course on R.

That way, I would feel as if I had learned something marketable during the weekend.

As the conference unfolded, I was surprised by how well I blended in. The short course was clearly too short to even get started on programming in R, but it inspired me to go home and self-study inspiration I sorely needed. It also made the R code I saw in many presentations much friendlier. As I expected, many of the presentations were over my head, but many weren't. I was pleased to find an interesting presentation in every time slot, and frequently I had to make a hard choice between more than one. There was even one directly useful to my current graduate research.

The small size and layout of the conference meant that even though I felt a bit awkward and alone at the beginning of the conference, I found I knew a lot of faces and names by the end. Even better, I felt I was starting to get a feel for the kinds of people who called themselves "statisticians" and which parts of the field I might explore to find the flexible, remote work I want. I met people working in large statistical organizations, like SAS, along with many more people who were the only statisticians in their companies, or one of only a few. There seemed to be as many master's as PhDs. I met a few professors early in their teaching careers and people who focus mainly on programming.

I went to CSP worried I would feel overwhelmed and inexperienced. Instead, I left feeling confident and inspired to fill in the gaps in my knowledge and with tools in hand to start working on those gaps. I also have a few names of people I can turn to when I am stuck.

I had not heard the term "Big Tent" before this conference, but I now know it's an important idea at the ASA. I find this reassuring as someone who definitely does not fit into any standard model of a statistician or academic and as someone not exactly sure of her ultimate path. I joined the ASA because it was required at registration, but I suspect the ASA has shown me, through this conference, that it is large enough for me to find value in being a lifetime member.

Response to Olkin

Jean D. Gibbons



ngram Olkin posed a disturbing and provocative question in "Where Have All the Tenured ▲ Women Gone?" He reported that tenured women comprised only 5/83 = 6% of the faculty at eight private universities in 1995 (Carnegie-Mellon, Chicago, Duke, Harvard, Penn, Rice, Southern Methodist, Stanford). Further, women accounted for only 20/243 = 8.2% of statistics faculty at 21 public universities that offered doctorates in statistics. The survey by the Conference Board of the Mathematical Sciences revealed women comprised only 79/525 = 15% of faculty in doctoral statistics departments in 2005 and 95/560 = 17% in 2010.

Since the proportion of graduate students and the number of PhDs in statistics who are female has increased drastically over the last 30 years, the question posed in the title of Olkin's article is perplexing. We all know statistics faculty at major universities are required to publish to become tenured. Can it be that these females do not publish in sufficient numbers? This has indeed been the case for female PhDs in the field of economics.

Mary Fish and Jean Gibbons, in their 1989 Journal of Economic Education paper titled "A Comparison of the Publications of Male and Female Economists," compared the publication records of female and male PhD economists on the basis of a random sample of 960 persons over the period from 1969–1984. Thirty men and 30 women for each year were matched with respect to the year the PhD was granted from a comparable university in the United States and one of 10 primary topics of dissertation research (e.g., monetary and fiscal theory, international economics,

economic statistics, etc.) for each year. Publication records were obtained from the quarterly Journal of Economic Literature, which indexes 260 economics journals. Of the respondents in academic careers, only 32% of the women had at least one publication, while the corresponding percentage for men was 60%. The male economists in the sample had an average of 1.76 publications, while the females averaged 1.01 publications for all the journals indexed—a difference of 74%.

In their 1988 Business Horizons paper, "The Strange Case of the Female PhD Economist," Gibbons, John S. Fielden, and Fish reported a study that attempted to determine why PhD female economists are publishing so much less than their male counterparts. They sent questionnaires to 54 of the women in the original group. Sixty-one percent completed the questionnaire; all but two were currently employed in academia. Respondents were asked to rank five categories of possible hindrances to achieving a more prolific publication record. These classifications were described as Domestic Situation, Value Choices, Environmental Influences, Sex Discrimination, and Career Interruptions. There was a significant consensus of opinion with environmental influences the most important, followed by value choices, domestic situation, career interruptions, and last, sex discrimination. Only the first three ranked together as important factors.

The comments about value choices were the most illuminating. Half of the respondents indicated that children's and/or domestic partners' needs were placed before publication activities. Many indicated they preferred to spend time on teaching activities and nurturing students.

Environmental influences include lack of assistance for research and lack of opportunity to coauthor. One could argue that identical environmental factors should also affect men equally. The only difference that emerged clearly is the additional pressure on women for service activities. If every oral examination committee, say, needs a token female and there are few females on the faculty, each female will have an excess of committee responsibilities that take time away from publishing.

While sex discrimination did not turn out to be an important factor, the individual comments were revealing. One respondent said, "My impression is that economics is still a male-dominated Jean D. Gibbons is Russell Professor Emerita of Applied Statistics at the University of Alabama. She retired in 1995 and resides in Vero Beach, Florida.

profession, and a 'jealous' one." Another claimed, There is more an indifference to women than there is discrimination."

The range of comments was so diverse that we found it impossible to come up with any definitive reasons to explain the large difference in publication output. We did conjecture that women may regard publications as a game that must be played and they simply refuse to compete. Instead, they choose to teach at institutions where refereed journal publications in prestigious journals are held to be less important than other, more practically useful publications. Women may prefer teaching and counseling students, activities regarded by psychologists as more nurturing and caring, to competing for the publications necessary to be successful at the major institutions of higher learning. These same institutions generally also regard teaching and service more favorably. We also concluded that women are reluctant to offer a gender-based excuse, even though the prime childbearing years coincide with the prime tenure-granting years. While female PhD economists are not the same as PhD statisticians, these conclusions sound reasonable enough to be attributed to other PhD women in academia

today. The typical PhD woman has chosen to teach at an institution where she can make her own choices about her contributions to society and not feel pressured to engage in activities required by other, more prestigious institutions.

Olkin suggests a possible cause of the shortage of tenured female faculty is bias against women in both hiring and granting tenure, and he recommends suitable programs be introduced to enable women who are isolated and may encounter difficulty finding co-authors to do more collaborative research and thereby improve their publication records. My personal experience as the lone woman in two doctorate-granting statistics departments for more than 35 years (Penn and Alabama) is that my male colleagues enthusiastically welcomed my collaboration because I had established a reputation as an extremely capable writer who was always willing to do more than her fair share in collaboration. The sense of isolation among my colleagues actually worked to my advantage in obtaining co-authors for research and publications. Further, potential co-authors were never limited to colleagues in my own department, even before the advent of email and other modern methods of instant communication.



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Xiaoming Huo, Thomas F. Russell, and Christopher Stark

omputational and Data-Enabled Science and **∠**Engineering Mathematical and Statistical Sciences (CDS&E-MSS) is a relatively new funding opportunity managed by the Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF). The CDS&E-MSS program supports research that confronts the mathematical and statistical challenges presented to the scientific and engineering communities by the ever-expanding role of computational modeling and simulation on the one hand and the explosion in production of digital and observational data on the other. The goal of the program is to promote the creation and development of the next generation of mathematical and statistical theories and methodologies that will be essential for addressing such issues. To this end, the program supports fundamental research in mathematics and statistics whose primary emphasis is on meeting these challenges.

The next submission window for CDS&E-MSS is November 25 to December 9. CDS&E-MSS was launched in 2011, and the first two rounds of awards were made in 2012 and 2013, respectively. To learn about existing CDS&E-MSS-supported projects, visit www.nsf.gov/div/ index.jsp?div=DMS and locate the link to CDS&E-MSS.

After arriving at the CDS&E-MSS website, click "What Has Been Funded..." at the bottom of the page to reach the NSF Award Search website, where all active projects funded by the CDS&E-MSS program are listed. Alternatively, browse the NSF Award Search website directly and then use the CDS&E program element code 8069 in a search.

Awards from the first two CDS&E-MSS competitions cover a wide range of topics (e.g., stochastic partial differential equations, Lie groups and representation theory, manifold learning, sparse optimization, data assimilation, partially observed Markov processes, and highdimensional learning). Many emerging methodologies have been proposed for development (e.g., efficient parallel iterative Monte Carlo methods, accelerated Monte Carlo schemes, solving large-scale Eigen-related problems, and measurement model specification search). Some projects are dealing with newly emerged data sets (e.g., algebraic, geometric, and computational tools for data cloud and data array; LiDAR point cloud data; and data with network structure). A wide range of applications can be found in the current awards, including tumor microenvironment, genetic association, brain connectivity, coastal ocean modeling, and subsurface imaging.



A successful statistics proposal will address the data-enabling component of the program description and argue convincingly for its application(s) in science and engineering. A project that appears to fit into other, traditional programs will have low funding priority in the CDS&E-MSS program. Many CDS&E-MSS awards support interdisciplinary research, and existing awards are jointly supported by several divisions within NSF, with significant participation by the Division of Advanced Cyberinfrastructure in the Directorate for Computer and Information Science and Engineering.

More information about this new program can be found in an October 2012 Amstat News article by Jia Li (http://magazine. amstat.org/blog/2012/10/01/ *funding1012*). ■

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Council of Chapters: History, Organization,

and Objectives

nder Francis Walker's leadership, the American Statistical Association was founded in Boston in 1839. By the end of the 19th century, it had acquired a national membership. In 1925, the ASA chartered the first geographically localized chapter of statisticians in Los Angeles. By 1933, the ASA had sanctioned 11 chapters in large cities across the nation. The chapters held regular meetings and were required to have a constitution consistent with the ASA objectives, while the ASA collected chapter dues and maintained membership directories. To strengthen the relationship between the ASA and these chapters, the ASA established a Committee on Chapters in 1939. However, this committee disbanded in 1944. Yet by 1953, the ASA's membership had grown to 4,900.

To better serve this membership, district committees were formed in the 1950s to provide organizational coherence. By 1983, the ASA chapters were meeting in 40 states, and the ASA membership had grown to 14,700. In 1984, the Council of Chapters (COC) was established to resume the mission of the disbanded Committee on Chapters, whose efforts had been sustained by the geographic district committees replaced in 1974 by the ASA Council. By 1987, the COC supported 75 chapters, including several rejuvenated chapters. The council served in accord with the 1983 ASA constitution, which was ratified by the members, and its own charter. By 1989, the year of the ASA's 150th anniversary celebration, ASA membership exceeded 15,000. The number of ASA chapters located throughout the United States and Canada remains stable at 74 and ASA membership now exceeds 18,000.

The ASA, now headquartered in Alexandria, Virginia, runs under the leadership and staff of Executive Director Ron Wasserstein. ASA leadership is organized into sections, chapters, and committees (Figure 1).

Similar to the ASA itself, the broad objective of a chapter is to promote statistics and its applications. ASA chapter activities are designed to increase the unity and effectiveness of all individuals within a specific geographical region. Chapter activities include holding meetings, producing publications, participating in educational efforts, providing information about the application of statistics, making statistics of service to society, and making society aware of statistics as a science. Chapters are grouped by region and district to allow the ASA to effectively communicate

175th ANNIVERSAR

Alex Hanlon and James Cochran

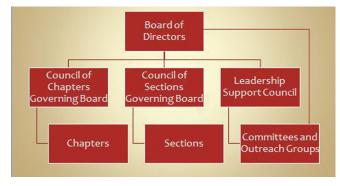


Figure 1. A chart showing the ASA leadership

with each on a local level. The primary interests and goals of the COC are to encourage the development of chapters; assist in promoting specific chapter activities at the local level; foster member involvement in the functions of the ASA; and act as a liaison to link individuals to chapters, chapters to chapters, and both individuals and chapters to the association.

The COC Governing Board (COCGB) manages the affairs of the COC and consists of the following 14 officers:

Chair

Chair-elect

Past Chair

Representative to the ASA Board of Directors (3)

District Vice Chair (6)

Communications Officer

Secretary/Treasurer

With the exception of the communications officer, who is appointed by the chair-elect to serve during her/his upcoming term as president, all officers are elected. The terms of office for the elected district vice chairs are three years, while the remaining elected office terms are yearly. The COCGB meets semiannually—the winter meeting is used to discuss yearly council activities, while the August JSM meeting is used to review actions taken by the COCGB over the prior year and plan for future activities. Outside of these meetings, council business is generally conducted by email or telephone.

The COC encourages the development of new chapters and the health of existing chapters in several

Communication Tools

In addition to *Chapter Chatter*, there are other tools available for chapter officers to reach both current and prospective members, as well as a broader audience, when it comes to events (e.g., continuing education courses, workshops, conferences, symposia, chapter meetings with a guest speaker, etc.). Attracting people outside the chapter can increase chapter profile, attract new members, and increase the chapter's revenue.

Calendar of Events: http://bit.ly/1iBRIGq

ASA website: www.amstat.org

COC website: http://community.amstat.org/COC/Home

ASA Facebook page: http://on.fb.me/1gqLaHX

ASA Twitter account: https://twitter.com/AmstatNews

ways. Individuals seeking to establish a new chapter are given advice about how to navigate the process by the COCGB. Once a new chapter is approved, the COCGB and COC members advise the nascent chapter on how to attract members and plan suitable events. Officers of the new chapter are added to the distribution list for Chapter Chatter, the biannual electronic newsletter for ASA chapters. This newsletter highlights recent and upcoming chapter activities and ASA activities and initiatives that are of interest to chapters. If there is evidence that a chapter is becoming inactive, the COCGB investigates and often finds this is nothing more than a lack of reporting of activities. When a chapter has ceased to be active, the COCGB assesses the situation and takes measures designed specifically to reinvigorate the inactive chapter. Because each case is unique, measures taken are also unique, but the approach is always supportive.

Specific chapter activities also are supported by the COC in many ways. Through Chapter Chatter, information about chapter activity is shared with other chapters. Discussion of recent and upcoming chapter activity, as well as suggestions for potential activities, are discussed freely at the COC meeting held during the annual JSM. Every chapter is encouraged to send a representative to this meeting. The COC recognizes outstanding service of individual chapters through the Chapter Service Recognition Award; a chapter is eligible for one of its members to win this award every

The COC also operates the Traveling Course Program and the Chapter Visitation Program. The COC traveling courses provide low-cost, local courses for ASA chapters members. The COC sponsors this activity by covering speaker travel expenses and honoraria. The chapter is responsible for advertising, local arrangements, course materials, and registration. The Traveling Course Committee chooses the local chapters and works with the speakers and chapters to select

dates for each course. The courses often are awarded according to geographical proximity to minimize travel cost, with special consideration given to smaller chapters and chapters that have not had a traveling course recently. Previous offerings have included applied survival analysis; successful data mining in practice; statistical methods for reliability data; and Bayesian methods for data analysis, meta-analysis, and adaptive trials. The 2014 course offering is Applied Logistic Regression, and will be given by David W. Hosmer, Stan Leneshow, and Rod Sturdivant, authors of Applied Logistics Regression, 3rd ed.

The Chapter Visitation Program is probably one of the most visible means by which the ASA shows its support and concern for its chapters. The visitor is generally the ASA president, vice president, executive director, or a COC Governing Board member. The purpose of the visit is to communicate with the chapters about issues of concern to the chapter and association. The visit also is expected to stimulate and revitalize chapters by providing a prominent speaker. Examples of visitor offerings include providing a lecture that attracts potential new chapter members and current but inactive chapter members; providing a discussion format among chapter members for exchange of information on current ASA issues or policy and chapter concerns; and/or establishing goals and objectives for the chapter to attain in the immediate future to improve and maintain the chapter's status within the association, as determined by the COC evaluation criteria.

The COC also serves as a means through which chapters in close geographical proximity can be encouraged to hold joint meetings and develop joint activities. For example, chapters will jointly host a traveling course or a visitor through the Chapter Visitation Program. This is a terrific way to share the effort involved in organizing an event and bring together colleagues who may not otherwise see each other.

Finally, the ASA COC website offers valuable resources for chapters: Chapter Officer Handbook, COC Responsibilities and Procedures, Chapter Vice Chair Orientation, and instructions for filing the IRS Form 990-N. The COC website also offers a tutorial for chapter officers on the use of online reporting for extracting current chapter rosters, including member emails, reports on new and lapsed chapter members, and ASA members in the area who do not belong to the local chapter.

The COC encourages each chapter to maintain an updated website. The ASA can assist chapters with their web presence by hosting their website or creating chapter "microsites." Rick Peterson, continuing education and chapters and sections associate, assists chapters with their web presence on the ASA community. Visit the ASA community website at http://community. amstat.org/home for details or email Peterson at rick@ amstat.org for assistance. ■

STATtr@k

Dana Mackenzie on How to Tell a **Story About Statistics**

ave you ever wondered what it would take to be a science writer? We interviewed author, writer, and math whiz Dana Mackenzie to find out how to tell a story about statistics.

What came first? Your love for math or writing?

Writing, but it was a close call. My mother taught me to read and write at a young age, and by age 5, I was already writing stories that she would bind into a little book. My father was very interested in math (he was a math major in college) and would pose puzzles to me, like "How many ways are there for your class to line up for lunch?" This was in second grade, when my class had 22 students. I guessed 22. The correct answer, of course, is 22 factorial. After he explained what factorials were, I spent the rest of the spring computing 22 factorial. The catch is I didn't know how to multiply yet (beyond one-digit numbers), so I had to do it by adding! Imagine adding 21 factorial to itself 22 times and you can see what a huge project this was. It's almost certain that I made mistakes, but I did get an answer by the end of the year.

I'd also like to give credit to Martin Gardner for showing me how math and writing can be combined. I read a lot of his Scientific American columns when I was growing up and several of his books. Of course, many mathematicians of my generation were inspired in the same way.

What skills and academic training are valuable to a science writer?

Curiosity about science, obviously. Beyond that, I think it's important to realize how writing for the public is different from academic writing. You need to un-learn a lot of bad habits that academia teaches you—the passive voice, the use of jargon, the impersonality. Writing for the public is all about telling stories, which scientific publications seldom do. Stories have a beginning, middle, and end. They have people in them. The people in them have emotions and personalities. The stories they tell may use the first person singular, which is almost forbidden in academic publications.

Accuracy is important, too—but not the pedantic 100% accuracy of an academic article. You have to cut some corners in your explanations, give readers the right sense of the topic, even if some of the details are missing or simplified. Also, as a writer for newspapers or magazines, you have to give up control.



Dana Mackenzie is a science writer, mathematician, and author of several books, including The Universe in Zero Words, The Big Splat, or How Our Moon Came to Be, and What's Happening in the Mathematical Sciences. He has won several awards for his writing and been published in such magazines as Scientific American, Discover, Science, Smithsonian, and New Scientist.

You do not have the last say over your words—the editor does. Finally, being able to work under tight deadlines is very important. If you're writing for a newspaper, you might have to turn around a story in a day. If you're writing for a weekly, you might have a week or less. All these amount to a huge culture change for most people who are used to the academic environment, and not all of them can handle it.

These were some of the things I learned during my year in the Science Communication Program at the University of California at Santa Cruz. People sometimes ask me if you have to go to a writing program to become a writer. I tell them no, you don't have to, but it helps a huge amount. Otherwise, you'd have to learn all the things I just mentioned the hard way.

What do you find rewarding about a career as a science writer?

Being able to find out about so many new advances in science. I tell people my job is like getting free lessons every week from the smartest people in the country (or the world). Also, being able to write for a living is great! I love writing; I love solving the problem of how to explain something in the most lucid way, finding the right analogies, finding where the human story lies. Writing my two books was a special thrill, because a book is so permanent. It lasts forever and establishes your credibility as a writer. In the process of writing my first book, especially, I got to do historical research

with original documents, and that was amazing. For the first time, I really understood why historians love history.

What are some of your greatest challenges as a science writer?

For me, the hardest thing in the beginning (and still, to some extent) was interviewing people. But it helped a lot once I saw that about 90% or 95% of scientists are *happy* to be interviewed. If they've done something good, they'd like to talk about it. I'm fortunate I don't work in an area like cancer or AIDS research, where the leading researchers have been interviewed so many times they're sick of it. In math and related fields, media attention is the exception rather than the rule, so people are excited and flattered to get the attention.

Another unexpected challenge is writing about math! The problem is that I know a great deal more than the average reader and so I sometimes assume too much. One of my teachers at UCSC assigned our class to read a book about Zen Buddhism, Zen Mind, Beginner Mind, because that book talks all about forgetting what you know and putting yourself in the frame of mind of a beginner. I try to remind myself about that sometimes when I write about math: Don't forget to ask the questions a beginner would ask. This isn't a problem when I'm writing about other sciences, such as astronomy or biology. In those fields I am a beginner, so I don't have to make any special effort.

Who or what inspires you to write?

I just look for a story that grabs me. I could give you some examples if you want to talk about this further. Also, I have to mention that a significant percentage of my articles are assignments that an editor gives to me. I have a rule—if I pitch a story to an editor, I might have a 30% or 50% chance of getting it published. If the editor pitches the topic to me, then I have a 100% chance. So I almost always say "Yes" when that happens.

Can you point to any websites to learn about a career in science writing?

Well, of course I have to give a plug to the program that taught me, which is at http://scicom.ucsc.edu. Also, the National Association of Science Writers website (www.nasw.org) is a good place to learn about the field.

Do you have any general advice for high-school or college students who are interested in a science writing career?

The great thing about this job is that it rewards generalists—people who know a little about a lot of things. Most of academia is the opposite. In academia, you have to specialize and learn a lot about something extremely tiny. If you're set on writing as a career, you should recognize that academia will pull you in the opposite direction and you'll have to resist it. Always try to keep your eyes on the big picture. Try to get as well-rounded an education in science as you can.

Also, don't ignore literature and the humanities, because a big part of this job is story-telling. Good story-telling is good story-telling, whether it's fiction or nonfiction. You might want to start reading popular science books and magazines to see which writers and magazines you like. Writing for a school newspaper or magazine is good. I never did it myself, but that sort of thing will give you a sense of what journalists do and it will also establish some credentials if you want to apply to a journalism school or a science-writing program. I also recommend majoring in a science. The UCSC program requires applicants to have a science degree (bachelor's, master's, or PhD), and I think it's smart. Most journalists did not major in science, so this is a way to set yourself apart. But just remember, that specialized knowledge can also be a curse when you're writing for non-specialists, so use it wisely!

Most of your articles are written for the general public. Do you have any tips for communicating the complexities of math and statistics to a general audience?

I gave you a few tips in my second answer above. The best way to communicate a difficult subject is to write about the people who are working on it. If you can convey to the readers why they are passionate about their subject, you build up the reader's identification with it, too. A good example was the publicity last year about Yitang Zhang's work on prime pairs, which was probably the most-publicized math story of the year. What made it a great story was that it was a rags-to-riches story. He emigrated from China, and for a while he couldn't even get a teaching job and worked at a Subway. Now, almost overnight, he's one of the most celebrated mathematicians in the world. That's a story everybody can relate to, even if they don't understand exactly what he did.

I also like to practice what Los Angeles Times writer K.C. Cole called "stealth math." You write a column that is supposedly about climate change, for example, but really it's all about the math that goes into climate models. If the reader doesn't even realize it's math, you can sometimes get past that emotional resistance many people have toward the subject.

Newly Elected AAAS Fellows



n November of 2013, the American Association for the Advancement of Science (AAAS) council elected 388 members as fellows. These individuals were recognized for their efforts to advance science or its applications at the Fellows Forum on February 15 during the AAAS annual meeting in Boston, Massachusetts. The new fellows received a certificate and blue and gold rosette as a symbol of their distinguished accomplishments.

The 10 new fellows of AAAS Section U (Statistics) are listed below with their citations. Included are current ASA Science Policy Director Steve Pierson and former ASA Research and Graduate Education Manager Keith Crank.

Raymond J. Carroll, Texas A&M University

For preeminent research on statistical theory and methods and their applications to medical science and for excellence in teaching and in service to professional societies.

Keith N. Crank, Retired

For the advancement of statistical science through many years of service as an NSF program officer and for workshops to advance the careers of young researchers.

Barry R. Davis, The University of Texas School of Public Health

For distinguished contributions to the methodology of clinical trials; the design, monitoring, management, and reporting of influential clinical trials; and leadership to advance public health.

Kim-Anh Do, The University of Texas MD **Anderson Cancer Center**

For distinguished contributions to computational statistics and integrated statistical methodology for highdimensional omics data with applications to translational cancer research and personalized medicine.

Mark Scott Kamlet, Carnegie Mellon University

For distinguished contributions to the economic analysis of health interventions and budgetary policy analysis and as provost of Carnegie Mellon University.



From left: Kim-Anh Do, Barry Davis, Michael Stein, Joseph Newton, and Robert Smythe

Bani K. Mallick, Texas A&M University

For distinguished contributions to the field of Bayesian modeling and computation with application to different scientific fields, for leadership in promoting statistical science, and for service to the profession.

H. Joseph Newton, Texas A&M University

For contributions in statistical space-time methodology and computational statistics, for introducing computer technology in teaching, and for many years of extraordinarily successful science higher education administration.

Stephen W. Pierson, American Statistical **Association**

For significant leadership with the American Statistical Association in communicating and advocating statistics to policymakers and for the facilitation of statisticians' involvement in this process.

Robert T. Smythe, Oregon State University

For distinguished contributions to probability theory, design of randomized trials, and analysis of algorithms and for application of probability and statistics to science policy.

Michael Stein, The University of Chicago

For distinguished contributions to applied statistics, especially for the development of spatio-temporal models for environmental applications.

Editor's Note: ASA member Ann Bostrom was elected AAAS Fellow of the Section on Social, Economic, and Political Sciences.

First GlaxoSmithKline-Duke Statistics Workshop a Success



From left, first row: Michael Pencina (Duke), Liz DeLong (Duke), Sara Hughes (GSK), John Whittaker (GSK); From left, second row: Robin White (GSK), Kerry Lee (Duke), Stephen George (Duke), Shein-Chung Chow (Duke), Shuyen Ho (GSK), Steve Novick (GSK), Paul McSorley (GSK), Xiaofei Wang (Duke)

The first GlaxoSmithKline (GSK)-Duke Statistics Workshop on Critical Statistical Issues in Drug Development was held October 29, 2013, at the GSK Research Triangle Park location. It was well attended, with more than 100 participants from both Duke and GSK.

Liz DeLong and Michael Pencina of the Duke Clinical Research Institute and Sara Hughes and John Whittaker of GSK gave opening remarks. Stephen George and Kerry Lee from Duke biostatistics and bioinformatics then presented their perspectives on design and analysis issues in drug development. Finally, Paul McSorley and Steve Novick discussed the GSK data sharing (SHARE) program and challenges and issues involved in pre/nonclinical research.

The Duke Biostatistics and Bioinformatics Department and GlaxoSmithKline formed this partnership with a mission to promote research and collaboration by bringing together researchers

from industry, academia, and regulatory agencies to discuss important and potentially controversial issues related to the clinical development of drugs and devices. The partnership also encourages collaboration, consulting, and internships and will include workshops dedicated to important and timely topics in the application of statistics to clinical trials.

The 2nd joint GSK-Duke workshop has been tentatively scheduled for October 28 at Duke. ■



Join us as we celebrate throughout 2014!

The American Statistical Association, the nation's second-oldest learned society, proudly celebrates its 175th anniversary this year.

Throughout 2014, ASA members will look back at our history, explore our present, and learn about future plans for our association!



www.amstat.org/asa175

University of **Tampere Videos**

The University of Tampere in Tampere, Finland, hosted two conferences on statistics (and related matrix theory) in 1987 and 1990. The videos of these conferences have now been published on the university's YouTube channel at http://bit.ly/1l4JRFS.

These videos were originally recorded on VHS tapes, which were 'found' two years ago during a move. They have been digitized and edited by Jarmo Niemelä and Reijo Sund. The conferences took place before so many of today's high-tech tools existed, and it is interesting to see how well people (e.g., George Box with his 'magic' transparencies) managed. The performers in the videos are the following:

T. W. Anderson Elja Arjas Anthony C. Atkinson Jerzy K. Baksalary George E. P. Box Tadeusz Calinski R. Dennis Cook Knut Conradsen Yadolah Dodge Norman R. Draper Iohan Fellman Stanislaw Gnot Shanti S. Gupta E. J. Hannan J. A. John Takeaki Kariya C. G. Khatri Stratis Kounias Erkki Liski Sujit Kumar Mitra Seppo Mustonen

Heinz Neudecker

Hannu Niemi Leif Nordberg Ingram Olkin Michael Perlman John W. Pratt Daryl Pregibon Friedrich Pukelsheim Tarmo Pukkila Simo Puntanen C. R. Rao Jorma Rissanen Alastair J. Scott Kirti R. Shah Bimal K. Sinha Terry Speed J. N. Srivastava George P. H. Styan Timo Teräsvirta Tue Tjur Jarmo Visakorpi Mati Wax

The programs of the conferences are available at http://people.uta.fi/~simo.puntanen/Program-1987conference-Tampere.pdf and www.sis.uta.fi/tilasto/ iwms/program-IWMS-1990-Tampere.pdf. ■

Obituaries William H. Hill

William H. Hill, a statistician and information systems specialist with the Department of the Navy, died January 27, 2014, at the Residences at Thomas Circle retirement community in Washington, DC. He was 97. View his entire obituary in *The Washington Post* at http:// wapo.st/MyvMRA.

Sameena Salvucci

William F. Rosenberger

Sameena Khan Salvucci passed away February 5, 2014, one day shy of her 55th birthday, after a long battle with metastatic breast cancer. She was a senior fellow at Mathematica Policy Research Institute in Washington, DC, and an expert in survey sampling research.

Salvucci earned a bachelor's degree from Hartwick College in Oneonta, New York (where she met her husband). She earned a master's degree in statistics at SUNY Binghamton, completed further graduate work in statistics at The George Washington University, and earned a PhD in information technology from George Mason University in 2000. Her dissertation, "Imputation Methods in Sample Surveys," was directed by James Gentle.

Salvucci had more than two decades' experience directing large, complex contracts involving study design, data collection, survey methodology, statistical analysis, and automated systems development in education, defense, and health. Her early career was spent at Synectics for Management Decisions, where she was director of research for 10 years, before her move to Mathematica. During her tenure at Mathematica, Salvucci was instrumental in many successful statistics-led business development activities. She served as the corporate-area leader for the Substance Abuse and Mental Health Administration. She was an innovative area leader, who was fantastic at thinking creatively and reaching out to partners and had contacts everywhere. She was a great mentor throughout her career to junior staff on a range of subject matter and methodological aspects, as well as people skills. Although she was in an intense fight against a debilitating illness, she remained on full-time employment throughout and maintained a cheerful attitude and determined spirit.

Salvucci leaves her husband, Doug; two children, Kazim and Layla; and a large circle of family members and friends, international and ecumenical in scope. Her personal devotion to Islam was a source of comfort and energy to her always. At her service, the imam said, "Sameena loved everyone and was loved by everyone," which sounds like a cliché—unless you knew Sameena.

Thomas R. Ten Have Symposium to Take Place in May



Thomas Ten Have

The third annual Thomas R. Ten Have Symposium on Statistics in Mental Health will be held at the Yale School of Public Health May 29-30. This event continues the Columbia-Cornell-NYU-Penn-Yale Symposium and is jointly sponsored by the five universities and Mental Health Statistics Section of the American Statistical Association. Conference participants are welcome to contribute posters on statistical methodology or applied research in mental health.

The idea for a forum on statistics in psychiatry arose in 1998 from informal discussions among Eva Petkova, Ray Carroll, and Tom Ten Have. The first forum took place in 1999 at the New York State Psychiatric Institute as an informal joint forum with participating statisticians from Columbia University and the University of Pennsylvania. It was at this initial forum that several precedents were established for the ensuing annual forums: the forum would start with lunch and end with at least happy hour, if not dinner, and then a quick departure of the visiting attendees back home by train. Between 1999 and 2003, the forum location rotated between Columbia University and the University of Pennsylvania, with each forum consisting of two one-hour presentations on statistics in psychiatry by a member from each school and then ample time for informal discussions before happy hour.

In 2004, Yale University joined as the third participating institution and GlaxoSmithKline was a company sponsor of an external invited speaker. In addition, the forum grew with one one-hour invited presentation and three 30-minute contributed presentations, outside participants, and

an enhanced social program. In 2007, New York University became the fourth participating site and the forum was renamed to symposium, which continued to expand as Cornell University was added as another participating institution.

In 2011, Thomas Ten Have, who was one of the founders of the symposium, passed away. To honor his many contributions to the field of statistics in psychiatry and the statistics profession, the symposium was renamed to Tom R. Ten Have Symposium on Statistics in Psychiatry (TTH Symposium). The 2012 symposium was the first renamed TTH symposium. It took place at the University of Pennsylvania and culminated in the Ten Have Memorial Lecture given by C. Hendricks Brown. The second TTH symposium took place at the New York University Child Study Center in 2013.

In 2013, the ASA Statistics in Mental Health Section and TTH organizers agreed to sponsor the 2014 event jointly. This will be the first national symposium with an expanded program covering a day and a half of presentations, posters, and a social program. There will be eight regular invited talks, plus one keynote address to be delivered by Naihua Duan from Columbia University. Posters on statistical methodology or applied research in mental health will be on display throughout the conference.

For more information, visit http://bit.ly/1ddqjg1. ■

BASS XXI on Tap for November

The 21st meeting of the Biopharmaceutical Applied Statistics Symposium (BASS XXI) will be held November 3–7 at the Crowne Plaza Washington DC-Rockville. At least 16 one-hour tutorials on diverse topics pertinent to the research, clinical development, and regulation of pharmaceuticals will be presented November 3–5 by speakers from academia, the pharmaceutical industry, and the Food and Drug Administration (FDA). Two parallel two-day short courses will be presented November 6–7.

Popular features of BASS XXI are the keynote address on November 4, with reception following, and the November 5 FDA Biometrics session.

BASS is a nonprofit entity established for the purpose of fundraising to support graduate studies in biostatistics. To date, BASS has provided support to more than 50 master's or doctoral degree graduate students in biostatistics.

For further information, visit www.bassconference.org or contact the BASS registrar at Rewhitworth@gmail.com, Andreas Sashegyi at (317) 532-7414 or aisasheg@ lilly.com, or Karl Peace at (912) 681-6980 or peacekarl@frontier.com.

May

» 1—Successful Applications of Customer Analytics, Philadelphia, Pennsylvania

For details, visit www.wharton. upenn.edu/wcai/1299.cfm or contact Debbie Shapiro, 426 Vance Hall, 3733 Spruce St., Philadelphia, PA 19104; (215) 746-4160, wcai-events@ wharton.upenn.edu.

» 2—2014 Rutgers Statistics Symposium: Statistics and the Century of Data, Piscataway, **New Jersey**

For information, visit www.stat. rutgers.edu/conferences/centuryofdata2014 or contact Han Xiao, 501 Hill Center, 110 Frelinghuysen Road, Piscataway, NJ 08854; (848) 445-7640; hxiao@stat.rutgers.edu.

» *9—Monte Carlo and Bayesian Computation with R, Chicago, Illinois

For details, contact Anthony Babinec, 617 Argyle, Flossmoor, IL 60422-1201; (708) 805-1409; tbabinec@sbcglobal.net.

9–11—3rd Workshop on Biostatistics and Bioinformatics, Atlanta, Georgia

For more information, visit www2. gsu.edu/~matyiz/2014 workshop or contact Yichuan Zhao, Department of Mathematics and Statistics, Atlanta, GA 30303; (404) 413-6446; yichuan@gsu.edu.

» 12-16—Short Course on Mathematical Sciences in Obesity Research, Birmingham, Alabama

For more information, visit www. soph.uab.edu/energetics/shortcourse/ first or contact Richard Sarver, 1665 University Blvd., RPHB 140J, Birmingham, AL 35294; (205) 975-9169, rsarver@uab.edu.

» *15–17—Celebrating Women in Statistics, Cary, North Carolina

For details, visit women-in-stats. org or contact J. Lynn Palmer, 732 N. Washington St., Alexandria, VA 22314; (703) 302-1872, palmer@ amstat.org.

The following events are the latest additions to the ASA's online calendar of events. Announcements are accepted from education and not-forprofit organizations only. To view the complete list of statistics meetings and workshops, visit www. amstat.org/dateline.

- * Indicates events sponsored by the ASA or one of its sections, chapters, or committees
- » Indicates events posted since the previous issue

15-18-AAPOR 2014 Annual Conference, Anaheim, California

For information, visit www.aapor.org/ AAPOR Annual Conference.htm#. UnkdERDZjMg or contact Lisa Kamen, 111 Deer Lake Road, Suite 100, Deerfield, IL 60015; (847) 205-2651; Ikamen@aapor.org.

*19-21—37th Annual Midwest **Biopharmaceutical Statistics** Workshop (MBSW), Muncie, Indiana

For details, visit www.mbswonline. com or contact Melvin Munsaka. One Takeda Parkway, Deerfield, IL 60015; (224) 554-2846; melvin.munsaka@ takeda.com.

NORTHWESTERN ANALYTICS

As businesses seek to maximize the value of vast new streams of available data, Northwestern University offers two master's degree programs in analytics that prepare students to meet the growing demand for data-driven leadership and problem solving. Graduates develop a robust technical foundation, which guides data-driven decision making and innovation, as well as the strategic, communication and management skills which position them for leadership roles in a wide range of industries and disciplines.

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- Offered by Northwestern University School of Continuing Studies

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» 19–22—Summer Statistics Institute, Austin, Texas

For details, visit ssc.utexas.edu/ training/ssi or contact Sasha Schellenberg, 1 University Station G2500, Austin, TX 78712; (512) 232-9217; sasha.schellenberg@austin. utexas.edu.

22-23—12th IIF Workshop, London, United Kingdom

For more information, visit forecasters.ora/conferences/ *iif-sponsored-workshops* or contact Mohsen Hamoudia, 5 Allee Clos des Charmes, Eragny, International 95610, France; +33155544151; mohsen.hamoudia@orange.com.

To view the entire list of statistics meetings and workshops, visit www.amstat. org/dateline.

25–29—Statistical Challenges in 21st-Century Cosmology, Lisbon, Portugal

For details, visit sccc21.sim.ul.pt or contact Eric Feigelson, 525 Davey Laboratory, Penn State University, University Park, PA 16802; edf@astro. psu.edu.

26-28—PLS2014, Paris, France

For details, visit www.pls14.org or contact Gilbert Saporta, Dept. IMATH, 292 rue Saint Martin, Paris, 75003, France; +33140272268; pls2014@essec.edu.

June

*1-4-50th Summer Research Conference in Statistics and Biostatistics, Galveston, Texas

For details, visit *srcos2014.rice.edu* or contact Don Edwards, Dept. of Statistics, University of South Carolina, Columbia, TX 29208; (803) 777-7575; edwards@stat.sc.edu.

2-6—2014 Undergraduate Summer Research Program, Columbus, Ohio

For more information, visit www.mbi. osu.edu/eduprograms/ undergrad2014.html or contact Dennis Pearl, The Ohio State University, Jennings Hall, 3rd Floor, 1735 Neil Ave., Columbus, OH 43210; (614) 292-3887, pearl.1@osu.edu.

2-6-11th International Conference on Ordered Statistical Data, Bedlewo, Poland

For more information, visit bcc. impan.pl/14OrderStat or contact Tomesz Rychlik, Dept. of Mathematical Statistics, Institute of Mathematics, Polish Academy of Sciences, Warszawa, International 00-956, Poland; +48 22 5228 219; osd2014@impan.pl.

» 2-8/15-2014 MBI **Undergraduate Summer** Research Program, Columbus,

For more information, visit www. mbi.osu.edu/eduprograms/ undergrad2014.html or contact April Shelton, The Ohio State University, Jennings Hall, 3rd Floor, 1735 Neil Ave., Columbus, OH 43210; rebecca@mbi.osu.edu.

*4-6—Workshop on Nonparametric Statistics for Big Data, Madison, Wisconsin

For more information, visit www. stat.wisc.edu/node/206 or contact Douglas Nychka, P.O. Box 3000, Boulder, CO 80305; (303) 725-3199, nychka@ucar.edu.

8-12-23rd International Workshop on Matrices and Statistics (IWMS), Ljubljana, Slovenia

For more information, visit www. law05.si/iwms or contact Damjana Kokol Bukovsek, Faculty of Economics, University of Ljubljana, Kardeljeva ploscad 17, Ljubljana, International 1000, Slovenia; Damjana.Kokol.Bukovsek@EF.Uni-Lj.Sl.

» 11-14-BIOSTAT 2014 21st International Scientific Symposium on Biometrics, Dubrovnik, Croatia

For details, visit www.hbmd. hr or contact Anamarija Jazbec, Svetosimunska cesta 25, Zagreb, International HR-10000, Croatia; jazbec@sumfak.hr.

16-26—Pan-American Advanced Study Institute on Spatial Statistics, Búzios, Brazil

For details, visit www.stat. washington.edu/peter/PASI/ PASI 2014.html or contact Peter Guttorp, Box 354322, Seattle, WA 98195-4322; peter@stat.washington.

17-20—First International **Congress on Actuarial Science** and Quantitative Finance, Bogotá, Colombia

For details, visit www.matematicas. *unal.edu.co/icasaf* or contact Jaime Londoño, Dept. of Mathematics, Universidad Nacional de Colombia, Bogotá, International 11001000, Colombia; jalondonol@unal.edu.co.

18-20-39th Annual Summer Institute of Applied Statistics, Provo, Utah

For information, visit statistics.byu.edu or contact Amy Royer, 223 TMCB, Provo, UT 84602; (801) 422-4506; aroyer@stat.byu.edu.

» 23—Conference on Geometry and Statistics, Bath, United Kingdom

For details, visit *people.bath.ac.uk*/ kai21/conference.html or contact Karim Anaya-Izquierdo, Department of Mathematical Sciences, Bath, International BA27AY, United Kingdom; 447949622545; kai21@ bath.ac.uk.

» 23-27—Summer Institute in **Statistics for Clinical Research** 2014, Seattle, Washington

For details, visit www.biostat. washington.edu/suminst/siib/general or contact Mónica Feliú-Mójer, 4333 Brooklyn NE, Box 359461, Seattle, WA 98195; (206) 543-5912; monicai@uw.edu.

*24-26—ASA Q&P and SPES Joint Research Conference, Seattle, Washington

For more information, visit *jrc2014*. org or contact Robert Gramacy, University of Washington, Seattle, WA 98195; (206) 543-2100; rbgramacy@chicagobooth.edu. ■

sectionnews

Biometrics Section

Edited by Feifei Wei, Biometrics Section **Publications Officer**

Do you want to get more involved in JSM? Consider volunteering to chair a session. Chairing a session is an important responsibility and a great way to meet your colleagues. If you are interested, contact our section's 2014 program chair, Jonathan Schildcrout, at jonathan.schildcrout@vanderbilt.edu.

JSM 2014 Program

The Biometrics Section is pleased to sponsor the following six CE courses and five invited sessions at the 2014 Joint Statistical Meetings in Boston, Massachusetts:

CE Courses

Cure Models and Their Applications in Biomedical Research, taught by Jeremy Taylor and Yingwei Peng (1/2-day)

Adaptive Methods in Modern Clinical Trials, taught by Guosheng Yin, Byron Jones, and Frank Bretz (1-day)

Analysis of Genome-Wide Sequencing Association Studies, taught by Xihong Lin and Mike Wu (1-day)

Quantile Regression, taught by Roger Koenker and Huixia Judy Wang (1-day)

Missing Data Methods for Regression **Modeling,** taught by Joe Ibrahim (1-day)

Applied Longitudinal Analysis, taught by Garrett Fitzmaurice and Nan Laird (1-day)

Invited Sessions

Statistical Methods for Modern Complex-Structured Imaging Data, organized by Veera Baladandayuthapani

Recent Developments in the Analysis of Semi-Competing Risks Data, organized by Sebastien Haneuse

Recent Development in Variable Selection Methods, organized by Zhangsheng Yu

Emerging Statistical Methods for Complex Data, organized by Lan Xue

New Challenges in Survival Analysis, organized by Yichuan Zhao

2014 David P. Byar Young Investigator **Award Winners**

The David P. Byar Young Investigator Award is given annually to a new researcher in the Biometrics Section who presents an original manuscript at the Joint Statistical Meetings. The award commemorates David Byar, a renowned biostatistician who made significant contributions to the development and application of statistical methods during his career at the National Cancer Institute.

Through a comprehensive review of 42 submissions, members of the award committee chose the following eight travel award winners in addition to Byar Award winner **Peisong Han** of the University of Waterloo for "Multiply Robust Estimation in Regression Analysis with Missing Data":

Ting-Huei Chen of The University of North Carolina at Chapel Hill for "Prediction of Cancer Drug Sensitivity Using High-Dimensional Genomic Features"

Fang Han of The Johns Hopkins University for "Sparse Median Graphs Estimation in a High Dimensional Semiparametric Model"

Zheng-Zheng Tang of The University of North Carolina at Chapel Hill for "Meta-Analysis of Sequencing Studies with Heterogeneous Genetic Associations"

Nabihah Tayob of the University of Michigan for "Nonparametric Tests of Treatment Effect for a Recurrent Event Process That Terminates"

Jarcy Zee of the University of Pennsylvania for "Nonparametric Discrete Survival Function Estimation with Uncertain Endpoints Using an Internal Validation Subsample"

Shanshan Zhao of the Fred Hutchinson Cancer Research Center for "Covariate Measurement Error Correction Methods in Mediation Analysis with Failure Time Data"

Yize Zhao of Emory University for "Hierarchical Feature Selection Incorporating Known and Novel Biological Information: Identifying Genomic Features Predictive of Cancer Recurrence"

Jose Zubizarreta of Columbia University for "Stable Weights That Balance Covariates for Causal Inference and Estimation with Incomplete Data"

Peisong Han received \$2,000, and each travel award winner received \$1,000 to offset the cost of presenting their paper in two Biometrics-sponsored topic-contributed sessions at JSM.

Strategic Initiatives Grant Opportunity

The Biometrics Section invites applications for funding to support projects developing innovative outreach projects that enhance awareness of biostatistics among quantitatively talented U.S. students. Of interest are projects that will encourage students to pursue advanced training in biostatistics. We anticipate funding up to three projects this year, with total funding of \$3,000-\$5,000 per project. The project timeline is 1–1.5 years. All investigators are encouraged to apply.

Award recipients must be both an ASA and Biometrics Section member before project initiation.

A three-page application is due by April 21 that should be in the following format: Title, Objectives and Specific Aims; Background, Significance, and/ or Rationale; Design and Methods; Deliverables/ Products, and Budget. A project period with a start date no earlier than May 1 and an end date no later than December 31, 2015, also should be specified.

Allowed expenditures include supplies, domestic travel (when necessary to carry out the project), professional expertise (e.g., instructional designer or webmaster), and cost of computer time. Expenditures that are not allowed include secretarial/administrative personnel, tuition, foreign travel, faculty salaries, research expenses, and honoraria and travel expenses for visiting lecturers to the investigator's home institution.

Applications should be submitted electronically to the Strategic Initiatives Subcommittee chair, Roslyn Stone, at Roslyn@pitt.edu. Funded investigators will be expected to submit a brief report at the conclusion of the project to the subcommittee chair. Questions should be addressed to either Stone or the subcommittee co-chair, Page Moore, at PMoore@uams.edu. ■



Engage with your professional network and peers.

Get involved and start sharing today!

community.amstat.org

Statistics and the Environment

The Statistics and the Environment (ENVR) section is sponsoring the following invited, topic-contributed, and roundtable sessions at the 2014 Joint Statistical Meetings in Boston, Massachusetts:

Invited Sessions

Environmental Monitoring Using Networks of **Sensors**, organized by Marian Scott

Statistics for Wind Energy, organized by Marc Genton

Spatiotemporal Modeling and Control of Infectious Diseases and Invasive Species, organized by Brian Reich

Estimation and Testing Problems in Large Spatial Data Sets and Their Applications, organized by Sucharita Ghosh

Topic-Contributed

Stochastic Modeling of Meteorological Variables and Weather Generators, organized by Ying Sun

Challenges in Environmental Risk Assessment, organized by Jing Zhang

Penalized Regression and Variable Selection for Spatially Dependent Data: Theory and Methods, organized by Rajib Paul

Recent Advances in Statistics on a Spherical Domain, organized by Stefano Castruccio

ENVR Student Paper Awards Session, organized by Elizabeth Mannshardt

Roundtable Discussions

Pushing the Limits of Spatial Extreme Value Analysis, led by Brian Reich

Changepoints: The Need to Homogenize Environmental Data, led by Robert Lund

Student Paper Competition Results

The selection committee recently announced Won Chang of Penn State University as the winner of this year's competition for "Fast Dimension-Reduced Climate Model Calibration."

For more information about the Statistics and the Environment Section and its activities, visit http://community.amstat.org/ENVR/home.

Section on Physical and Engineering **Sciences**

James G. Wendelberger, SPES JSM Program Chair; William Li, SPES JSM Program Chair-elect; Bryan Smucker, SPES Education Chair; and Winson Taam, Past SPES Chair

The SPES program for JSM is coming together with four invited sessions (three allotted and one by program committee vote), three topic-contributed sessions, 35 contributed papers, seven contributed posters, and four contributed SPEED posters.

Four SPES roundtable sessions also are planned. Roundtables provide a unique opportunity to have discussions among a small group of participants (no more than 10 people) and a discussion leader. The ASA Section on Physical and Engineering Sciences will sponsor the following four roundtables in Boston:

Handling Missing Data in Repeated Measures, led by Vaneeta Kaur Grover of DuPont—This roundtable will discuss missing data mechanisms and statistical methods for dealing with different mechanisms during analysis.

What's It Like to Be a Statistician in the Physical and Engineering Sciences? led by Tena I. Katsaounis of The Ohio State University—Join this roundtable to learn and generate ideas about SPES activities and programs.

The Continuing Impact of Spatiotemporal Statistics, led by Alexander Kolovos of SpaceTimeWorks, LLC—This roundtable intends to sketch the future global potential of space-time statistics in light of recent changes in data gathering, analytical technologies, and shifting research directions.

Big Data Analysis: Concepts, Methods, and Computation, led by Sijian Wang of the University of Wisconsin-This roundtable will focus on recently developed models and methods to deal with challenges associated with data sets of massive size and dimensionality.

SPES has scholarships available for students to attend one of these SPES-sponsored roundtables. To apply, contact William Li at wli@umn.edu by May 1.

The following two section-sponsored continuing education short courses also have been selected for JSM 2014 in Boston:

Modern Design of Factorial Experiments, taught by Peter Goos and Bradley Jones

The Design and Analysis of Experiments That Use Computer Simulators, taught by Thomas Santner and Brian Williams

Additionally, JSM 2014 will have a well-represented selection of member works. For example, invited session titles include the following:

Statistical Design and Modeling for Experiments with Functional Data

Approaches to Solving Challenges in Industrial Applications

Frontiers of Computer Experiments: Big Data, Calibration, and Validation

Statistical Analysis of Kepler Data at SAMSI (Statistical and Applied Mathematical Sciences Institute)

Also, don't forget to attend the popular SPES mixer and snag a door prize!

2014 Joint Research Conference

The ASA Q&P Section's Quality and Productivity Research Conference will combine with the ASA SPES Section's Spring Research Conference to create the Joint Research Conference (JRC) with the theme "Statistics and Quality in a Data Rich World." The 2014 JRC will be held in Seattle, Washington, from June 24-26 at the University of Washington. For a small additional registration fee, a short course, "Bayesian Statistical Process Control" by Panagiotis Tsiamyrtzis, will be offered before the conference on June 23. The goal of the conference is to stimulate interdisciplinary research among statisticians, scientists, and engineers in quality and productivity, industrial needs, and the physical and engineering sciences. Statistical issues and research approaches drawn from collaborative research will be highlighted.

The conference will honor Douglas Hawkins from the University of Minnesota. Conference registration includes a tour of and reception at the Future of Flight Aviation Center and a tour of Boeing's Commercial Jet Assembly Plant in Everett, Washington (the world's largest building).

For more information, visit http://jrc2014.org or contact either Robert Gramacy at rbgramacy@ chicagobooth.edu or Christina Mastrangelo at mastr@u.washington.edu.

To list your sections' news in Amstat News send an email to managing editor Megan Murphy at megan@ amstat.org with the details.

Survey Research Methods Section

Phil Kott

Happy very belated New Year! Since this message is going out a good bit later than usual for reasons beyond my control, I needed to make a small change to the annual salutation before I jumped into the customary outline of some of what the Survey Research Methods Section (SRMS) will be doing over the next year.

Much of SRMS' activity in 2014 will be centered on the Joint Statistical Meetings (JSM), to be held in Boston, Massachusetts, in August. SRMS will again sponsor many activities, including short courses and a variety of technical sessions.

In 2013, our section was one of the five to experiment with JSM SPEED sessions, in which each

Quality and Productivity Section and Section on Physical and Engineering Sciences

JOINT RESEARCH CONFERENCE

Short Course on Bayesian Statistical Process Control June 24-26, 2014

University of Washington, Seattle, Washington June 23, 2014

In 2014, the ASA Quality and Productivity (Q&P) Section's **Quality and Productivity Research Conference** will combine with the ASA's Section on Physical and Engineering Sciences Spring Research Conference to create a Joint Research Conference (JRC) with the theme "Statistics and Quality in a Data Rich World." The 2014 JRC will be held **June 24–26** at the University of Washington. The goal of the conference is to stimulate interdisciplinary research among statisticians, scientists, and engineers in quality and productivity, industrial needs, and the physical and engineering sciences. Statistical issues and research approaches drawn from collaborative research will be highlighted.

The conference will honor Douglas Hawkins from the University of Minnesota. Conference registration includes a tour and reception at the Future of Flight Aviation Center and a tour of Boeing's Commercial Jet Assembly Plant in Everett, Washington (the world's largest building).

For a small additional registration fee, a short course on Bayesian statistical process control taught by Panagiotis Tsiamyrtzis will be offered before the conference on June 23.

For further information about the conference program, registration, and housing, visit http://jrc2014.org or contact either Robert Gramacy at rbgramacy@chicagobooth.edu or Christina Mastrangelo at mastr@u.washington.edu.

contributor gave a five-minute oral presentation followed later that day by a poster session. SPEED sessions will appear again in 2014 and may be the future of ISM.

If you will be in Boston for JSM, check the online program (www.amstat.org/meetings/jsm/2014/ onlineprogram) for the SRMS business meeting and mixer, normally held Wednesday evening. Section members and nonmembers are welcome to attend to learn more about the section's activities and, if so inclined, provide ideas and input into future activities. Best of all may be the free food and drink available while socializing with colleagues. Nonmembers can easily duck out before the formal meeting starts. Members too, but many will find the meeting itself of surprising interest.

Besides the short courses and technical sessions at JSM, SRMS is again planning for a series of webinars throughout the year. The webinars are announced to the SRMS membership via email and in the section newsletter, and information about upcoming webinars also is provided on the section website at www.amstat.org/sections/SRMS.

A valuable source of information is the section's electronic mailing list hosted by the University of Maryland. I have used it on occasion for lazy man's research. It you don't know about the mailing list, check out www.amstat.org/sections/srms_net.html.

The ASA co-sponsored Journal of Survey Statistics and Methodology (JSSAM) began publishing last year. It is available for free to SRMS members. ISSAM aims "to publish cutting-edge scholarly articles on statistical and methodological issues for sample surveys, censuses, administrative record systems, and other related data." There is also a section for e-letters on the journal's website at www.oxfordjournals.org/our_journals/jssam.

One of the section's most important activities is fostering, supporting, and encouraging scholarly work by students entering the field of survey research. Together with the Social Statistics Section and Government Statistics Section, SRMS co-sponsors a student travel award competition that provides the awardees with funds to support their travel to JSM. Information about this competition is available at www.amstat.org/ sections/ssoc/studentawards.html.

Here's hoping that our section and we have another productive year!

Short Course on Calibration Weighting in **Survey Sampling**

The ASA's Survey Research Methods Section is sponsoring a half-day continuing education short course at this year's JSM titled "Calibration Weighting in

Survey Sampling." The course will be taught by Phil Kott of RTI International. Information about how to register for the course is available at www.amstat. org/meetings/jsm/2014/ce.cfm.

Calibration weighting involves a mild adjustment of probability sampling weights that forces the weighted totals for a set of calibration (benchmark) variables to equal values determined using more complete information from the frame, target population, or a larger sample. Its use can increase the efficiency of survey estimates and adjust for frame coverage errors and unit nonresponse. This short course is composed of three modules of increasing complexity:

The **first** module provides a broad overview of the topic. It assumes knowledge of survey sampling at the level of Lohr's Sampling Design and Analysis.

The **second** module discusses the roles of the linear prediction models and probability-sampling theory in calibration weighting. A treatment of optimal and pseudo-optimal calibration is followed by a discussion of double protection from potential biases due to unit nonresponse or coverage errors. The potential use of calibration weighting when nonrespondents are not missing at random is introduced. Some familiarity with derivatives and linear algebra is needed.

The third module discusses large sample variance estimation for which previous exposure to asymptotics would be helpful, although concepts are stressed over rigorous proofs.

A motivating example grounds the theory throughout by displaying the numerical impact of alternative approaches. Handouts of slides and SUDAAN 11 code used to produce numerical examples will be provided to students. Note that this is not a course in SUDAAN procedures, so there will be no explicit discussion of the code in class.

The learning objectives for the course include understanding what calibration weighting is and how to use it, how calibration weighting relates to other methods of weight adjustment, how it can be used to increase the efficiency of estimated means and totals and to reduce selection biases due to nonresponse or coverage errors assuming either a selection or outcome model, how it can be used when nonresponse is not missing at random, how to measure the standard errors of resulting survey estimates properly, what some of the limitations of calibration weighting are, and what is yet unknown.

This month in ASA's history...

1849

During the April board meeting, remarks were made by then president Edward Jarvis on discrepancies of reports the Worcester Insane Hospital. A committee, consisting of Jarvis and Lemuel Shattuck, were appointed to use endeavors with the Boston Legislative Committee for such reports, so that they may be more correct.

Lemuel Shattuck

1941

The board of directors established a special first-year dues rate of \$3 for new members under 30 years of age. The reduced rate was introduced to make it possible for graduate students and young people starting out in their careers to join the association.

1962

The American Statistical Association and Institute of Mathematical Statistics jointly sponsored the brochure, "Careers in Statistics." The brochure, designed to meet a long-felt need for a short guide for young people considering statistics as a career, was developed by a joint committee headed by Bernard Greenberg.

1989

In the April issue of *Amstat News*, the ASA Committee on the Sesquicentennial announced there would be a time capsule as part of the 150th anniversary celebration. Suggestions for the material—which were to be one cubic foot—were mailed to Ronald Snee, chair of the committee.



Famous April Birthdays

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

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

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

Rates: \$320 for nonprofit organizations (with proof of nonprofit status), \$475 for all others. Member discounts are not given. For display and online advertising rates, go to www.amstat.org/ads.

Listings will be invoiced following publication. All payments should be made to the American Statistical Association. All material should be sent to Amstat News, 732 North Washington Street, Alexandria, VA 22314-1943; fax (703) 684-2036; email advertise@amstat.org.

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

Also, look for job ads on the ASA website at www.amstat.org/jobweb.

www.westat.com

Survey Sampling Statistician

EOE

Westat is an employee-owned corporation headquartered in the suburbs of Washington, DC (Rockville, Maryland). We provide statistical consulting and survey research to the agencies of the U.S. Government and to a broad range of business and institutional clients. With a strong technical and managerial staff and a long record of quality research, Westat has become one of the leading survey research and statistical consulting organizations in the United States.

Our company was founded in 1961 by three statisticians. The current staff of more than 2,000 includes over 60 statisticians, as well as research, technical, and administrative staff. In addition, our professional staff is supported by data collection and processing personnel situated locally and in field sites around the country. The work atmosphere is open, progressive, and highly conducive to professional growth.

Our statistical efforts continue to expand in areas such as the environment, energy, health, education, and human resources. Westat statisticians are actively involved in teaching graduate-level courses in statistical methods and survey methodology in collaborative arrangements with area colleges and universities.

We are currently recruiting for the following statistical position:

Survey Sampling Statistician

Responsibilities include: developing sample designs (determining stratification and allocation to strata; determine sample size based on differences and power; determine optimal clustering; and select sample); selecting and/or constructing appropriate sample frame; developing and documenting weighting plan which includes non-response adjustment and bench-marking; developing and conducting imputation for item nonresponse and estimating sampling errors using appropriate software; writing specifications for programmers; and preparing reports on sample design, weighting procedures and other methodological issues. Candidates would benefit from knowing SAS and other statistical software packages; although candidates are not required to do programming. A master's or doctoral degree in statistics is required with 3 or more years of relevant experience. Coursework in sample survey design is highly desirable.

Westat offers excellent growth opportunities and an outstanding benefits package including life and health insurance, an Employee Stock Ownership Plan (ESOP), a 401(k) plan, flexible spending accounts, professional development, and tuition assistance. To apply, go to www.westat.com/careers.



An Employee-Owned Research Corporation

Delaware

Senior Research Biostatistician, Nemours Center for Healthcare Delivery Science, Wilmington, Delaware. Join The Nemours Center for Healthcare Delivery Science's (CHDS) team of core investigators and develop a biostatistics section within the CHDS. Doctoral degree in biostatistics or closely related field and five years of related postdoctoral experience required. Send CV to Greg Stets, gstets@nemours.org, or apply online: http:// careers.nemours.org/jobs/57067. EOE.

Maryland

■ Seeking PhD/experienced master's statisticians for Center for Devices and Radiological Health, FDA, HHS, in Silver Spring. Grapple with rich array of statistical issues in clinical trials for new technologies, from LASIK and artificial hearts to genetic tests and robotic surgery. Review statistical design/analysis issues in medical devices from invention to postmarket. Email CV to Greg Campbell, greg. campbell@fda.hhs.gov. Identify residency/ visa status in application. www.fda.gov/cdrh/ index.html. FDA is a smoke-free environment and an Equal Opportunity Employer.

Massachusetts

- Assistant/Associate Professor Statistics - Mathematical Science. The mathematical sciences department at the University of Massachusetts Lowell invites applications for one full-time tenure-track faculty position at the rank of assistant professor or associate professor to start September 1, 2014. For additional information and to submit an application, go to http://bit. ly/1gazQ2A. Please submit a cover letter, curriculum vitae, teaching philosophy, research statement, three letters of refer-
- Position at Harvard Teaching Hospital (Boston) requires appropriate technical expertise (MS or higher degree in biostatistics); 3+ years experience in statistical collaboration with clinician-scientists; outstanding speaking, listening and writing skills. Position 2249874 at www. mghcareers.org. Massachusetts General Hospital is an EOE.

University at Buffalo The State University of New York

RESEARCH PROFESSOR

The Department of Biostatistics in the School of Public Health and Health Professions at the University at Buffalo is seeking applicants for the position of Professor - 10 Month. The successful candidate's duties will focus primarily on teaching six to eight biostatistics courses throughout the academic year at both the undergraduate and graduate level. Having an active research program is desirable. A Ph.D. in biostatistics or Statistics is required. Ten years teaching experience is desirable.

To apply, please append letter of application, curriculum vitae, a list of three references and a statement describing research and teaching experience.

> Applicants should apply online at https://www.ubjobs.buffalo.edu

The University at Buffalo is an Equal Opportunity Employer/Recruiter





Michigan

Department of Statistics and probability, Michigan State University, invites applications for a tenure stream associate or full professor, starting 8/16/2014. Requirements include a PhD in statistics or related field and a sustained strong record of funded research in statistics. A strong record of interdisciplinary research is desirable. Applicants should submit CV, research and teaching statements, contact information of at least four references to http://bit.ly/1cCiGtT. MSU is an affirmative-action, equal-opportunity employer and is committed to achieving excellence through diversity. The University actively encourages applications of women, persons of color, veterans, and persons with disabilities, and we endeavor to facilitate employment assistance to spouses or partners of candidates for faculty and academic staff positions.

Minnesota

■ The Division of Biomedical Statistics and Informatics is seeking applications

for an institutionally guaranteed faculty position. Candidates must have a PhD in statistics or related field with substantial clinical trials experience. Must possess a sound understanding of the principles of clinical trials and translational/biomarker research. Must be able to assimilate relevant information and initiate new areas of research. Visit www.mayoclinic.org/ scientist-jobs and reference job posting 31760BR. Mayo Clinic is an EOE.

Missouri

■ Monsanto. We are seeking a highly talented and motivated research scientist to join our protein structure and design team in the area of computational protein design. This position is based out of St. Louis. To view the complete job description for this exciting position and/or apply online to this opportunity, please visit our website at jobs.monsanto.com/ statisticalscientist. EOE/AA EMPLOYER M/F/D/V.



7th Annual Conference on Statistical Issues in Clinical Trials:

April 8, 2014

Topic: Current Issues Regarding the use of Biomarkers and Surrogate Endpoints in Clinical Trials

The 2014 Conference will bring together leading scientists who will discuss state-of-the-art approaches for using biomarkers and surrogate endpoints in the design, analysis and interpretation of clinical trials. Participants from academic institutions, industry, and government agencies with an interest in clinical trials methodology are encouraged to register.

Conference co-sponsors: American Statistical Association, the Society for Clinical Trials and the University of Pennsylvania Center for Clinical Epidemiology and Biometry.

Faculty

Stuart Baker (NCI) Marshall Joffe (U Pennsylvania) Jeremy Taylor (U Michigan) Jarcy Zee (U Pennsylvania) Michael Kattan (Cleveland Clinic) Ying Huang (Fred Hutchinson CRC) Herbert Weisberg (Causalytics)

Tentative Topics

Emerging methods for identifying, assessing and using surrogate endpoints and biomarkers Surrogate Outcomes for Time-varying Treatments and Outcomes, Including SMART trials. Issues and problems in the use of intermediate endpoints in assessing treatment effects. Survival analysis using both surrogate and true endpoints Statistical prediction models and medical decision-making Combining and evaluating biomarkers for treatment selection in randomized trials Biomarkers for personalized treatment strategies.

Panelists

Constantine Frangakis (Johns Hopkins BSPH); Michael Daniels (U Florida); Eve H Pickering (Pfizer); Lurdes Y. T. Inoue (U Washington)

Venue, Housing, Registration Fee. The Conference will be held at the Smilow Center for Translational Research Auditorium on the campus of the Perelman School of Medicine at the University of Pennsylvania. The Sheraton University City is located within easy walking distance. Many alternative hotels in Center City Philadelphia are also a short distance from the UPenn campus. Registration is limited to 220 participants. Registration ¬deadline is March 31, 2014, or when the registration limit is reached. Conference fee (includes breakfast, lunch, breaks): \$220 Industry, \$130 Academic & Government. For information and registration visit Conference website (after January 10, 2014) http://www.cceb.med.upenn.edu/biostat/conferences/ClinTrials14. For questions contact Marissa Fox Phone: 215-573-7393. Email: mfox@mail.med.upenn.edu

North Carolina

■ NIEHS/NIH, Research Triangle Park, is recruiting for multiple full-time appointments at tenure-track or tenure-eligible levels (assistant, associate, and full professor equivalents) in biostatistics, bioinformatics, and computational biology. PhD or equivalent required. For full description visit www.niehs.nih.gov/careers/jobs/research positions_in_biostatisticscomputational_ biology.cfm. Send CV, 2-page research interests/goals statement, and 3 referral letters to Emily Starnes at dir-appls@niehs. nih.gov, citing Vacancy Announcement DIR14-2. Applications accepted until vacancies filled. EOE.

Ohio

■ The department of quantitative health sciences at the Cleveland Clinic is recruiting for faculty and master's-level positions. Many areas are being sought, including biostatistics, health economics, health status measures, analysis of



Tenure-Track Associate Professor/Assistant Professor in the Department of Statistics and Actuarial Science (Ref.: 201400073)

Applications are invited for a tenure-track appointment as Associate Professor / Assistant Professor in the Department of Statistics and Actuarial Science, from September 1, 2014 or as soon as possible thereafter. The post will initially be made on a three-year term. Appointment with tenure will be considered during the second three-year contract.

Applicants should possess a Ph.D. degree in Statistics or related disciplines such as Applied Probability and Statistics, Statistical Finance or Actuarial Science. Those with demonstrated research ability and teaching experience are preferred. The rank offered will depend on the candidate's years of experience, publications and on-going research. The appointee should be able to demonstrate excellence in research and scholarship; and evidence of leadership in curriculum and pedagogy development, and teaching effectiveness.

A globally competitive remuneration package commensurate with qualifications and experience will be offered. At current rates, salaries tax does not exceed 15% of gross income. The appointment will attract a contract-end gratuity and University contribution to a retirement benefits scheme, totalling up to 15% of basic salary, as well as annual leave, and medical benefits. Housing benefits will be provided as applicable.

For enquiries about the existing research activities of the Department and the specific job requirements, please write to Professor W.K. Li, Head of the Department of Statistics and Actuarial Science (e-mail: hrntlwk@hku.hk). Applicants should send a completed application form, together with an up-to-date C.V, a detailed publication list, a research plan and a statement on teaching philosophy by e-mail to scsaas@hku.hk. Please indicate clearly the reference number and which level they wish to be considered for in the subject of the e-mail. Application forms (341/1111) can be obtained at http://www.hku.hk/apptunit/form-ext.doc. Further particulars can be obtained at http://jobs.hku.hk/. Closes April 15, 2014.

The University thanks applicants for their interest, but advises that only shortlisted applicants will be notified of the application result.

The University is an equal opportunity employer and is committed to a No-Smoking Policy

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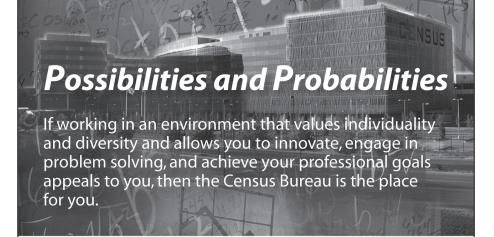
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Join us in Northeast Illinois on AbbVie's Statistics Visiting Scholar Program and you'll collaborate with our statisticians on clinical trials or non-clinical applications. You don't need to stipulate a research topic in advance. We will work together to identify an area that sparks your interest and makes a lasting contribution to both AbbVie and yourself. Combining the enterprise and energy of a recently created business with the executional strength of a market leader, AbbVie will provide an exceptional development experience. You will help us tackle some of the world's most serious illnesses while learning from a community of some 60 outstanding statisticians, 40 of whom have PhDs.

Interested applicants should submit a resume and cover letter for consideration to Richard Rode at richard.a.rode@abbvie.com. The closing date for applications is May 1, 2014.

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- Design sample surveys and analyze the data collected.
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- Perform research on statistical methodology that will improve the quality and value of the data collected.
- Publish research papers and technical documentation of your work

Requirements

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

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population-based registries, diagnostic test assessment, ROC analysis, and psychometrics. Details for all positions, as well as application instructions, are on our website: www.lerner.ccf.org/qhs/jobs. EOE.

Canada

■ The Canadian Statistical Sciences Institute (CANSSI) seeks nominations and applications for the position of scientific director for a five-year term beginning January 1, 2015. A letter of application with a CV and names of three references should be sent to canssi.incass@ gmail.com. Applications will be considered until the position is filled. The search committee will begin discussions this month. An advertisement appears at www.crm.umontreal.ca/CANSSI/news-events/ canssi-scientific-director-search. EOE.

International

■ Wang Yanan Institute for Studies in Economics & School of Economics, Xiamen University, China. Full-time, tenure-track/tenured professorship positions in statistics beginning September 2014. Preferred areas of specializations are theoretical and applied statistics. PhD in statistics or probability theory must be completed by August 1, 2014. Send applications, including cover letter, CV, samples of research work, and three reference letters, to recruit.wise.xmu@gmail. com before June 30. EOE. ■

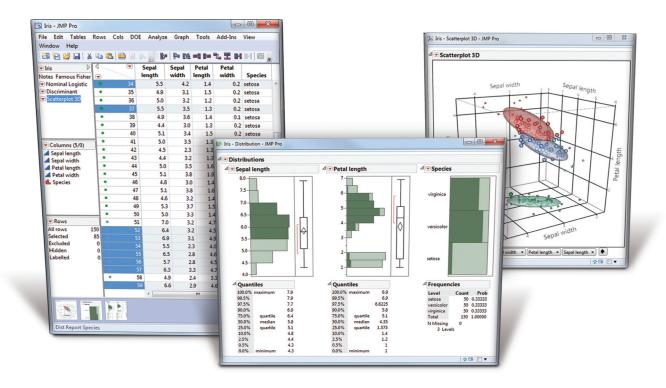


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- Nonlinear Modeling
- SAS, R, MATLAB and Microsoft Excel Connections
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e Model Mixture 1: Normal(3.34,0.67) 2: Normal(4.89,1.45) 3: Weibull(9.52,0.07) 6.7 7.3 7.9 8.5 9.1 9.7 10.3 10.9 11.5

Statistics

The newest release of SAS/STAT® software takes the breadth and depth of SAS® statistical functionality to new levels in areas ranging from missing data analysis to survival analysis to market research. Highlights include:

Sensitivity analysis for multiple imputation. Assess sensitivity of multiple imputation to the missing at random assumption with pattern-mixture models. Impute missing values under scenarios for which missing data are missing not at random.

Survival analysis for interval-censored data. Compute nonparametric estimates of the survival function for interval-censored data. Compare survival curves for different groups and display the results graphically.

Item response theory models. Use item response theory models to calibrate test items and evaluate respondents' abilities. Rasch models, graded response models, and multiple group analyses are featured along with factor score estimation.

Bayesian choice models. Use Bayesian discrete choice analysis to model consumer decisions in choosing products or selecting from multiple alternatives. Fit logit or probit models and enable individual-level inferences on product preference and price sensitivity.

Competing risk models. Analyze time-to-event data with competing risks using the method of Fine and Gray (1999) to model the cumulative incidence of an event of interest.



