ASA Board of Directors Candidates

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Promoting the Practice and Profession of Statistics™

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

features

columns

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.

Contributing Editors

Franklin

Christine Franklin is the Lothar Tresp Honoratus Honors Professor in Statistics at the University of Georgia. She was the lead writer for the ASA Pre-K–12 GAISE Framework. She is an ASA Fellow and was honored in 2013 with the CAUSE/USCOTS Lifetime Achievement Award in Statistics Education.

Jacobbe

Tim Jacobbe is an associate professor of mathematics and statistics education at the University of Florida. He is the principle investigator for the NSF-funded Levels of Conceptual Understanding of Statistics (LOCUS) Project, as well as an author of books from NCTM and the ASA aimed at helping teachers teach statistics.

This column is written to inform ASA members about what the ASA is doing to promote the inclusion of statistics in policymaking and the funding of statistics research. To suggest science policy topics for the ASA to address, contact ASA Director of Science Policy Steve Pierson at *pierson@amstat.org*.

Contributing Editor

Pierson

Steve Pierson earned his PhD in physics from the University of Minnesota. He spent eight years in the physics department of Worcester Polytechnic Institute before becoming head of government relations at the American Physical Society.

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. There were 200 submissions to the International Year of Statistics photo contest.

 True

 False

2. The federal statistical agencies generally had their budgets raised for FY14. The exceptions are:

 A. The National Institutes of Health and the Bureau of Labor Statistics

 B. The National Center for Education Statistics and the National Science Foundation

 C. The Bureau of Labor Statistics and The National Center for Education Statistics

3. MUDAC stands for

 A. Midwest Undergraduate Data Analytics Competition

 B. Midwest Undergraduate Data Academic Challenge

 C. Midwest Undergraduate Data Analysis Convention

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

Online

Make the most of your ASA membership
Visit the ASA Members Only site: *www.amstat.org/membersonly*.

Visit the **ASA Calendar of Events**, an online database of statistical happenings across the globe. Announcements are accepted from educational and not-for-profit organizations. To view the complete list of statistics meetings and workshops, visit *www.amstat.org/dateline*.

columns

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

Contributing Editor

Daniel Smith has been a reliability engineer at Cox Communications since 2005. He completed his undergraduate studies at Emory University and earned an MBA with a concentration in statistics at the Georgia Institute of Technology, where he also received his Six Sigma Black Belt training.

Smith

departments

member news

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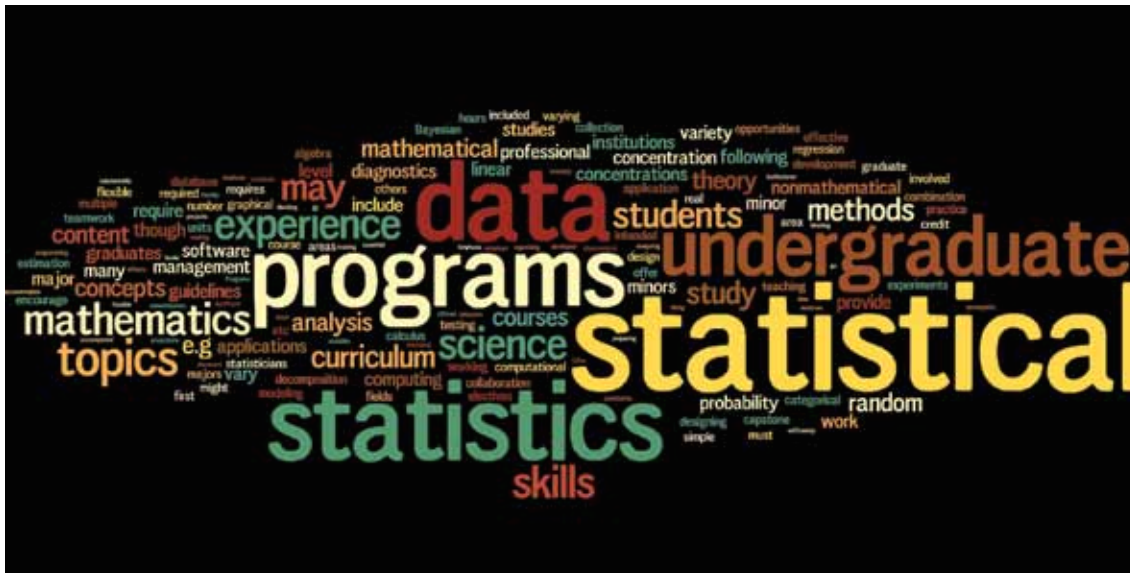
Updating the Guidelines for Undergraduate Programs in Statistical Science

One of my favorite activities so far as president-elect and president has been formulating strategic initiatives for the ASA and appointing good people to work on them. In this and the next couple of columns, I will interview the chairs for my initiatives to see what their workgroups have been up to.

First up is an initiative to update the ASA's Curriculum Guidelines for Undergraduate Programs in Statistical Science (*www.amstat.org/education/curriculumguidelines.cfm*). It has been more than a decade since the ASA approved the current curriculum guidelines and much has changed. The "Age of Big Data" arrived. New tools are available for statisticians. Interest in the AP Statistics program has flourished. The number of people earning undergraduate degrees in statistics has increased dramatically. In addition, we took a fresh look at the curriculum for master's programs last year (*http://magazine.amstat.org/blog/2013/06/01/preparing-masters*). Thus, it is a good time to rethink the undergraduate curriculum.

In mid-2013, I appointed Nicholas Horton, professor of statistics at Amherst College, to chair this initiative. Nick and I assembled a terrific workgroup with members from academia, industry, and government to work on updating the guidelines (*www.amstat.org/committees/commdetails.cfm?txtComm=ABTEDU07*). I recently caught up with Nick to discuss the initiative, and our conversation follows.

Nat Schenker

NS: Nick, I'm very happy that you took this project on. Tell me, why were you interested in chairing the initiative?

NH: I've been engaged in statistical education issues for many years and have been working to integrate statistical computing into the curriculum as part of these efforts. Being able to help move this project forward has been a great opportunity to review the range of curricular offerings for undergraduate majors, minors, and certificate programs.

Nicholas Horton

NS: What excites you most about the project?

NH: This is a really key time, as we're seeing growth in statistics programs at all levels. Steve Pierson had several columns last year in *Amstat News* that detailed continuing growth in undergraduate majors and statistics. Given the increasing importance of undergraduate statistics programs, I'm really honored and enthused about working with the high-powered group we recruited. On several occasions, you've described them as a "dream team," and I concur. Beth Chance, Stephen H. Cohen, Scott Grimshaw, Johanna Hardin, Tim Hesterberg, Roger Hoerl, Christopher Malone, Rebecca Nichols, and Deb Nolan have a wealth of experience plus wide-ranging contributions to statistics education and the profession through their varied papers, books, reports, awards, and commendations. At each of our meetings, I've learned something new. It's been like a puzzle, with many pieces that only a diverse group with experience in industry, government, and a range of academic institutions can bring together.

NS: I don't mean to put you on the spot, but I know many of the folks who developed the previous guidelines in 2000. One of them asked whether we felt the previous guidelines missed the mark. How would you respond to this?

NH: I'm really appreciative of the work that the previous group did, and I suspect our final guidelines will be consistent with theirs in many ways. But there have been some important changes in the field in the intervening years, and it's critical for the

ASA to stay ahead of the game in this era where increasingly Big Data is being brought to bear on key questions.

In particular, I think there have been some fundamental shifts in what graduates are doing once they head into the work force. They often find themselves in positions that don't have "statistician" in the title, but instead "analyst." We need them to be able to pose and answer statistical questions. We need them to be able to tackle problems involving data, which will often be far messier than those presented in textbooks. We also need them to be able to address large data sets and databases, and develop the capacity to "think with data." The strict use of cookbook formulas is outdated. Creative solutions with seamless integration of statistical and computational knowledge are required in today's workplace.

Students also require the development of more "professional skills," such as teamwork and communication in conjunction with technical skills, that can grow and improve as they gain more experience. These need to be introduced earlier in the curriculum, with practice in upper-level courses and experiences. We will need to better integrate topics and practice into this new curriculum, more than just through problem sets. Capstones play a key role in integrating and refining these capacities, in combinations with internships, opportunities to consult, and research experiences.

NS: What have been your workgroup's major activities to this point?

NH: We got our start last summer and undertook a self-study of the previous guidelines. We had a number of "listening" meetings at USCOTS and JSM to hear from the community about what issues needed to be addressed. We set up a survey on the existing guidelines page (*www.amstat. org/education/curriculumguidelines.cfm*). Then, we organized a series of five webinars on various topics (challenges for large programs, integration with community colleges, the role of capstones, Big Data and the undergraduate curriculum, and preparation for graduate study in statistics); presentations from the webinars also are available on the guidelines page. We meet twice per month and are in the process of drafting specific new guidelines and supporting materials.

NS: What will be your workgroup's final product?

NH: In addition to the formal guidelines (which will be submitted to the ASA Board of Directors for their endorsement in the fall of 2014), we're planning to create a series of supporting materials that will provide details of key topics, as well as multiple examples of successful models for courses, capstones, and programs. Our goal is to be descriptive, and not prescriptive, but help push the envelope in areas where we see the need for change.

NS: How might the initiative help the ASA, its members, and/or the profession?

NH: We're hoping the guidelines and resources will help members and departments craft new statistics programs or revise existing ones to enhance the training of the next generation of students to be able to use data to make decisions.

NS: Do you see areas for follow-up on this initiative in the future?

NH: Nationally, the numbers of students taking statistics courses and pursuing degrees in the field continues to grow. This creates challenges that we as a community need to address. It will be important for others to further refine what is included in introductory statistics (though the skills students will need can't be shoehorned into a single course). While we're planning to address data science, this will require further discussions about how to blend computational science and statistical science. Finally, we need to address questions of teacher training and faculty development at all levels. If we can effectively do this, then statistics graduates will be well poised for the challenges of the future.

NS: Nick, thanks to you and the workgroup for your work to date. I'll be excited to see the final product. Thanks also for taking time to discuss the project with me.

NH: My pleasure, Nat.

Nathaniel Schenker

This month in ASA's history...
MARCH

1902

The ASA seal first appears on the cover of the *Journal of the American Statistical Association*. It was not officially adopted by the ASA Board of Directors until 1937, and its meaning was still undefined at that time. In 1997, ASA member Bill Heavlin conducted a search to uncover that the pillar is an *axis mundi*, representing orderliness. The bald eagle represents America, spirit, and intellect. The snakes appear to be part of a Greek myth about the caduceus, the wing-tipped staff given to Mercury by Apollo. Shortly after receiving the caduceus, Mercury slammed the staff between two quarreling snakes. The presence of the snakes possibly represents peace, resolution of argument, and triumph of rationality.

1940

In celebration of the ASA's centenary, the March 1940 issue of the *Journal of the American Statistical Association* included historical exhibits, the program and proceedings of the anniversary dinner meeting, and an article by Frederick Stephen: "The Centenary of the American Statistical Association." The issue is online through JSTOR at *www.jstor.org*.

1951

On March 22, 1951, members and friends of Walter Willcox gathered at Cornell University to celebrate his 90th birthday. Among the many attending were Edmond Ezra Day and Liberty Hyde Bailey. Willcox read a scholarly address, titled "The Dis-United Nations: A Novel Experiment in the Balance of Power," and was presented with a "handsome desk clock."

1988

During the March board meeting, members of the Executive Committee approved the title of the student magazine *STATS: The Magazine for Students of Statistics*. The first issue appeared in January 1989 under the editorial leadership of John Hewett.
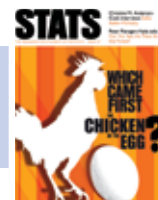
Famous March Birthdays

David Freedman, Walter Shewhart, Jack Wolfowitz, Walter F. Willcox

ASA Board of Directors Candidates

The ASA announces the selection of candidates for the 2014 election. The winning candidates' terms will begin in 2015. Make sure to look for your ballots in your email inbox and to vote early. Voting begins at midnight EDT on March 14 and ends at 11:59 p.m. PDT on May 3.

Complete candidate biographies can be read at *www.amstat.org/candidatebios/candidatebios.pdf*.

President-elect

Jessica Utts

The remarkable growth in the collection and use of data throughout society has greatly expanded opportunities for statisticians, but also placed a greater responsibility on us to ensure the appropriate and ethical use and interpretation of data. From these trends, I see two emerging needs. One is the need for more people to choose a career in statistics. The other is the need for a foundation in statistical literacy for all educated citizens. Since the adoption of the ASA Strategic Plan in 2008, each president has implemented new initiatives addressing specific aspects of the plan. The dual needs for more statisticians and greater statistical literacy have led to three initiatives I hope to pursue if elected. They all address the Strategic Plan theme of increasing the visibility and understanding of our profession among the public, but each is targeted at a different audience.

1. Awareness of Statistics as an Exciting Career Choice

As I write this, I'm starting my 40th year as a member of the ASA. But just three years before I joined the ASA, I didn't know there was a career choice called "statistician." Fortunately, one of my professors was the son of statistician S. N. Roy, and he suggested I investigate statistics as a career. On his recommendation, I wrote to the ASA for advice. I received a nice letter from Executive Director Fred Leone outlining options for graduate school and beyond. Thus began my career as a statistician.

My vision is to have every student who graduates from high school know that "statistician" is not only a career option, but a rewarding, versatile, well-paid one. I hope to continue work the ASA public relations coordinator has started on the development and dissemination of information about statistics careers. The timing of this election coincides with my appointment to a five-year term as chief reader for the Advanced Placement Statistics program, with which I have been involved since the first exam in 1997. One of the successes of the AP program is that an extensive network has developed among high-school teachers and college faculty. That network could be instrumental in getting career information to students. Even if we only target AP Statistics students, we would reach a few hundred thousand of the best students every year.

2. Statistical Literacy Where It Matters

Statistical literacy matters for everyone, from the media to the masses. The ASA already reaches out to policymakers such as congressional staffers. But imagine if every student graduated from high school with a basic foundation in statistical literacy. In the United States, the new Common Core curriculum has vastly increased the statistics content in the K–12 curriculum. Other countries are adopting similar changes. The statistics community has an opportunity to make sure these changes focus on conceptual understanding. The most important step we can take is to emphasize the relevance of statistics in daily life to the math teachers responsible for implementing the curriculum. The ASA can and should provide resources for teachers as this new curriculum is launched.

3. Being Effective with the Media

Statistical conclusions are increasingly in the news, and often misrepresented. Few statisticians have been trained to work with the media, but some simple strategies could help us get our messages across. Many years ago, I was involved in a media event leading to appearances on Larry King Live, CNN News, and other shows. Two hours of training from my campus' media trainer made a big difference in being able to communicate effectively. ASA members should have the opportunity to obtain media training, which could be made available through workshops at JSM and the ASA website. The training should include how to respond effectively to statistical misinformation in the media, as well as how to present your own work to the media. I am excited about where our profession is headed and would be honored to have the opportunity to help achieve these goals as ASA president.

Utts

President-elect

Ian Johnstone

Johnstone

I am honored to be asked to be a candidate for president and, if elected, to serve the largest organized community of statisticians. We are lucky to live in a time in which data collection and analysis is expanding in every sphere: public and private, education and research. Opportunity—and challenge—abound, both for statisticians now active and those in training. The ASA offers both community and a broad spectrum of services to support the activities and aspirations of its members. The ASA's strategic plan provides continuity and a thoughtful framework within which successive presidents can innovate, an excellent example being the joint initiatives of the current and recent presidents around Big Data and data science. Following are areas of focus in the strategic plan to which I look forward to contributing:

Visibility and Impact in Policymaking

The ASA has a big advocacy role in both "statistics for policy" and "policy for statistics." The first involves working to ensure sound data and statistical analysis guide policy formation. The second includes both education in statistics at all levels and public funding for scientific and statistical research. I have some recent experience with chairing advisory committees for the National Science Foundation and hope to bring a bit of that to bear in work for the ASA.

Public Awareness

The ASA was a central player in the recent and very successful International Year of Statistics. I participated in the capstone workshop on the future of statistical sciences, viewable at *statistics2013.org*, which was both a showcase and a forum for lively discussion of ways forward. The IYSTAT effort will continue under the name The World of Statistics. This ASA anniversary year will see the launch of an outreach campaign about careers in statistics.

Membership Growth

The ASA is the Big Tent for statistics, and membership is now at nearly 19,000. New sections are being added, along with interest and outreach groups. During my presidential cycle at the Institute of Mathematical Statistics, that group planned to make membership free for students—a move that has served them well. A target of 20,000 and more seems well within reach, and I will support efforts to identify and reach out to potential members.

Education

The ASA seeks to advocate for and support statistics education at all levels: K–12, undergraduate, and graduate. AP Statistics continues to grow, as does the number of undergraduate statistics majors, though the latter is still small relative to other fields. An important ASA effort to review undergraduate statistics guidelines will report in the coming year. For practicing statisticians, the ASA is expanding its continuing professional development offerings, especially at JSM and the Conference on Statistical Practice, but also in other ways.

Meetings

JSM continues to grow, perhaps by 1,000 attendees in the last 10 years. The number of concurrent sessions is approaching both physical and psychological limits. JSM has experimented with new formats such as speed presentations, and we should continue to look at ways in which the meetings can best evolve to serve members and all partner societies.

Publications and Information Needs

The ASA's journals are renowned and a major intellectual asset. More broadly, the ASA aims to offer a variety of publications, web-based services, and professional development opportunities to serve the full community. The association is rightly seeking a path that combines breadth of access with fiscal responsibility.

Financial Status

It seems the ASA is in good shape, with strong reserves, but caution is in order in a rapidly changing environment for publications and advertising revenue. The ASA's ongoing effort to expand fundraising and development activities is important and worthy of leadership attention.

Thank you for reading this far! If elected, I look forward to hearing from members, subgroups, and leadership in further planning my own contributions.

Vice President

Devan V. Mehrotra

It is an honor and privilege for me to be a candidate for vice president of the ASA as we celebrate the 175th anniversary of our association. Given the current and projected statistical needs in different segments of our society, this is an incredibly exciting time for statistics students and experienced statistical scientists in various stages of their respective careers in academia, government, industry, and private practice. The ASA's current strategic plan promotes a variety of activities for strengthening the public awareness of our profession, improving the visibility and impact of statistical thinking in the policy arena, increasing the quantity and quality of ASA membership, enhancing the scope and format of the ASA's professional meetings and educational programs, improving access to statistical journals and related information needs, and boosting the ASA's organizational effectiveness and efficiency. If elected, I will provide enthusiastic support and energy for these undertakings. In addition, I will leverage my experience of almost 25 years of statistical practice to offer pragmatic ideas for converting emerging threats and challenges faced by statisticians into potential opportunities for synergy and collaboration.

For example, some in our profession are understandably concerned that data scientists, modelers, and information analysts may displace the traditional role of the statistician on project teams. I deem this extremely unlikely because the quantitative insights of a well-trained statistician with subject matter expertise are irreplaceable. Solving complex Big Data problems requires collaborative multidisciplinary efforts. Instead of adopting defensive postures by our statistical community, I see virtue in embracing the ASA's Big Tent view by reaching out to other quantitative scientists and subject matter specialists and addressing competing viewpoints objectively via sound statistical principles.

I am deeply passionate about mentoring, providing statistical leadership, delivering value-added innovation, and learning from and collaborating with others through partnerships that leverage multidisciplinary skill sets. Over the years, my strengthening record of statistical scholarship and leadership has rewarded me with exciting opportunities, including serving as a subject matter expert for the Bill and Melinda Gates Foundation, National Institutes of Health, and National Academy of Sciences. I have enjoyed serving our profession in various capacities, including advising PhD students, teaching/presenting at numerous conferences and academic institutions, and serving the ASA in a variety of roles, including as chair of the ASA committee on career development, president of the ASA Philadelphia Chapter, core member of the executive committee of the Biopharmaceutical Section, and associate editor for *The American Statistician*.

I would be delighted to serve on the ASA Board as a vice president, working with other board members to help execute the strategic plan and generate new ideas for strengthening the future of our association and its beneficiaries.

Mehrotra

Robert L. Santos

I am honored to be your candidate for vice president and, if elected, would be a creative and passionate board member pursuing the ASA's mission.

I believe society is in a renaissance borne by technological advances, cultural diversification, and globalization. Statistics has never been more assimilated into everyday life than it is today. This is cause for celebration; however, statistics careers are at risk of being overtaken by sub-specialties in other careers (e.g., data analytics).

But threats can be opportunities! To illustrate, I'm an advocate of the sustainability of our profession, but this can't be achieved without initiatives to promote it. I am interested in building a pipeline from elementary school to the university and beyond. My premise is that it is good to engage a student's interest in statistics, regardless of career preference. If nothing else, garnering such interest enhances the stature of statisticians. I envision a systemic approach capitalizing on association partnerships to spark students' interests in statistics using representatives from a variety of fields with statistical specialties (thus transforming a threat into an opportunity). The coalition shares the effort, allowing the ASA to engage more students. A student ambassador component could be used to engage other students in a 'pay-it-forward' strategy, and this addresses the biggest barrier to pipeline efforts: non-graduating high-school students.

This illustrates the creativity I hope to offer the ASA Board. Over the past 35 years, I have worked in leadership positions in the academic, commercial, and nonprofit research sectors. There has hardly been a year when I was not involved as a chair or member of an ASA committee or section (currently Accreditation Committee member and Social Statistics Section chair). Moreover, I'm a proud member of sister association AAPOR, currently serving as president. My experience provides a great foundation from which to serve you.

Santos

Publications Board Representative

David A. Van Dyk

Van Dyk

The proliferation of digital technology has led to a fast-paced evolution of the publication industry and is giving rise to remarkable new opportunities for the American Statistical Association. Our journals face fresh challenges as they are transformed by a set of new digital technologies that promise to increase their access, influence, and functionality. As a member of the ASA Board, I will endeavor to shape this transformation to best serve the membership, profession, and consumers of our publications.

Hal Stern

Stern

The current goals of the American Statistical Association are to increase the visibility of our profession and establish the ASA as an association that serves all of its diverse constituencies. Our broad portfolio of outstanding journals and magazines plays a major role in helping us achieve both these goals. The present era continues to be a time of great change and great promise for scientific publishing. We should continue to take advantage of the opportunities provided by technology, which include the ability to provide faster and broader access to developments in the field. We can continue to add journals as the range of problems we address and the influence of our field continue to grow, but members of our community also are expressing concern about the proliferation of journals. I would be honored and excited to represent our publications on the board of directors to ensure our excellent and prestigious journals continue to support our profession, association, and members.

Council of Chapters Board Representative

Daniel Kasprzyk

Kasprzyk

The association membership is diverse in terms of members' interests, educational backgrounds, and applications of our discipline. The chapters, defined by geography, represent another way the association's diversity is exhibited. The ASA's strategic plan is organized around two broad themes—increasing the visibility of the profession and the association as a Big Tent for statistics. These are important themes on which it is easy to agree in principle, but which can be implemented in many ways, affecting groups within the association differently.

In recent years, each president of the ASA has developed his/her goals and plans consistent with the strategic plan. Working with the leadership of the Council of Chapters Governing Board, chapter concerns and ideas should be strongly represented in the discussion and implementation of presidential and association initiatives. There is also a need to continue to seek ways to strengthen the association by helping to maintain good communication between the ASA Board, Council of Chapters, and Council of Chapters Governing Board and to develop ways for the national office to help chapters thrive intellectually and professionally by promoting collegiality, mentoring, networking, and continuing education.

Council of Chapters Board Representative

Wendy Lou

I am honored to stand for election as Council of Chapters Board Representative. I have held various roles within the Southern Ontario Chapter and just completed a second term as chapter president. My chapter activities have focused on connecting the great variety of statistical groups in my region through annual joint events, such as last year's Workshop and Research Day that was hosted in Toronto by the Southern Ontario and Buffalo-Niagara Chapters and other local statistical associations.

Within the Statistical Society of Canada, I have served as publications officer on the Executive Committee of the Board of Directors and chaired their Public Relations Committee, through which I was involved in a variety of initiatives to promote our statistical profession north of the border. As an educator in a school of public health, I am fortunate to be involved for research and training purposes with numerous multidisciplinary teams that are partially based in local research institutes and hospitals, and I see firsthand how increased collection of data is rapidly spreading the application of statistics among quantitative researchers. Developing collaborative relationships with other scientific associations, especially via regional interactions with effective local organizational support, will help, I believe, to increase the visibility and value of our profession. If elected, I will work hard to serve the interests of our chapters.

Lou

Council of Sections Board Representative

Anna Nevius

The Council of Sections (COS) is an important part of the ASA, serving all the sections, each representing a different area of statistical practice. The sections provide a structure in which statisticians interested in a specific area of statistics can collaborate with fellow statisticians of similar interest resulting in career growth and professional development. The sections and their members are important to the ASA and, for the ASA to serve them effectively, their concerns need to be heard and communicated to the ASA Board of Directors. In turn, the ASA Board of Directors needs an avenue to convey to the sections the ASA's policies and concerns. An important concern to section members is how meetings and, in particular, the Joint Statistical Meetings can be restructured to meet the growing attendance and desire to have more invited and topic-contributed sessions while realizing we are reaching the physical limit on the number of concurrent sessions that can be held.

As stated above, professional development is important to section members. A new feature of ASA continuing professional development is the career-enhancing courses such as improving presentation skills and learning how to effectively influence others. The board needs feedback from sections on these issues. I see the COS Governing Board representative as the link between these two groups. I have served as a Council of Sections representative from the Biopharmaceutical Section and as the treasurer for the Council of Sections. I am honored to be a candidate for the COS Governing Board representative to the ASA Board of Directors.

Nevius

Council of Sections Board Representative

Stephen Cohen

Cohen

I am honored to be a candidate for Council of Sections Governing Board (COSGB) representatives to the ASA Board of Directors. The ASA provided me the opportunity to meet and professionally interact with a broad spectrum of statisticians outside of my business contacts. These interactions provided me with ideas beyond those gained by attending conferences and reading journals. We need to encourage younger statisticians of our profession to join the ASA for both tangible and these intangible benefits and to ultimately be more engaged in influencing the future of our profession.

ASA sections and chapters are the driving force behind the ASA as a Big Tent for statistics. The ASA is a large diverse organization; however, sections, chapters, and smaller specialized conferences supported by the ASA make it possible for junior statisticians and others to become rapidly engaged in the ASA and the statistics profession. As COSGB representative, I would serve on both the ASA Board and the COSGB, where I would continue to help the ASA as the Big Tent that continues to make joining the ASA worthwhile.

I have been honored to be elected to section leadership positions. In these positions, I helped ensure conferences were supported that allowed statisticians to interact with their peers in smaller settings than JSM. I supported efforts to encourage younger statisticians to become more active to influence the future of our profession. I actively supported efforts to partially fund graduate student attendance at JSM with a travel award competition. I supported efforts of our sections to go beyond the traditional paper presentation sessions at JSM such as round tables with coffee that are affordable, promoting posters that can be more rewarding than presenting a paper in front of a group of people.

ASA 2014 Election Candidates List

Council of Chapters Governing Board

Chair-elect
Harold Dyck, California State University, San Bernardino
Ananda Jayawardhana, Pittsburg State University

Vice Chair, Region 1, District 1
Andrew Reilly, University of Albany
Mimi Kim, Albert Einstein College of Medicine

Vice Chair, Region 1, District 2
Xiao Wang, Purdue University
Robert Johnson, Vanderbilt University

Council of Sections Governing Board

Chair-elect
Allan Rossman, Cal Poly - San Luis Obispo
Bonnie Ghosh, The RAND Corporation

Vice Chair
Natalie Cheung Hall, Eli Lilly and Company
Stuart Gansky, University of California, San Francisco

Section on Bayesian Statistical Science

Chair-elect
Peter Mueller, The University of Texas MD Anderson Cancer Center
Steven N. MacEachern, The Ohio State University

Program Chair-elect
Deb Sinha, Florida State University
David Dahl, Brigham Young University

Secretary/Treasurer
Michele Guindani, The University of Texas MD Anderson Cancer Center
Abel Rodriguez, University of California, Santa Cruz

Biometrics Section

Chair-elect
Debashis Ghosh, Pennsylvania State University
Page Moore, University of Arkansas for Medical Sciences

Secretary/Treasurer
Jonathan Schildcrout, Vanderbilt University
Wei Sun, The University of North Carolina at Chapel Hill

Council of Sections Representative
Elizabeth Brown, University of Washington
Jason Roy, University of Pennsylvania

Biopharmaceutical Section
Chair-elect
Christie Clark
Kalyan Ghosh, BMS

Secretary
Ed Luo, Bausch & Lomb, Inc.
Stephine Keeton, PPDI

Program Chair-elect
Olga Marchenko, Quintiles
Jingyee Kou, FDA

Council of Sections Representative
Kjell Johnson, Arbor Analytics, LLC
Bill Pikounis, Johnson & Johnson

Business and Economic Statistics Section
Chair-elect
Ana Aizcorbe, Virginia Tech
Tim Dunne, Federal Reserve Bank of Atlanta

Program Chair-elect
Rob Cage, Bureau of Labor Statistics
David Johnson, U.S. Census Bureau

Secretary/Treasurer
Graton Gathright, U.S. Census Bureau
David Matteson, Cornell

Section on Statistical Computing
Chair-elect
Wenbin Lu, North Carolina State University
David Poole, AT&T Labs - Research

Program Chair-elect
Wendy L. Martinez, Bureau of Labor Statistics
R. Todd Ogden, Columbia University

Council of Sections Representative
Jonathan W. Lane, Sandia National Laboratories
Yan Sun, Utah State University

Section on Statistical Consulting
Chair-elect
Chris Holloman, The Ohio State University
Jonathan Mahnken, The University of Kansas

Publications Officer
Jarrod Dalton, Cleveland Clinic
Vaneeta Grover, Hockessin

Council of Sections Representative
Nan Hu, University of Utah
MaryJo Smith, Embry-Riddle
Aeronautical University

Executive Committee at Large
Edward Jones, Texas A&M
Nicholas Pajewski, Wake Forest

Section on Statistical Education
Chair-elect
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Chair-elect

Juned Siddique, Northwestern University

Ying Lu, Stanford University and U.S. Department of Veterans Affairs Palo Alto Health Care System

Program Chair-elect

Samprit Banerjee, Weill Cornell Medical College

Zhehui Luo, Michigan State University ■

* The section was unable to locate a second candidate to run for the position of chair-elect. ASA bylaws do not allow for uncontested elections. However, to maintain continuity of the section's leadership, it was decided to continue with this election despite having only one candidate for the position of Section on Risk Analysis chair-elect.

**The second candidate for this position was forced to withdraw due to other commitments. Due to the timing, an alternate candidate was unable to be located in time for the election. ASA bylaws do not allow for uncontested elections. However, to maintain continuity of the section's leadership, it was decided to continue with this election despite having only one candidate for the position of Section for Statistical Programmers and Analysts chair-elect.

Statistics Students Learn Every Vote Counts

Faculty across country asked to participate in 2014 project

Mary W. Gray, American University

As a member and now chair of the ASA Committee on Science Policy, I am always eager to interest statisticians in public policy issues. A project my students have carried out in the last two election cycles is a good example of how to involve students in the political process. In 2012, we conducted an exit poll in the District of Columbia, Montgomery County (suburban DC), and Northern Virginia. We did not ask how the interviewees voted, but rather whether they had any trouble voting, either because of voter ID laws (relevant mainly in Virginia) or other problems. This past fall, the only local jurisdiction where there was a statewide contest was Virginia, so we repeated the exit poll project there.

My class in survey sampling selected the precincts, and students from several of American University's undergraduate basic statistics classes conducted the poll. This is a course taken by students majoring in a wide variety of subjects—arts and humanities, communication, sciences, and social sciences. American University has a strong social science emphasis and a very politically involved student body, so many students were eager to participate in a nonpartisan political process that would actually make use of what they were learning.

The precincts chosen came from Arlington, Fairfax, and Loudon counties, as well as the city of Alexandria. Initially, the students were somewhat disappointed that less than 2% of those interviewed as they were leaving the polls reported having problems; any concern about suppression of voter turnout seemed unfounded. However, at the end of the count the day after the election, it turned out that in the race for attorney general—one of three statewide offices—the margin of victory was 165 votes out of a total of more than 2.2 million votes cast. A recount weeks later increased the margin to around 900 votes, but no one was left in doubt about the importance of individual votes.

We did do a bit of stratification by income level in this year's project and found relatively more difficulties with voting in lower-income precincts, but we didn't draw any conclusion with our sample size. We also found younger (<25) and older (>65) voters encountered somewhat more problems than the middle group; one can think of various reasons why this might be the case.

Students who participated, and some of their friends who didn't, have already asked whether we are planning to repeat the project in 2014. Yes, of course, as all local jurisdictions will have crucial races. However, we would like to see widespread participation across the country, particularly in those states with highly restrictive voter ID laws.

In 2012, I wrote to a number of statistician friends on faculties around the country to try to engage others in the exit poll project, but only statisticians and their students from George Mason University in Northern Virginia joined in. Locals know that Northern Virginia is not representative of the state as a whole, and the other jurisdictions reached easily by American University are also not very representative of the country as a whole with respect to voter ID laws—or other characteristics for that matter. We would like to have results from a wide variety of states and regions within states.

What I would like to do is to persuade statistics faculty in institutions around the country to engage their students in this project next year. There's plenty of time to plan for this fall, so please let me know if you would like to know more about this project and perhaps join with us. ■

A Volume in Celebration of the International Year of Statistics

Jerry Lawless

In early 2013, the Statistical Society of Canada commissioned a volume of expository articles in celebration of the International Year of Statistics. The resulting book, *Statistics in Action: A Canadian Outlook*, is being published by Taylor & Francis/CRC Press in March 2014. By agreement with the publisher, an electronic version will be available for free at *www.ssc.ca/statistics-in-action*.
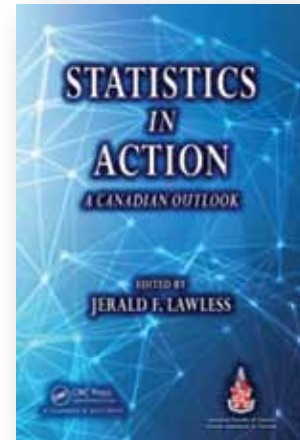
The objectives for the volume are to present for a general audience some of the ways statistics contributes to science, technology, business, government, and other areas while highlighting important contributions being made by Canadians. We hope that in addition to serving an educational function, the book will motivate students and others to learn more about statistics and its role in diverse fields.

The volume was edited by Jerry Lawless and prepared for publication by Christian Genest. It features 21 articles by leading Canadian researchers, covering a wide range of statistical methodology. Many subject areas are represented within the applications described, including climate change, e-commerce, ecology, financial engineering, genetics, medicine, public health, and resource management. Two articles, on the development of statistics in Canada and on Statistics Canada's contributions to survey methodology, provide historical perspectives. A table of contents can be found on the website. ∎

Meet **Charles J. Rothwell**, Director, National Center for Health Statistics

A mstat News *invited the director of the National Center for Health Statistics, Charles J. Rothwell, to respond to the following questions so readers could learn more about him and the agency he leads. Look for other statistical agency head interviews in past and forthcoming issues.*

What about this position appealed to you?

I have been involved in health statistics for more than 40 years and, to me, during those years, NCHS has been the leader in survey methods, addressing the nation's important health questions and disseminating that information in innovative and effective ways. Who wouldn't be interested in working with such outstanding staff on such interesting activities? NCHS is where the health statistics gold is mined and delivered!

Describe the top 2–3 priorities you have for the National Center for Health Statistics.

We must continue to produce high-quality timely data on major health topics and issues while identifying new health threats and groups at risk, as well as changes in the organization and financing of health care. In addition to describing the global picture of health in America, we need to produce more data on the health of minority populations to understand important differences in health status and access to care and more geographic detail to target those communities that lag behind. In collecting data, we need to take full advantage of new technology to analyze and disseminate data, as well as use the latest methodology to conduct our surveys and data systems. That includes expanding the use of electronic health records to gain more clinical information and link health care and outcomes. We need to continue to rejuvenate the nation's vital statistics system so it can document "the now" and not just the past.

What do you see as the biggest challenge(s) for NCHS?

I think the biggest challenge for NCHS is making sure we are collecting the right data—the information the government and public need to make the best decisions, plan the most effective programs, and take action to advance health. While using new technology for the collection and dissemination of data, we need to test the accuracy and quality of those new methodologies (e.g., when disease incidence and prevalence data are based on multiple modes of collection such as electronic health records in combination with data from health interviews and health examinations). An overall challenge is to continue to increase access to NCHS data available in new ways because of technological advances while ensuring we are maintaining and protecting the confidentiality of respondents, both people and providers.

What kind of support from the statistical community do you look for?

First and foremost, we look to the statistical community to advocate for statistical agencies and support their adherence to the principles that ensure the highest standards of accuracy and objectivity. We look to the statistical community for support in several other ways. We continually draw upon and adapt advances in survey and research methodology to our ongoing surveys and data systems. We count on the statistical community to train and develop the bright, young statisticians to fill our ranks and enrich our programs and look to the statistical community to promote government service. Let us not forget that advancing the statistical literacy of our citizens and their respect for and ability to use statistics is another function of the statistics community that benefits us all.

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

I believe that modifying, expanding, and upgrading our data systems to produce information on a wide range of new topics in a much faster time frame is a significant accomplishment. In the past few years—with an infusion of new funds, some from the Prevention and Public Health Fund established by the Affordable Care Act—NCHS has expanded its surveys to produce state estimates of key findings, generated data on priority health topics on a fast track, and produced more detailed information by race and ethnicity, including an expansion of statistics on Asian Americans. ∎

Rothwell has 30 years of federal government experience and 13 years of state government experience. He is a Fellow of the ASA and winner of the APHA Award in statistics. He also served as an officer in the U.S. Marine Corps. For a detailed bio, visit www.cdc.gov/about/leadership/leaders/rothwell.htm.

New *CHANCE* Executive Editor

Scott R. Evans, a senior research scientist at the Harvard School of Public Health and the director of the Statistical and Data Management Center for the Antibacterial Resistance Leadership Group, is the new executive editor of *CHANCE* magazine, announces ASA Executive Director Ronald L. Wasserstein.

Evans' term began with the New Year and runs through 2016. He replaces Sam Behseta, a professor of statistics at California State University, Fullerton, who had led the magazine since 2011.

CHANCE is a cultural record of an evolving, growing, and increasingly impacting professional field. The magazine's intent is to entertain as well as inform its readers by reaching beyond statistics professionals to a general audience.

"*CHANCE* fulfills a special role for the ASA and the statistics profession by stimulating public interest in statistics and statistical thinking through articles of thought-provoking and ground-breaking applications, the communication of new ideas, and education. I am excited to contribute to *CHANCE*'s growth in this exciting time for statistics," explains Evans.

Evans previously was an editor for *CHANCE* and is highly active in professional service, particularly in the ASA. He is past president of the Boston Chapter of the ASA, past chair of the ASA Development Committee, and past chair of the ASA Teaching Statistics in the Health Sciences and Statistics in Sports sections. Evans also is a member of the board of Mu Sigma Rho, the national honorary society for statistics; serves on a U.S. Food and Drug Administration advisory committee; and is a member or chair of several data and safety monitoring boards and scientific advisory committees.

Evans, who also is an ASA Fellow, says these broad activities have prepared him with "a wide-angle view of the statistics profession, statistical methodologies, and areas of application." This broad view has helped Evans create his vision for *CHANCE* under his editorship, which will continue and enhance ongoing initiatives while introducing new ones that build upon the magazine's successes.

Among Evans' objectives is the creation of special issues featuring invited articles dedicated to an interesting and timely theme, growing and enhancing the magazine's online communications channels, spotlighting through interviews the work of statisticians on critical issues with widespread public impact, and building readership among women and minorities.

"I am joined by all ASA members to congratulate Scott on being named the new executive editor of *CHANCE*," says Wasserstein. "Scott brings a high degree of enthusiasm and experience to this new leadership role. I look forward to working with him to implement his well-thought-out vision to lead *CHANCE* into the future."

To read the latest issue of *CHANCE,* visit *http://chance.amstat.org*. ∎

Scott Evans

Picture This!

Statistics2013 Photo Contest winners show off talent

Jeff Myers, ASA Public Relations Coordinator

The International Year of Statistics sponsored a photo contest for students in grades/years 7–12 to mark the end of the year-long celebration of statistical science.

The theme for the appropriately titled Statistics2013 Photo Contest was, "How statistics advances the well-being of people in your country or our global society." Students responded by submitting photos that exhibit the impact of statistics.

The competition was a contest-within-a-contest in that three place-winners were selected from each continent (excluding Antarctica). Also, a best overall photo was selected from among the winning photos from each continent. That best photo received a prize of $800, while $700 in prizes—$350 for first place, $200 for second, and $150 for third—was awarded to the continent place-winners.

There were 136 submissions in total. Asia had the most with 70, followed by North America—40. South America had the least submissions (1). Because of the low number of submissions or the lack of a qualifying photo, the judging panel decided to not select winners from South America and Africa.

On the other four continents, the competition was neck-and-neck. Let's take a look at the winners.

Asia

The large number of submissions from this continent contributed to making the top photo anybody's for the taking until the last vote was counted. Here's how the results ended up:

First Place: Albert Hans, Jakarta, Indonesia

Second Place: Amir Mohammad Rezaie, Dehloran, Iran

Third Place: Irshad Ahmed, Chennai, India

Hans' first-place photo speaks to the importance of statistics in fighting poverty.

Australia

Quality is the best descriptive for the images submitted by students from the Australian continent. Winners were:

First Place: Sarah Ross, Auckland, New Zealand

Second Place: Jhona Hidalgo, North Shore City, Australia

Third Place: Shirin Chen, Auckland, New Zealand

Ross's winning photo conveys the importance of setting aside electronic gadgets and other modern distractions to become statistically literate.

Europe

A sports statistics image from this continent stood out to the judges as the top photo. The lucky winners were:

First Place: Vasilia Harpali, Athens, Greece

Second Place: Gocho Ganchev Kushev, Yambol, Bulgaria

Third Place: Jesus Gregorio de Gouveia Ribeiro, Ilha da Madeira, Portugal

Harpali's image illustrates how statistical data in athletics help athletes train for better results.

North America

The winner of the North American continent delivered a striking image that illustrated the critical importance of cancer research. The winners were:

First Place: Shannon Hunt, Pembroke, North Carolina

Second Place: Dayana Jara, Hilton Head, South Carolina

Third Place: Alex Cowsert, Wichita Falls, Texas

The footwear in Hunt's photo reminds us of the importance of statistics in research of cancer and other diseases.

Best Overall Photo

The best overall photo was the image submitted by Shannon Hunt of Purnell Swett High School. For her efforts, Hunt received a total of $1,150—$800 for winning the best overall photo and $350 for winning the North American continent.

Thank You

We congratulate all the winners and thank each of the students who participated. Each helped us close out the International Year of Statistics on a high note and amazed us with their statistical acumen and photography skills. And for that, they all are winners.

We also thank the four judges—MaryDorsey Wanless, Washburn University associate professor of photography; Ron Wasserstein, Statistics2013 Steering Committee member; Paulo Canos Rodrigues, a statistician from Brazil; and Megan Murphy, *Amstat News* editor—who selected the winners.

Visit *www.worldofstatistics.org/2013/12/19/ congratulations-to-the-winners* to view the photos of all the place-winners. ∎

Renowned Speakers Featured at Business Analytics Day

The Business Analytics Group of the Louisiana Tech University College of Business hosted its first annual Business Analytics Day at the Louisiana Tech Shreveport Center on January 10. The focus of the Business Analytics Day was on Big Data issues, and the conference featured a full slate of speakers who spoke on the value of data analytics and how participants could make the most of their data. The event was co-chaired by **James J. Cochran** and **Tim Bisping**.

Bill Franks, chief analytics officer of Teradata and author of the book *Taming the Big Data Tidal Wave*, opened the day with the talk "Putting Big Data to Work." During Franks' discussion of Big Data issues, he emphasized that data does not create businesses, but rather enables businesses to identify and address problem and threats. He also provided several novel examples of consumer goods companies that are improving their bottom lines by providing their customers with data. Franks further suggested that although many believe technology is the greatest impediment to taming Big Data, the real impediments are usually people, policies, and politics.

Laurie Garrow, associate professor with the Georgia Tech School of Civil and Environmental Engineering and author of *Discrete Choice Modelling and Air Travel Demand*, followed with "Even Bigger Data: New Insights from Fusing Multiple Large Data Sets." Garrow emphasized her work on several applications of what she called "even bigger data" that required fusion of multiple massive data sets to better understand individual or firm behaviors. Examples she covered included vehicle emissions models, residential location choice models, airline passengers' online search and purchase behaviors, and consumer welfare analysis of airline mergers. Garrow also added to Franks' earlier discussion of privacy issues by describing techniques used to mitigate privacy concerns.

After a break, the conference resumed with a talk by Cochran, the Bank of Ruston, Barnes, Thompson, & Thurman Endowed Research Professor with the Louisiana Tech University College of Business and coauthor of several textbooks, including *Essentials of Business Analytics*. In his talk, "From Katie Scarlett O'Hara Hamilton Kennedy Butler to Pretzel Rods to Frankenstein for President to Taxi Wars: The Evolution of a Stream of Applied Analytics Research," Cochran explained his taxonomy for Big Data: tall data, which describes situations for which there are a large number of observations over relatively few variables; wide data, which describes situations for which there are relatively few observations over a large number of variables; and deep data, which describes situations for which the problem is extremely complex and so generates an extremely large number of potential solutions to consider. He

punctuated his talk with examples from optimal design of movie plots/scripts, products, platforms for U.S. presidential campaigns, and mass transit systems. Cochran concluded by quoting Nobel Prize–winning economist Paul Krugman ("The 1970s were the high point for vast amounts of theory applied to extremely small amounts of data.") and then expressing his concern that, in the upcoming decade, we will see the reverse— extremely small amounts of theory applied to vast amounts of data.

Catherine Truxillo, manager of analytical education for the SAS Institute, followed lunch with "Making Better Decisions from Predictive Models with Social Network Analysis." Truxillo opened with an overview of social networks and ways they are modelled and analyzed. She then concentrated on how successful businesses use social network analytics to generate added value by better understanding the customer, predicting customer behavior, and uncovering new customers.

Maytal Saar-Tsechansky, associate professor with McCombs School of Business at The University of Texas at Austin, then spoke on improving decisions with predictive modeling and intelligent information acquisition. The theme of this talk was the process of developing, assessing, and implementing predictive analytics models. Saar-Tsechansky made a distinction between passive and active data collection and elaborated on the

opportunity costs associated with a purely passive approach. She then discussed several predictive modeling problems—including sales tax audit decisions, direct targeting, and auction mechanism design—and she emphasized the value of ensemble approaches.

After the afternoon break, Pulitzer Prize–nominated reporter **Alan Schwarz** of *The New York Times* and author of the book *The Numbers Game* discussed how he used analytics to support his reporting. Schwarz devoted the majority of his talk to his reporting on the concussion crisis in American football, which he is roundly credited with uncovering and for which he has received many awards (including the 2013 Excellence in Statistical Reporting Award from the ASA). In addition to providing a chronological description of how this issue (and the numerous articles he has written about this issue) developed and how analytics were key at each critical juncture, Schwarz gave a brief overview of his current topic of interest: the use and/or abuse of Adderall in the United States.

The Shreveport audience was split almost evenly between academic/graduate students and members of the regional business community and travelled from as far away as North Carolina. In addition to the full day of talks, breakfast, lunch, coffee breaks, and a reception after the conference, registrants received copies of *Taming the Big Data Tidal Wave* and *The Numbers Game*. The event was made available live and at no cost to colleagues in developing nations. The organizers received requests for the link from colleagues in more than 70 countries, so this event certainly had a wide reach.

Plans are under way for the 2015 Business Analytics Day. For more information, contact Cochran at *jcochran@latech.edu* or Tim Bisping at *tbisping@latech.edu*. ∎

Recognize Outstanding Statistics Students by Nominating for Mu Sigma Rho

Ananda Jayawardhana, Kansas-Western Missouri Chapter

Consider nominating your outstanding statistics students for membership in Mu Sigma Rho, The Statistics Honorary Society. Both graduate and undergraduate students are eligible. To become a member, students must be nominated by a chapter and satisfy several academic requirements. Chapters are associated with an academic institution or the ASA. Details regarding forming a chapter and nominating students can be found at the Mu Sigma Rho website, *www.stat. purdue.edu/~mccabe/msr.*

In 2013, there were 399 students who received a Mu Sigma Rho honorary pin and certificate recognizing their accomplishments.

KWMCH and Mu Sigma Rho

Within the area the Kansas-Western Missouri Chapter (KWMCH) serves, there are several universities with small statistics concentrations in mathematics departments. The statistics department at Kansas State University and the biostatistics department at the University of Kansas Medical Center are the two dedicated statistics programs in the area. In 2011, representatives from these universities created a committee to start a Mu Sigma Rho affiliate chapter. This was done through the KWMCH, so a petition was not required.

Each committee member is a faculty member from these two universities and all hold a PhD in statistics. One member volunteered to be the chair or the representative to the national organization.

We modeled our Mu Sigma Rho chapter after the Boston Chapter's. Respective committee members from these institutions are charged with soliciting applications, checking academic requirements, making recommendations to the committee, collecting the initiation fee, and communicating with the chair of the committee and national secretary. We reach out to the universities by February 1 and expect all nominations by March 1. A local committee member reviews the applications and lets the chair know by March 10. The committee then electronically approves all the applications compiled by the chair by March 20 and invites the students to join Mu Sigma Rho by April 1.
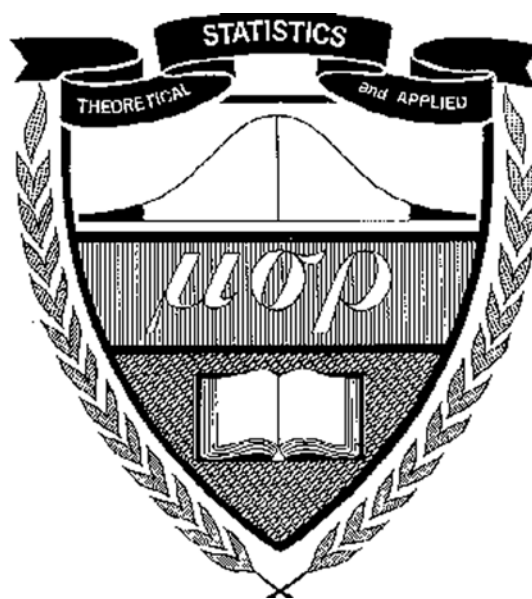
The induction ceremony is held during the spring meeting of KWMCH, which is usually in late April. During 2012 and 2013, 57 students were inducted into Mu Sigma Rho by KWMCH and given certificates, Mu Sigma Rho pins, and one year of ASA membership.

Currently, six universities participate in our affiliate chapter. In 2013, none of the participating universities had more than five eligible student applicants. A Mu Sigma Rho chapter through an ASA chapter provides the opportunity for students from isolated and small statistics programs to become members of the national organization.

For more information, visit *www.math.smith. edu/~nhorton/msr.html* or *http://community.amstat. org/KWMChapter/aboutus/musigmarhohonorsociety*. ∎

Meeting the Challenges of Improved Post-Secondary Education in the Mathematical Sciences

David M. Bressoud, Eric M. Friedlander, and C. David Levermore

*In 2012, the President's Council of Advisors on Science and Technology (PCAST), which advises President Barack Obama, issued a report—*Engage to Excel*—that raised concerns about the teaching of the mathematical sciences in the first two years of our colleges and universities. On behalf of the Joint Policy Board for Mathematics (JPBM)—the umbrella organization of the American Mathematical Society (AMS), the American Statistical Association (ASA), the Mathematical Association of America (MAA), and the Society for Industrial and Applied Mathematics (SIAM)—David Bressoud, Eric Friedlander, and David Levermore, with support from the leadership of all four societies, crafted a response. After participation in many discussions within our professional societies, JPBM, and PCAST, we are guided in formulating the following statement. We are calling upon the entire mathematical sciences community to achieve much-needed change in undergraduate education in the mathematical sciences. This statement also is appearing in* AMS Notices, MAA Focus, *and* SIAM News.

The mathematical sciences play a foundational and crosscutting role in enabling substantial advances across a broad array of fields: medicine, engineering, technology, biology, chemistry, computer science, social sciences, and others. The delivery of excellent post-secondary mathematics education is essential to the present and future well-being of our nation and its citizens.

Whereas research in the mathematical sciences is flourishing, with dramatic advances regularly occurring in core mathematics and in applications, mathematics education needs **immediate attention**. We focus on the needs of students in two-year colleges, four-year colleges, and universities. Mathematics education is a critical component of all undergraduate science, technology, engineering, or mathematics (STEM) degrees and plays a key role in educating the next generation of leaders in our increasingly technological, data-driven, and scientific society.

The President's Council of Advisors on Science and Technology (PCAST) presented many challenges to the mathematics community as it addressed the needs of post-secondary mathematics education in its 2012 report *Engage to Excel* (*www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-engage-to-excel-final_feb.pdf*). Answering these challenges will require collaboration among all the scientific disciplines working to prepare the STEM work force of the future. We acknowledge many of the shortcomings highlighted by the report. The *wake-up call* delivered by this PCAST report has underscored the immediacy of the need for intensive, broad-scale efforts to address these problems. Whereas efforts by a great many in the mathematical sciences community pre-date PCAST's report, now more than ever we need a broad, community-wide effort to implement innovation in all of our college and university educational programs.

What are these challenges, why is this an especially critical time for the mathematical sciences community, what efforts are under way to meet them, and what do we ask of the mathematical community?

Among the challenges we face is the need to find new ways to educate students who are poorly prepared for post-secondary mathematics. This includes new teaching methodologies and technology, as well as changes in curricula at all levels. We must do more to adapt the mathematics we teach to the career needs of the students we teach. We must pursue cooperation ever more energetically with mathematics-intensive disciplines. For emphasis, we rephrase these challenges as explicit questions. How should mathematics educators improve developmental education to enable students to aspire to STEM careers? What methods of placement and advising best help students navigate through a STEM curriculum? How should mathematical scientists in colleges and universities augment their cooperative efforts with "partner disciplines" to best serve the needs of students needing basic university mathematics? How should mathematical sciences departments reshape their curricula to suit the needs of a well-educated work force in the 21st century? How can technology be best used to serve educational needs?

We are at a critical juncture. Members of the academic mathematical sciences community should recognize that *change is coming rapidly* in their world. There is great pressure to reduce costs in order to relieve state budgets and student debt; this pressure will translate to "efficiencies" and new measures of effective teaching. Numerous agencies are identifying mathematics courses as a stumbling block for success in undergraduate programs leading to a STEM degree. Increasing numbers of students coming to colleges and universities seek STEM careers that require post-secondary mathematics, yet many of these are poorly prepared. There is much demand to make mathematics education directly relevant to STEM careers.

The mathematical sciences, themselves, are changing as the needs of Big Data and the challenges of modeling complex systems reveal the limits of traditional curricula. The National Research Council report The Mathematical Sciences in 2025 (*www.nap.edu/catalog. php?record_id=15269*) eloquently describes the opportunities and challenges of this shifting landscape. This well-received report can serve as one foundation for the change needed, providing a springboard for initiatives in mathematics education that more closely intertwine the learning of mathematics with the appreciation of its applications.

We mention a few of the national efforts under way to address these challenges. There are many, many efforts at individual institutions that we hope will be shaped into more coherent efforts as well. For two-year colleges, the New Mathways Project (*www.utdanacenter.org/higher-education/new-mathways-project*), Statway (*www.carnegiefoundation. org/statway*), and Quantway (*www.carnegiefoundation.org/ quantway*) programs are assisting

under-prepared students. Project NExT (*http://archives.math.utk. edu/projnext*) is now past its 20th year of introducing new faculty to effective strategies for teaching. MAA's national study of calculus has identified characteristics of successful programs (*www.maa.org/cspcc*). Modeling Across the Curriculum (*connect. siam.org/siam-nsf-workshop-on-modeling-across-the-curriculum*) is working to embed computational learning and exposure to modeling and simulation in early STEM courses. The Consortium for the Advancement of Undergraduate Statistics Education (CAUSE - *www.causeweb.org*)—which grew out of an ASA initiative—provides resources, professional development, outreach, and research for the needs of modern undergraduate statistics education. At research universities, there is a new program of the Association of American Universities to implement more "evidence-based" teaching practices and improve the quality of teaching and learning (AAU Undergraduate STEM Education Initiative, *www.aau.edu/policy/article. aspx?id=12588*). The Investing in the Next Generation Through

Innovative and Outstanding Strategies (INGenIoUS) project (*www.ingeniousmathstat.org*) is a joint effort of AMS, ASA, MAA, and SIAM to develop strategies for future investments in training at the graduate and undergraduate levels. Carnegie Corporation of New York and the Sloan Foundation are supporting a broad-ranging initiative titled Transforming Post-Secondary Education in Mathematics (*http://tpsemath.org*). These efforts are steps in the right direction, but much remains to be done.

We call upon all mathematical scientists in academia to renew their focus on post-secondary mathematics education. We challenge department chairs to incentivize innovation for the sake of their students and the health of our discipline. We encourage mathematics faculty to reach out to colleagues in mathematics-intensive disciplines to heighten the relevance of their courses to the careers of their students. And we urge departments as a whole to investigate with an open mind new teaching methodologies and technologies, keeping in mind the need to retain and motivate students. ■

BASS XXI to Take Place in 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*.

Revision of Introductory Statistics Courses Could Close Divisions

Terry Speed's comments in "Trilobites and Us" (January 2014) refer to omissions in the fields described in the International Year of Statistics conference—social and government, in particular. This connected me with the areas in which our community was said to have been guilty:

F. Generally poor teaching, particularly to large classes of non-specialists

H. Failing to articulate our core to the world at large

F and H seem to me to follow almost automatically from the fact that we do not have a unified profession upon which the basic principles are agreed. The divisions within the community are most clear between official and academic statisticians. In Australia, the Australian Bureau of Statistics (ABS) was concerned for many years by the failure of academic statistics courses to teach adequately (or at all) sampling procedures and the design-based approach to inference. The ABS had to retrain university statistics graduates in these areas before they could be useful in ABS work. Graduates found a major disconnect between their academic courses and the work of the ABS, and this contributed to high turnover of new graduates recruited to the ABS.

Over the same period, but especially since the 1990s, there has been an increasing disconnect between the traditional Fisher-Neyman-Pearson (FNP) math statistics course and the demands for complex analysis in many application areas. The failure of classical maximum likelihood methods to deal effectively with complex models and the success of MCMC-based methods has led to a similar situation: The undergraduate FNP course does not prepare students for these models, and Bayesian MCMC retraining courses are needed to prepare graduates for these applications.

It might be argued that advanced courses training graduates in new areas (as GLMs and GLMMs once were) will always be needed, so this is nothing new. However, the point is that the classical FNP course does not now train students effectively for any subsequent career, except research in extending the FNP paradigm and teaching it at undergraduate and graduate levels.

Progress in closing these divisions, and improving F and H, would be greatly accelerated by a revision of introductory statistics courses for undergraduate math statistics students.

An immediate introduction to real finite populations is needed (small socio-medical populations are interesting to students for this purpose, like the StatLab population of Hodges, Krech, and Crutchfield, 1975), as well as the sampling processes for learning about population quantities.

Starting with Bernoulli models and progressing to categorical variables before continuous ones allows likelihoods (including the sample design contribution) to be developed quickly.

Of course, statistical computing is an essential element, and both Bayes and maximum likelihood (from a log-quadratic likelihood approximation) can be introduced with these simple models.

In dealing with continuous or discrete variables, the Bayesian bootstrap approach—with sampling from the posterior Dirichlet distribution from the multinomial population model—allows a great deal of analysis without specific parametric model assumptions. These can be introduced later through exponential family and other useful models.

Beyond this point, courses will evolve depending on the individuals designing the courses, but the introductory course components above seem to me to be both essential and practical. ■

Murray Aitkin
Honorary Professorial Fellow
Department of Mathematics and Statistics
University of Melbourne

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The Statistics Education of Teachers

Christine Franklin and Tim Jacobbe

The opportunity of "statistical literacy" for all is upon us! The release in 2012 and widespread adoption in most states of the Common Core State Standard for Mathematics (CCSSM) have dramatically increased the amount of statistical content and expectations for teaching statistics in grades 6–12 (*www.corestandards.org/Math/Content*).

As you view the standards for statistics, you may say, "This sounds similar to the course content in an AP Statistics course or a college introductory statistics course." The statistics standards at K–12 are intended to introduce basic statistics topics at an intuitive and conceptual level using case studies, technology, and simulation. In light of these increased expectations of delivering conceptually based statistical content at K–12, the Conference Board of the Mathematical Sciences (CBMS) identified the statistical preparation of teachers as an area of concern in their recent document, *Mathematics Education of Teachers 2* (*MET2*).

Despite the increased attention statistics is receiving in national and state standards, research suggests teachers are not likely to be adequately prepared to teach statistics at the level suggested in the American Statistical Association's *Pre-K–12 Guidelines for Assessment and Instruction in Statistics Education (GAISE) Framework* (*www.amstat.org/education/gaise/index.cfm*) or the CCSSM.

The CBMS *MET1* and *MET2* documents emphasize the need for teacher preparation in statistics; however, the documents' primary focus is the mathematics education of teachers. The Joint ASA-NCTM Committee thought there was a critical need for a companion document, titled *Statistics Education of Teachers* (*SET*). The ASA has the statistical preparation of K–12 teachers as one of its strategic priorities. Just as the ASA took the lead with the Pre-K–12 GAISE Framework document in 2003, the ASA executive board enthusiastically approved supporting a strategic initiative for the development and writing of the *SET* document.

We are excited to co-chair this effort and to work with a team of committed and dedicated writers: Anna Bargagliotti, Gary Kader, Richard Scheaffer, and Denise Splanger. These writers are highly respected in the mathematics and statistics education communities for their professional efforts in promoting statistics in writing national standards and resources for K–12 and teacher preparation, as well as developing appropriate assessment for K–12

statistics. The work of the writing team will build on the following:

- Existing K–12 statistics standards and guidelines (Pre-K–12 GAISE Framework, NCTM Standards, and Common Core State Standards in Mathematics)

- Relevant research results from the studies of teaching and learning statistics

- Data on assessment items used in large-scale and high-stakes tests and the work of the NSF-funded LOCUS project (the assessment piece of the Pre-K–12 GAISE Framework)

- Experiences of teacher preparation institutions that are recognized leaders in the statistical preparation of K–12 teachers

In February 2013, a joint position statement of the American Statistical Association and National Council of Teachers of Mathematics, "Preparing K–12 Teachers of Statistics," was released (*http://bit.ly/1m3oeHd*). The *SET* project is one of many ways the ASA is showing its commitment to supporting the recommendations of this position statement.

The writing team met in October 2013 to outline the format and priorities of the document. The timeline for completion is fall 2014, with the ASA Board considering the document for approval before the end of December 2014. During the upcoming months as drafts of the document are written, an advisory group of respected statistics and mathematics educators will review it.

Once approved by the ASA, these guidelines will be posted on the ASA website and submitted to professional organizations such as NCTM, MAA, and CBMS, as well as to funding agencies such as NSF. The Joint ASA-NCTM committee also will sponsor printed versions of *SET*.

The ASA is again demonstrating its vision by supporting this necessary document for the national K–12 education community. Just as with the vision shown by supporting the Pre-K–12 GAISE Framework, a document that was available for the Common Core writers, we believe *SET* is critical for teacher preparation institutions and state departments of education in meeting the new and sudden challenges of infusing more statistics content and pedagogy into the training of pre-service and in-service teachers. The Pre-K–12 GAISE Framework has become influential internationally. We envision the same for *SET*—a special addition to the ASA's support of the International Year of Statistics. ∎

SCIENCE POLICY

NIH, NSF, Statistical Agencies Receive Final FY14 Budgets

Steve Pierson, ASA Director of Science Policy

Just over three months into the current fiscal year, Congress and the president finalized the fiscal year 2014 (FY14) budgets, a move facilitated by the December budget deal easing sequestration for both FY14 and FY15. In most cases, the FY14 budget levels are welcome news, as they largely restore the FY13 cuts (see Table 1).

NIH and NSF

While the budget for NIH was increased 2% over the FY13 level, the budget was still 2% below the FY11 and FY12 levels, accentuating the funding challenges NIH has faced for several years with relatively flat budgets and declining purchasing power due to inflation. Indeed, according to an analysis from the Federation of American Societies for Experimental Biology (FASEB), the NIH FY13 budget was $6 billion (22.4%) less than it was in FY03 in inflation-adjusted dollars. The FASEB analysis also reported 2,110 (20.3%) fewer competing research project grants and 2,528 (34%) fewer R01-equivalent grants than in FY03. Further, proposal funding rates for R01-equivalent grants has declined from 30% in FY03 to 17% in FY13. I would expect the FY14 NIH budget to prevent further decline in the proposal funding rate.

The NSF budget was increased 4% over the FY13 level, but only 2% over FY12. In FY13, the proposal funding rate was 22%, down from 24% in FY12, but still within the 22%–26% range since FY04 (excluding FY09, when the stimulus allowed a 32% funding rate). It also should be noted that the median annual grant size at NSF has increased each year, from $73,000 in FY04 to $117,000 in FY13. For the Division of Mathematical Sciences (DMS), the funding rates for FY04–FY13 are mostly in the range of 30%–36%. The DMS median grant size, however, rose from $39,000 in FY04 to a peak of $62,000 in FY12, falling to $59,000 in FY13. The FY14 budget should allow NSF to maintain a proposal funding rate of about 22%.

Statistical Agencies

The federal statistical agencies generally had their budgets raised for FY14 to levels above their FY12 budgets. The exceptions are the Bureau of Labor Statistics (BLS) and National Center for Education Statistics (NCES), whose FY14 budgets are 3% and 5% below their FY12 levels, respectively

The Bureau of Justice Statistics (BJS) and Energy Information Administration (EIA) saw the biggest increases, with 9% and 11% increases over their FY12 levels, respectively. (BJS is still 25% below its FY10 and FY11 levels, when Congress was funding the improvement of the National Crime Victimization Survey.)

Table 1—Final FY14 Budget Levels for NSF, NIH, and the Primary Federal Statistical Agencies

	FY11	FY12	FY13	FY14		
				Final	change from FY13	change from FY12
Research Agency (amounts in millions of dollars)						
NIH	30688.0	30623.0	29300.0	29926	2.1%	-2.3%
NSF	6913.0	7033.0	6884.0	7172	4.2%	2.0%
Statistical Agency (amounts in millions of dollars)						
BEA	93.2	92.2	89.8	95	5.8%	3.0%
BJS	60.0	41.3	41.3	45	9.0%	9.0%
BLS	610.0	609.0	577.2	592	2.6%	-2.8%
BTS	27.0	25.2	26.0	26	0.0%	3.2%
Census	1152.0	942.4	841.7	945	12.3%	0.3%
EIA	96.0	105.0	99.5	117	17.6%	11.4%
ERS	81.8	77.7	71.4	78	9.2%	0.4%
NASS	156.4	158.6	166.0	161	-2.9%	1.6%
NCES	247.0	247.0	226.0	235	4.0%	-4.9%
NCHS	138.7	138.7	138.7	140	0.9%	0.9%
NCSES*	42.0	43.3	41.6			
ORES	29.0	29.0	27.5	29	5.5%	0.0%
SOI	39.0	38.7	33.1	37	11.8%	-4.4%

*Levels were not available for NCSES, as the appropriations bills do not go to that level of detail. Note also that the BTS budget is not tied to the annual appropriations cycle because it is funded through Highway Trust Fund.

Relative to the FY14 administration request (*not* shown in Table 1), EIA, the Economic Research Service (ERS), and the National Agricultural Statistics Service (NASS) did the best, with Congress funding the request level to within 1%. BJS, NCES, and the National Center for Health Statistics (NCHS) fared the worst, with FY14 levels 15%, 9%, and 13% below their request levels, respectively.

The NCHS budget is perhaps affected the most of the federal statistical agencies as, according to a Friends of NCHS email, Congress did not provide funding from the mandatory Prevention and Public Health Fund established by the Affordable Care Act. For the past two years, this funding has elevated NCHS's budget by approximately $30 million. As a result, NCHS faces an effective cut of $30 million in FY14.

The U.S. Census Bureau's budget was increased 12% over FY13, and only 4% below its FY14 request level. Considering the Census Bureau's budget was funded more than 10% below its request level, the FY14 final budget is welcome news, but the Census Bureau will still need to make difficult choices as it ramps up work on the 2020 decennial census.

To put the FY14 budgets into perspective, figures 1 and 2 show the federal statistical agency budgets normalized to their FY03 budgets. For the mid-size federal statistical agencies, the recent cuts to the ERS budget, the longer-term stagnancy of the Bureau of Transportation Statistics (BTS) budget, and the volatility of the BJS budget stand out. While the BEA has fared well over the 12 years covered in Figure 1, it should be noted that their purchasing power has declined slightly.

For the larger federal statistical agencies (Figure 2), the Census Bureau budget stands out because of both the decennial census and the apparent budget increase over
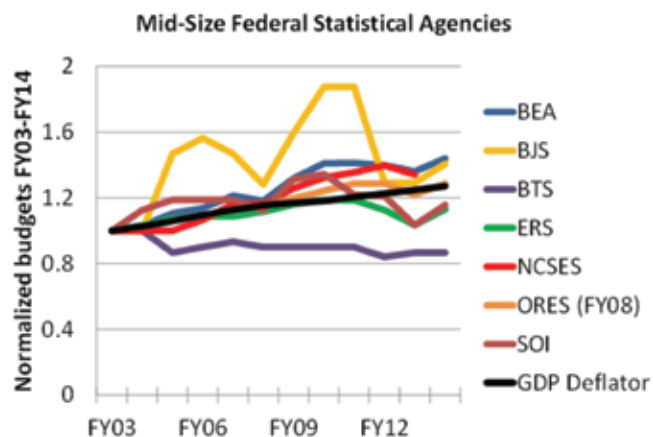
Figure 1. The budgets of the seven mid-sized statistical agencies normalized to their FY03 levels, along with the GDP deflator to account for inflation. The Social Security Administration Office of Research, Evaluation, and Statistics' budget is normalized (and adjusted for inflation) to its FY08 level, when the current accounting scheme was implemented.
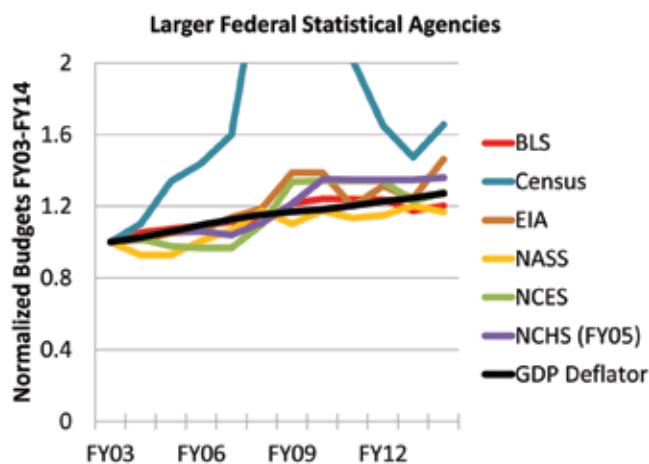
Figure 2. The budgets of the six larger statistical agencies normalized to their FY03 level, along with the GDP deflator to account for inflation. The NCHS annual budgets are normalized (and adjusted for inflation) to the FY05 level, when the current accounting scheme was implemented. The U.S. Census Bureau line peaks at 12.65 in FY10.

the last decade. For the latter, it is important to remember that the long form of the census was converted from a once-a-decade survey to a monthly rolling survey in the 2000s. That change accounts for the seemingly much larger budget of the Census now than a decade ago.

The increase for EIA also stands out, though its FY14 level also could be seen as on track with its FY09 and FY10 budgets. The NCHS budget has been flat since

FY10 and has lost about 10% of its purchasing power, thereby making the *de facto* cut discussed above all the more concerning.

For further discussion about the federal statistical agencies, please see the June 2013 *Amstat News* article, "Congress Finalizes FY13 Budgets."

The FY15 federal budget process will begin with the administration's request, expected in early March. ∎

STAT*tr@k*

Finding Careers in Quality Management

Daniel Smith, Cox Communications

When it comes to choosing a career, there are generally two types of people in the world: those who figured out long ago what they wanted to do and those who slowly gravitated toward a career. I don't have any sample statistics to prove or disprove which group has a higher success rate, but I was definitely in the latter. The finality of choosing one career to achieve in life seemed so precarious. What if you're wrong?!

I always thought it better to keep my options open, and that eventually led me to a career in quality management. But whether you know what you want to do for the rest of your life or are simply considering a career in quality management, there are a few actions that can help you gain a leg up on your ever-growing competition.

Get Certified

Here's a little tip when you notice a position and are going over what is "required" and what is "preferred" in the job description. "Preferred" usually means required also. The job market is growing more competitive every day, and there will likely be at least dozens of candidates applying for the same position you covet. Most quality management positions will require a college degree, and many will likely list "graduate degree preferred." However, if you don't want to spend several years in a full-time graduate program, there are other ways to become certified with skills that will be of great benefit to you in the quality management world.

Obtaining certification in Six Sigma is one of the quickest ways to greatly improve your résumé. Many introductory Six Sigma certification programs (e.g., Green Belt) last anywhere from 1–4 weeks, and you can mention that in every interview you go to once you're certified. Even if the company you are interviewing with likes to provide its own Six Sigma training, already being certified gives them greater confidence that you will have no trouble in their program. And by the way, "Six Sigma certified" often appears in the "preferred" section of many quality management openings.

Have Experience Using Advanced Analytics Software

Ten years ago, you might have been able to impress a quality manager if you had even basic Excel skills. Nowadays, almost every quality management department expects you to know how to use it. And although Excel is still a valuable tool, learning how to use advanced analytics software will separate you from your competition. Minitab (my preference) and JMP seem to be two of the more popular statistical software packages in use.

Having experience using any statistical software package doesn't mean you have to be an expert. Ideally, once you get your foot in the door, you will have guidance from the quantitative experts who surround you. Further, this looks good on a résumé, even if the particular company you are attempting to join uses a different statistics package. If you can demonstrate familiarity with one type of software package, then most employers will feel fairly confident you can learn another.

Speak the Language

Colleagues sometimes ask me what to look for when interviewing a person for any analytics position, especially positions in quality management. The number-one skill I recommend looking for is the ability to discuss and explain variation. It doesn't matter whether the quality management opportunity you are looking for resides in marketing, operations, sales, finance, logistics, or any other branch of a company. All measure variation in one way or another, so they need someone able to discuss this in an intelligent, confident way. Sometimes, this may be as easy as being able to define what a standard deviation represents.

Aside from variation, another important term you should feel comfortable with is statistical significance. It's not necessary to memorize the multitude of comparative hypothesis tests that exist to determine statistical significance. Most of them can be referenced easily in your statistical software package or from other resources. What is important is that you are able to identify when the difference between two population sets, or two processes, differs by an amount too unlikely to have occurred by chance. Often times, an interviewer will pose a hypothetical question to you, and they are looking for you to address variation and statistical significance in your response.

I don't want to discount the impact that networking, research skills, work ethic, presentation skills, public speaking, and many other variables could have on landing a position in quality management. However, covering the three aspects listed above should provide you with a solid foundation for a career in the quality management industry. ∎

Second eCOTS Set for May

The Electronic Conference on Teaching Statistics (eCOTS) will take place online from May 19–23. Hosted by the Consortium for the Advancement of Undergraduate Statistics Education (CAUSE: *www.CAUSEweb. org*), eCOTS has been designed to focus on undergraduate-level statistics education (including AP Statistics) with a target audience of statistics teachers.

eCOTS 2014 includes keynote talks by mathematics and statistics education innovators Conrad Wolfram and Christine Franklin; six two-hour virtual workshops to disseminate NSF-supported statistics education innovations (e.g., game-based learning, randomization-based curriculum, project-based learning, interactive probability education, modeling across the curriculum, and the CATALST curriculum); "birds-of-a-feather" lunchtime discussions; invited and refereed breakout sessions; and virtual posters. All these events will focus on the following three themes of the conference:

1. Teaching from Big Data. What are some of the issues and challenges when it comes to using Big Data for teaching and learning purposes? How can a focus on Big Data change the way we teach statistics? How can we teach data analytic methods that draw insights from massive data?

2. The Impact of the Common Core. How can we better prepare, at the college level, future teachers of statistics at all levels (K–16)? How must teachers be prepared to deal with the Common Core State Standards? Further, how should the teaching of statistics at the college level change in light of changes in the K–12 statistics curriculum?

3. Bridging the Disciplines. How can we enhance the centrality of statistics across the disciplines? What can we take from other disciplines to create a more positive learning experience for our students? How can we connect with other disciplines and forge relationships with these disciplines that will be mutually beneficial? How might we create valuable learning experiences for students that will prepare them to work in multidisciplinary teams?

The conference website is *www.CAUSEweb.org/ ecots*, where you will find details and online registration. The registration fee for attending eCOTS is $25 and includes all sessions. If you have questions about the eCOTS program, contact CAUSE Director Dennis Pearl at *pearl.1@osu.edu*. ∎

Perelman
School of Medicine
UNIVERSITY of PENNSYLVANIA

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	Tentative Topics
Stuart Baker (NCI)	Emerging methods for identifying, assessing and using surrogate endpoints and biomarkers
Marshall Joffe (U Pennsylvania)	Surrogate Outcomes for Time-varying Treatments and Outcomes, Including SMART trials.
Jeremy Taylor (U Michigan)	Issues and problems in the use of intermediate endpoints in assessing treatment effects.
Jarcy Zee (U Pennsylvania)	Survival analysis using both surrogate and true endpoints
Michael Kattan (Cleveland Clinic)	Statistical prediction models and medical decision-making
Ying Huang (Fred Hutchinson CRC)	Combining and evaluating biomarkers for treatment selection in randomized trials
Herbert Weisberg (Causalytics)	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

Undergraduates Provide Solutions to Data Analytics Problems

Participants of the Midwest Undergraduate Data Analytics Competition (MUDAC)

The department of mathematics and statistics at Winona State University will host the Midwest Undergraduate Data Analytics Competition (MUDAC) 2014 in Winona, Minnesota, April 5–6. MUDAC was started three years ago at Winona State University to showcase the ability of undergraduates to solve a data analytics problem for a nationwide corporation.

MUDAC is comprised of teams of undergraduate students and their mentors from colleges and universities in the Midwest. This year, teams will work together to solve a problem for Fastenal Corporation, a wholesaler and retailer of industrial and construction materials with more than 2,600 locations worldwide. The competition will begin with Fastenal representatives introducing teams to the analytics problem, and—in the next 24 hours—teams must complete an analysis, provide a written summary of their findings, and present their recommendations. Teams are allowed to seek input from their faculty mentors on a limited basis and from Fastenal representatives who are available to answer questions throughout the competition.

The winners are selected by a panel of judges that includes faculty mentors, Fastenal representatives, and several other professional data scientists. Cash prizes are awarded to the top three teams. Teams with a diverse knowledge base and the ability to digest complex problems tend to do well. Peter Guidinger, a representative from Fastenal, commented, "One of the most useful take-a-ways from this competition is the creativity and diversity in the solutions provided. The students help us think about our business in different ways, and we enjoy contributing to their long-term professional development at this formative stage in their training."

Other undergraduate competitions such as the past ASA-sponsored data analysis competitions from the 1990s, COMAP's Mathematical Contest in Modeling, and UCLA's DataFest competition motivated the creation of MUDAC. This competition is unique, however, because in addition to showcasing the analytical ability of undergraduate students, MUDAC also brings academic advisors/mentors together to discuss curricular issues related to the teaching of undergraduates and provides networking opportunities between competition participants and professional data scientists.

The registration deadline is March 21. For more information, visit *www.MUDAC.org*. ∎

C. R. and Bhargavi Rao Prize

Rao

The C. R. and Bhargavi Rao Prize was established to recognize outstanding and influential innovations in the theory and practice of mathematical statistics, international leadership in directing statistical research, and pioneering contributions by a recognized leader in the field of statistics. The Rao Prize is awarded in odd-numbered years by the department of statistics at Penn State University to a nominee selected by the members of the Rao Prize Committee.

Nominations for the 2015 Rao Prize should be submitted by July 1 to Hunter at *depthead@stat.psu.edu*. Candidates nominated in previous years will be considered. Nominations should include a letter describing the nominee's outstanding contributions to leadership and research in statistics, a current curriculum vita, and two supporting letters. The award recipient will receive a medal, cash prize, and invitation to visit Penn State to give a talk.

See *http://bit.ly/1bNgtLA* for details. ∎

Deadlines and Contact Information for ASA National Awards, Special Lectureships, and COPSS Awards
www.amstat.org/awards

April 1, 2014
ASA Gertrude M. Cox Scholarship

Applications & Questions: Pam Craven, *pamela@amstat.org*

April 1, 2014
ASA Outstanding Statistical Application Award

Nominations: Pam Craven, *pamela@amstat.org*
Questions: DuBois Bowman
dbowma3@emory.edu

April 1, 2014
ASA Edward C. Bryant Scholarship

Applications: Pam Craven, *pamela@amstat.org*
Questions: Tapabrata Maiti, *maiti@stt.msu.edu*

April 1, 2014
ASA Excellence in Statistical Reporting Award

Nominations: Pam Craven, *pamela@amstat.org*
Questions: Morteza Marzjarani, *mortkm2@yahoo.com*

April 1, 2014
ASA Samuel S. Wilks Memorial Medal

Nominations: Pam Craven, *pamela@amstat.org*
Questions: Lynne Billard, *lynne@stat.uga.edu*

ASA Presentation Given to Iranian Mathematicians Group

Group picture of the MAA

Ali Arab, an assistant professor of statistics, gave a short presentation about the ASA to the Iranian mathematicians group in Washington, DC. In attendance were 15 mathematicians in the Iranian delegation; three interpreters; and representatives from the Mathematical and Astronomical Society, Mathematics Association of America, Society for Industrial and Applied Mathematics, and National Council of Teachers of Mathematics.

University of Florida (UF) biostatistician **Meenakshi Devidas** was recently named group statistician of the Children's Oncology Group, the world's largest organization devoted exclusively to pediatric cancer research.

Devidas will lead the Statistics and Data Center, which provides statistical expertise for the Children's Oncology Group's research studies. She also serves as the principal investigator of a National Cancer Institute grant supporting the center beginning March 1 with a planned budget of $39 million over five years.

The Children's Oncology Group, a National Cancer Institute–funded cooperative group, brings together more than 8,000 researchers at more than 200 children's hospitals, universities, and cancer centers across North America, Australia, New Zealand, and Europe. About 90 percent of the 13,500 children and adolescents diagnosed with cancer each year in the United States are cared for at Children's Oncology Group member institutions.

"I've worked with the group for a long time and I'm really excited about my new role and helping the Children's Oncology Group move forward with its research agenda," said Devidas, a research associate professor in the department of biostatistics at the UF College of Public Health and Health Professions and the UF College of Medicine. Devidas, a member of the UF Health Cancer Center, has worked in pediatric oncology research for 16 years.

In her role as group statistician, Devidas supervises about 60 Children's Oncology Group faculty and staff located at the University of Florida, the University of Southern California, the University of Nebraska Medical Center, St. Jude Children's Research Hospital, and Harvard University. Statisticians are involved in every phase of Children's Oncology Group clinical trials, including study design, data management, safety and efficacy monitoring, and analysis of results. There are more than 100 Children's Oncology Group studies being conducted at any given time on the underlying biology of childhood cancers, new treatments, supportive care, and survivorship.

Devidas also serves on the Children's Oncology Group scientific council, which evaluates new study proposals and sets the group's research priorities, and is lead statistician for the group's acute lymphoblastic leukemia research committee. Her research focuses on developing optimal methods for trials with a small number of target participants. Patients in some Children's Oncology Group studies may be assigned to clinical trials based on factors such as type of disease, risk factors, and particular gene mutations.

"These classifications result in very small numbers of patients being available for clinical trials for each of these studies, so you have to come up with some innovative designs," Devidas said. "The traditional trial designs may not work."

A state-of-the-art statistics and data center for such a large research enterprise is key to the Children's Oncology Group's future success, said Peter C. Adamson, group chair of the Children's Oncology Group and a professor of pediatrics at the Children's Hospital of Philadelphia.

"What we needed when we were looking for a new group statistician is someone who would be able to lead and harmonize a group of very talented people to help us in this research mission," Adamson said. "Dr. Devidas is clearly a leader who can both organize the logistics of such a large research enterprise on the data management side, but as importantly understands childhood cancer research and knows how best to apply resources and methods to answer the important questions." ∎

ASA member and Carnegie Mellon University statistics and social science professor **Stephen Fienberg** was appointed January 14 to the newly created National Commission on Forensic Science by the U.S. Department of Justice and National Institute of Standards and Technology. Fienberg and other commission members will work to improve the practice of forensic science by developing guidance concerning intersections between forensic science and the criminal justice system. The ASA, which has advocated for forensic science reform (*www.amstat.org/policy/forensicscience.cfm*), nominated Fienberg for the panel. To read more about the appointment, visit *http://1.usa.gov/1iYr8HX*. ∎

The University of Cantabria, in Spain, organized a series of events throughout 2013 to commemorate the International Year of Statistics. The activities included a lecture series, a forthcoming book dedicated to the dissemination of statistics and its applications, and a series of video clips. To culminate these events, the University of Cantabria awarded an honorary doctorate to **Peter Hall** of the University of Melbourne. Hall is well known within the field of

C.R. Rao Gallery Opening

Ramakrishnan unveils the C. R. Rao Gallery plaque with Tejaswini Rao, C. R. Rao, and Bhargavi Rao.

The **C. R. Rao** Gallery, capturing C. R. Rao's life in statistics over 65 years (40 years at the Indian Statistical Institute and 25 years at Penn State and the University of Pittsburgh), was inaugurated by Nobel Laureate V. Ramakrishnan December 22, 2013, in the C. R. Rao Advanced Institute of Mathematics, Statistics and Computer Science, at Hyderabad, India. The gallery is open to the public.

statistics, with many of his more than 600 publications among the most cited in the field. In addition, Hall appeared among the 10 most-cited scientists in mathematics in all reports by in-cites (*http://in-cites.com/scientists*) until they stopped running in 2008. Hall has already received this award from the universities of Lovaina (1997), Glasgow (2005), and Sidney (2009). ∎

Franz Kafka, author of *The Trial*, may be the Czech Republic's most well-known author. He also may have valued statistics.

While celebrating his birthday this past December, **Chris Barker**, president of Statistical Planning and Analysis Services, Inc., visited the Kafka museum in Prague.

While reading one of the panels about Kafka, Barker noted a statement about Kafka working for an insurance company. A provocative detail suggested Kafka had, at one time, been in charge of a statistical unit there. "I read this near

closing time," said Barker, "and no docents or museum staff were available to ask for more details." When he returned home, he searched the Internet for references to Kafka and statistics and found the following:

> … The chronic problem with this law was the lack of reliable statistics that would determine a given enterprise's degree of risk of accidents occurring. … As Kafka saw very clearly and emphasized repeatedly, the result of inadequate statistics was arbitrariness and unfairness.

Few other details are available. "Kafka apparently was aware of the value of statistics," said Barker. "I have not yet found confirmation that Kafka headed a statistical unit." ∎

ASA Board member and Fellow **Jeri Mulrow** has been appointed deputy division director of the National Science Foundation's (NSF) National Center for Science

and Engineering Statistics (NCSES). Mulrow, who is ASA vice president, had served as the acting deputy division director since May. Previously, she served as program director of the NCSES Information and Technology Service Program. Mulrow joined NSF in 2001 as a survey statistician in NCSES and then became a senior mathematical statistician. ∎

The Presidential Commission on Election Administration's report (*http://bit.ly/1g3EZN6*) endorses risk-limiting audits—a method invented and piloted by ASA member **Philip Stark** and endorsed by the ASA Board in 2010. President Obama established the commission following the 2012 elections and charged it with making recommendations to increase efficient administration of federal elections and improve voter experience. In the report, the commission states: "The commission endorses both risk-limiting audits that ensure the correct winner has been determined according to a sample of votes cast and performance audits that evaluate whether the voting technology performs as promised and expected." ∎

The governor of Puerto Rico has appointed **Carlos E. Toro Vizcarrondo** to the Puerto Rico Institute of Statistics. Vizcarrondo, a longstanding ASA member, then was elected the panel's vice president by his fellow board members. He is president of ASEP Inc. and consultant to the schools of dental medicine and nursing and the Research Institute of Behavioral Sciences of the Medical Science Campus. He serves as a private consultant in actuarial science studies, design of surveys and sampling, and econometrics analysis for private and public institutions. ∎

Read about your colleagues and friends in the news. Go to *www.amstat. org* and click on "Statisticians in the News."

Obituary

Gang Zheng

Nancy Geller, Colin Wu, and Michael Lauer

Zheng

We are deeply saddened by the passing of our colleague, Gang Zheng, who lost his battle with head and neck cancer on January 9. Gang earned his BS in applied mathematics in 1987 from Fudan University in Shanghai. After serving as a teaching assistant at the Shanghai 2nd Polytechnic University, he immigrated to the United States in 1994 and earned a master's degree in mathematics at Michigan Technological University in 1996. He then gained admission to the PhD program in statistics at The George Washington University and earned his PhD in 2000. Immediately, he joined the Office of Biostatistics Research at the National Heart, Blood, and Lung Institute, where he remained until his death.

Gang was a prolific and versatile statistician. His input into the Division of Lung Diseases studies was appreciated repeatedly. He also worked with DIR investigators in lung diseases and with Betsy Nabel's genetics group. In 2010, Gang initiated and led a symposium called "Clinical Trials Past, Present, and Future," which was broadly attended by both statisticians and other clinical trialists. In addition, Gang was an intellectually ambitious researcher in statistical methodology, publishing more than 100 papers in the areas of genetics, life testing, order statistics, and ranked sampling and categorical data. He served as an associate editor of *Statistics and Its Interface* and edited several journal issues, one in honor of his thesis advisor. He was the first author of a 400-page book, titled *Analysis of Genetic Association Studies*, which was published in 2012.

Gang was a generous and nurturing colleague who mentored new members of the Office of Biostatistics Research in both statistical research and collaboration. He directed or co-directed six PhD students, most at The George Washington University. He also mentored summer students and a post-baccalaureate fellow who went on to do his PhD at Harvard.

Gang's efficiency, creativity, and generosity were truly inspiring. He will be sorely missed.

Obituary

Philip E. Enterline

Sally Morton and Gary Marsh, University of Pittsburgh

Philip E. Enterline, professor emeritus of biostatistics, died January 8, 2014, at his winter home in Stuart, Florida, from complications of a recent stroke. He was 92 years old.

Enterline earned his BBA in economics from Westminster College and his MA and PhD in demography from American University in 1960. Enterline came to the University of Pittsburgh Graduate School of Public Health in 1967 as a professor of biostatistics. Before joining the university, he held academic positions at American University (1960–1965) and McGill University (1965–1967).

Prior to his academic career, Enterline held various federal government positions at the U.S. Public Health Service (USPHS; 1945–1965). During his tenure there, he worked on a number of research projects concerning heart disease and tuberculosis in the then somewhat obscure field of epidemiology. His research interests eventually focused on occupational health. Through ensuing studies of asbestos workers and coal miners at the USPHS, Enterline helped formulate the conceptual and methodological groundwork for what would later become known as the modern field of occupational epidemiology. Enterline's work investigating the health patterns of industrial populations continued when he was in Pittsburgh.

During his career at the University of Pittsburgh that spanned more than two decades (1967–1989), Enterline served as chair of the biostatistics department (1976–1983) and director of the Center for Environmental Epidemiology (1983–1986). He was principal investigator for numerous federal and private research contracts and grants, including several training grants for graduate students. Through his prolific research activities, Enterline gained a reputation as an insightful and innovative thinker and leading expert in the health effects of asbestos, man-made fibers, and arsenic.

Despite an ambitious research agenda, Enterline always found time for his students. His 1972–1975 National Institute for Occupational Safety and Health training grant in industrial biostatistics turned out several PhD graduates, including Pierre DeCoufle, Otto Wong, and Gary Marsh, who went on to establish themselves as leaders in the occupational health field. Enterline became professor emeritus in 1989.

Enterline's contributions include more than 140 publications and service on countless government, academic, and private scientific advisory or review committees, including the Health Advisory Committee for the National Bureau for Economic Research and the National Advisory Food and Drug Committee for the Food and Drug Administration. His honors include Fellow of the American Public Health Association in 1955, Fellow of the American Statistical Association in 1972, and ASA Pittsburgh Chapter Statistician of the Year in 1977. Enterline was a member of numerous editorial boards of major scientific journals, including the *American Journal of Epidemiology*.

He is survived by his wife, Jo-Anne, and his children—John, Janis Baker, Jeffrey, Gayle Myers, Eric, and Carla Heger. Donations can be made in Enterline's name to the Treasure Coast Hospice, 1201 SE Indian St., Stuart, FL 34997.

Obituary

Rudolf Freund

Rudolf Freund—Rudi to his friends—passed away January 5, 2014. He was an ASA Fellow.

Rudi was born in Kiel, Germany, and moved with his family to the United States before WWII. His father, Ernst, was a professor of economics, and his mother, Susanne, was a French professor, so Rudi naturally wound up an academic, having studied at North Carolina State and The University of Chicago. He helped establish the computer center at Virginia Tech, then VPI, where he was a professor of statistics until 1962, when he moved to College Station to help found the Institute of Statistics at Texas A&M. He was the author of numerous textbooks.

Rudi retired in 1992 and moved his wife, Marge, to Lake Conroe and subsequently Spring, Texas. He was an active member of Northwoods Presbyterian Church and volunteered for Habitat for Humanity.

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section news

Biometrics

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 Action: How to Improve Pharmaceutical Drug Development, taught by Guosheng Yin, Byron Jone, 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 InternalValidation 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.

New 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 1and 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*. ∎

Physical and Engineering Sciences

Liz Schiferl, The Lubrizol Corporation

Happy New Year, everyone! The International Year of Statistics is now in the past, but every year can be a year of *local* statistics. How can that happen? By meeting and engaging with other statisticians who share the same interests. One way to do that is to join one of the many ASA sections.

The Section on Physical and Engineering Sciences provides many opportunities to meet and learn from fellow statisticians who share the same interest in industrial statistics. There are conferences (Spring Research and Fall Technical), SPES-sponsored sessions and the mixer at JSM, and webinars. After enjoying many such activities for 25 years, it is my privilege to help guide SPES as the incoming chair for 2014.

There are so many ways to become involved in SPES—serve on a committee, become an industrial speaker, help find continuing education courses, etc.—but I think the main benefit is the opportunity to meet and learn from other statisticians. Sound interesting? Well then, here is a quick how-to list for getting the most out of SPES:

Join

It doesn't cost much, and you will be emailed a copy of the newsletter. Plus, once you are a part of the SPES community, you can join online discussions or post questions to elicit input from other SPES members. You'll also be notified about webinar and conference opportunities.

Attend a Conference

The Spring Research Conference (SRC), a joint venture of SPES and the Institute of Mathematical Sciences, is the premier research conference for statistics in industry and technology. The program typically features stimulating keynote addresses by eminent researchers, plenary talks, invited sessions, and contributed sessions on key and emerging areas.

In 2014, the ASA Q&P Section's Quality and Productivity Research Conference will combine with the SRC to create the Joint Research Conference (JRC) with the theme "Statistics and Quality in a Data-Rich World." The conference will be held June 24–26 at the University of Washington.

The annual Fall Technical Conference (FTC) is co-sponsored by the Chemical and Process Industries Division and the Statistics Division of the American Society for Quality Control. In addition to a full program of talks typically based on research reported in the *Journal of Quality Technology* and *Technometrics*, the meeting offers pre-conference short courses, council meetings for the sponsoring bodies, and fun non-technical outings. The 2014 conference will be in Richmond, Virginia, October 2–3.

Attend a Sponsored Talk

Attend a SPES-sponsored talk or roundtable discussion at JSM and then have some fun at the SPES mixer, where you will have a chance to win fabulous prizes. When you look at the list of past door prize contributors, you get an idea of the diversity in SPES membership. In 2013, we had items from Los Alamos National Laboratory, SAS, jmp, Stat-Ease, Lubrizol, Ohio State, Pearson, W.L. Gore, Virginia Tech, David Trindade, Bill Notz, Statistical Society of Canada, SIAM, Chevron, Microsoft, P&G, MINITAB, Wiley, and Dow Agro Sciences, just to name a few. Thanks to their generosity, almost half the attendees went home with a prize!

Get Involved

Really get involved by submitting papers, joining a committee, or serving as an officer. It takes a dedicated group of people to keep SPES moving forward, and I want to thank everyone who has helped out in the past. I especially want to thank Winson Taam, outgoing SPES chair, for all of his efforts. It turns out that it's kind of fun to volunteer, and there is no better way to get to know people.

Want to learn more? Start by visiting the SPES website at *http://community.amstat.org/SPES/ Home*. ∎

Survey Research Methods

John Finamore, SRMS Publications Officer

As the publications officer for the Survey Research Methods Section (SRMS), I am responsible for ensuring that SRMS members (and those considering SRMS membership) are aware of ongoing SRMS activities and the work we are accomplishing. This article provides an overview of the different ways we publicize the activities of our section.

The most prominent SRMS publication tool is the SRMS website (*www.amstat.org/sections/ srms*). Our website includes the most up-to-date information about the SRMS-sponsored competitions and awards, including the Waksberg Award, SRMS Student Travel Award, Student Paper Competition, and E. C. Bryant Scholarship Award. In addition, the website includes proceedings of the SRMS-sponsored Joint Statistical Meetings

sessions from 1978–2012 (the 2013 proceedings will be posted later this year). Many thanks go to Pushpal Mukhopadhyay for his work maintaining the SRMS website and overseeing the posting of the SRMS-sponsored proceedings papers.

To reach our constituents who prefer having their SRMS news delivered to them directly, we produce a SRMS newsletter twice a year (January and July). The newsletter includes an update from the SRMS Section chair, announcements about upcoming SRMS activities, and occasionally a feature article about a topic of interest to the survey research methods community. Past feature articles have discussed the role of the Committee on National Statistics (CNSTAT), redesign of the Consumer Expenditures Survey, and operational planning associated with the Decennial Census data-collection effort. The *SRMS Newsletter*, produced by Jamie Ridenhour and Shelton Jones, can be found at *www.amstat.org/ sections/srms/newsletter.html*.

We also use *Amstat News* and the ASA Twitter (*https://twitter.com/AmstatNews*) and Facebook (*www.facebook.com/pages/The-American-Statistical- Association/262043213686*) social networking sites to publicize SRMS activities. *Amstat News* includes a section that provides updates for the ASA chapters and sections. In most issues of *Amstat News*, you will find an article or two from SRMS. We use the ASA social networking sites to post reminders about upcoming events and activities. Some of the topics featured in the *Amstat News* articles and Twitter/Facebook posts include the SRMS-sponsored webinar series, SRMS Student Travel Award, SRMS-sponsored JSM roundtables and sessions, and the annual business meeting (typically occurring on the Wednesday of JSM week). When you have a minute, please take the time to follow ASA on Twitter and Facebook to ensure you get all the SRMS updates. And when you get your next issue of *Amstat News*, be sure to take a look at the chapters and sections news.

Since it is my responsibility to publicize the work SRMS members do throughout the year, I encourage you to send me ideas for future *Amstat News* articles or Twitter/Facebook posts. In addition, if you have any ideas or suggestions for improving our publication activities, please let me know. I can be reached at *jfinamor@nsf.gov*. ∎

Arkansas

■ Little Rock, AR–The Pediatric Biostatistics Program at the University of Arkansas for Medical Sciences/Arkansas Children's Hospital is recruiting a master's-level biostatistician to become part of a collaborative analytical unit specializing in pediatric research. Minimum qualifications include proficiency in SAS and R plus 2 years statistical experience; some graduate experience may qualify. Please forward a rèsumè plus contact information for 2 references to *ACHBiostat@uams.edu*. EOE.

Georgia

■ Statisticians and Predictive Modelers. State Farm® is seeking statisticians to join a team of advanced analytics professionals at its Dunwoody, GA, location. MS or above in quantitative discipline is required. Experience in predictive modeling, data mining, mathematical statistics, & statistical modeling preferred. Visit *statefarm.com/careers* to search jobs and apply! Job ID # 39578 - Research Statistician. State Farm is an EOE.

Maryland

■ Seeking PhD/experienced master's statisticians for Center for Devices and Radiological Health, FDA, HHS in Silver Spring, MD. 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 EOE.

Missouri

■ Saint Louis University College for Public Health & Social Justice, Departments of Epidemiology & Biostatistics, Postdoctoral fellow in spatial statistics. Primary responsibilities include conducting research, and teaching graduate and undergraduate courses in biostatistics. Interested candidates must submit a cover letter, application, curriculum vitae, and three letters of recommendation to *http://jobs.slu.edu* (Job ID: 20130909) or

email Mario Schootman, PhD, Chair, Search Committee at *schootm@slu.edu*. EOE.

New York

■ Seeking a graduate in biostatistics or statistics for a post-doctoral position to work on research at the interface of cancer epidemiology and genomics. Opportunities also to gain experience working on interdisciplinary research projects. Send cover letter, CV, and contact information for 3 references to Katherine Wong (for Colin Begg) at *wongk1@mskcc.org*, Memorial Sloan-Kettering Cancer Center, 307 East 63rd Street, 3rd Floor, New York, NY 10065. EOE.

North Carolina

■ NIEHS/NIH, Research Triangle Park, NC, 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. Evaluation began 2/10/2014. Applications accepted until vacancies filled. EOE.

■ NIEHS/NIH, Biostatistics Branch, Research Triangle Park, NC, is recruiting for full-time appointments at tenure-track or tenure-eligible levels (assistant, associate, and full professor equivalents). PhD or equivalent required. See *www.niehs.nih. gov/research/atniehs/labs/bb*. Send CV, a 2-page research interests/goals statement, and 3 referral letters to Emily Starnes at *dir-appls@niehs.nih.gov*. Cite Vacancy Announcement DIR 14-2. Evaluation began 2/10/2014. Women and minorities encouraged to apply. Applications accepted until vacancies filled. EOE.

Pennsylvania

■ Possible tenure-track and visiting positions. Collegial environment emphasizing disciplinary and cross-disciplinary research and teaching. All statistics areas welcome. Joint appointments possible with other units in Pittsburgh area. See *www.stat.cmu.edu* (email: *hiring@stat.cmu.edu*). Apply online: *https://webapps.cs.cmu.edu/FacultyApplication/Statistics*. Application screening begins immediately, continues until positions closed. (If you previously applied by email or mail there is no need to register on-line.) Women and minorities encouraged to apply. AA/EOE.

■ Principle Scientist, Biostatistics, Upper Gwynedd, PA. Responsible for statistical planning, data analysis and reporting of oncology clinical trials. Requires knowledge of statistical methodology, experimental design, computing software and data management, and understanding of worldwide regulatory requirements and clinical trial expertise in Phase I–III oncology trials. PhD in biostatistics or statistics and 3+ years of experience in oncology drug development required. *http://jobs.merck.com*. Job #BIO003850. EOE

Utah

■ Faculty, Assistant Professor, Statistics. The Department of Mathematics at Utah Valley University invites qualified individuals to apply for a tenure-track position as an assistant professor of statistics starting August 2014. Duties include teaching lower- and upper-division statistics courses as well as mathematics courses as required. Apply online: *www.uvu.jobs*. Review of applications will began February 1. Utah Valley University is an AA/EOE/Equal Access Employer.

Canada - Quebec

■ 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 in April 2014. An advertisement appears at *www.crm.umontreal.ca/CANSSI/news-events/canssi-scientific-director-search*. EOE.

International

■ Applications are invited for a teaching-track faculty position at Carnegie Mellon Qatar in Education City, Doha. This position emphasizes undergraduate teaching primarily, but also involves a combination of course development and/or research. All statistics areas welcome. See *www.stat.cmu.edu* (email: *hiring@stat.cmu.edu*). Apply online: *https://webapps.cs.cmu.edu/FacultyApplication/Statistics*. (If you previously applied by email or mail, there is no need to register online.) Women and minorities encouraged to apply. AA/EOE.

■ 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 degree 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 r*ecruit.wise.xmu@gmail.com* before June 30. *www.wise.xmu.edu.cn/english* EOE. ■

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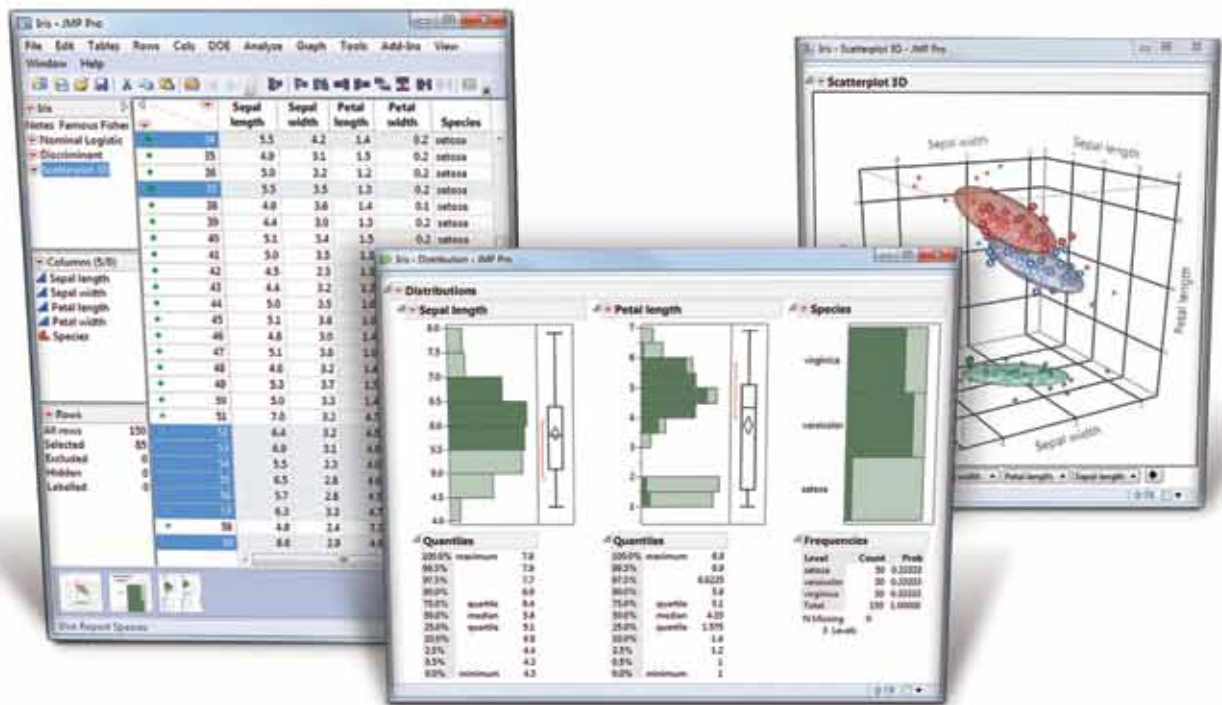
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