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AMSTATNEWS

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VISION STATEMENT

To be a world leader in promoting statistical practice, applications, and research; publishing statistical journals; improving statistical education; and advancing the statistics profession

MISSION STATEMENT

Support excellence in statistical practice, research, journals, and meetings. Work for the improvement of statistical education at all levels. Promote the proper application of statistics. Anticipate and meet the needs of our members. Use our discipline to enhance human welfare. Seek opportunities to advance the statistics profession.

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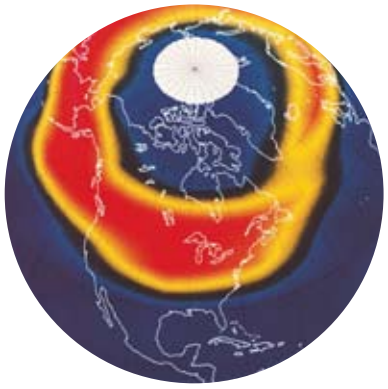

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Column Contributors

Funding Opportunities

This column highlights research activities that may be of interest to ASA members. These brief articles include information about new research solicitations and the federal budget for statistics. Comments or suggestions for future articles may be sent to ASA Research and Graduate Education Manager Keith Crank at *keith@amstat.org.*

Contributing Editor

Keith Crank has a BS in mathematics education and an MS in mathematics from Michigan State University and a PhD in statistics from Purdue University. Prior to joining the ASA, he was a program officer at the National Science Foundation, primarily in the probability program.

Crank

Science Policy News

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.*

Spiegelman

Contributing Editor

Clifford Spiegelman is a professor of statistics at Texas A&M, where he has been on faculty for 23 years. He is also a senior research scientist at the Texas Transportation Institute. His applied research interests include chemometrics, transportation statistics, environmetrics, and statistical forensics.

Master's Notebook

This column is written for statisticians with master's degrees and highlights areas of employment that will benefit statisticians at the master's level. Comments and suggestions should be sent to Keith Crank, ASA Research and Graduate Education Manager Keith Crank at *keith@amstat.org.*

Contributing Editor

Sami Huovilainen is a senior vice president for CitiCards' (the credit card division of Citigroup) decision management group. He earned his master of science degree in statistics and master of arts degree in economics from The Pennsylvania State University. Prior to joining CitiCards, he spent five years in a similar group at JP Morgan Chase.

Huovilainen

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The Federal Budget Request for FY 2011
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MEMBER NEWS

cover design by Melissa Muko

Make Yourself Count

Sastry Pantula

There are a few hours to go before the Super Bowl commercials start. I promised myself I wouldn't turn on the TV until I finish this column, but my mind keeps wandering. What exciting commercials will be on this time? I can't wait to see the commercial for the 2010 Census!

I heard Census Director Bob Groves on National Public Radio last month talking about the difficulties with undercounts, overcounts, foreclosures, etc. I wish him the best with a successful census. It is exciting to be a statistician during the decennial census: "United States Census 2010: It's in Our Hands," "We Count, Because Everyone Counts," "How America Knows What America Needs." The importance of accurate counts is well known to all of us. Please encourage everyone you know to fill out their census forms.

Speaking of being counted, do not forget to vote in the upcoming ASA elections. The percentage of members who vote in ASA elections has increased over the past few years; however, participation is still far below 50%. I hope we have an excellent turnout this year; it is as easy as a few clicks from your email. Of course, deciding who you would like to vote for among such good candidates is another story. On the next few pages, you will see information about outstanding members who are willing to volunteer their time to our association. The ASA thrives on such dedication. I want to thank each of the candidates for their willingness to participate. Please show them your support by casting your vote.

Section officers play an important role in advancing the thematic interests of our association and are a key to the success of our meetings. Council of Chapters and Council of Sections representatives and the publications representative serve as conduits for communication between the ASA Board and members. Vice presidents and presidents (-elect, current, and past) provide leadership in regard to our strategic plan. Membership benefits and growth, meetings, publications, finances, committee appointments and accomplishments, education, visibility, and having an impact on public policy are some of the topics discussed regularly by ASA Board members. Please read the candidates' biographies and statements; Google them if you need to. Just don't forget to cast your vote.

To provide you (and myself) with more information, I asked the candidates for president (Jim Landwehr and Bob Rodriguez) and vice president (Linda Gage and Mary Mulry) to respond to some questions. Their answers (unedited) are below. I hope this information, in addition to their personal statements, helps you choose.

What does the ASA stand for? (I don't mean just "American Statistical Association." I'm looking for three bullets or an elevator speech you would give if someone asked what the ASA means to you.)

Jim Landwehr (P): It's the central focus for the statistics profession in this country. It's the place all segments of our profession can and do gather—through meetings, publications, electronically—to communicate among ourselves and with the broader society, which needs and uses statistics in many and varying ways.

Bob Rodriguez (P): I believe that ASA stands for Activity, Service, and Advocacy! The ASA benefits all statisticians by providing us with:

- a home in which we engage and enrich each other through a variety of *activities*—communicated in our publications and meetings, and conducted in our chapters, sections, and committees
- an organization through which we serve the needs of society and the statistics profession
- a voice with which we advocate for statistical science in research and in policymaking

Linda Gage (VP): ASA is an international organization that is the professional home to statisticians and to thousands of members who use statistics in varied disciplines and applications in diverse settings in academia, government, industry, and independent enterprises. This organization sets and maintains standards of excellence within the discipline and practice of statistics. ASA offers countless opportunities to access current research, interact with colleagues, and make contributions to our society. This professional home is also a place to make lifelong friends.

Mary Mulry (VP): ASA is where I meet the people I need to meet and I find the resources I need in my career. Whenever I have moved, ASA members from the local chapters advised me and helped me learn where the statistics jobs were. From the very beginning of my career, ASA members I have met through the chapters and sections have mentored me and given me career advice. Over the years, I have found ASA publications and conferences are invaluable sources of recent developments in statistics, as well as great places to present results and receive feedback from outside my organization.

Why is it important for our 18,000 members to participate in this election?

Bob Rodriguez (P): This is a time of unprecedented opportunities for statisticians in all sectors of society, and the leaders that we elect this year will face the challenge of making the association more vital and more visible in response to these opportunities. If more members read the candidates' views, discuss the issues, and vote thoughtfully, then all of us will win a stronger association for the future. So let's spread the word about this election and surpass the turnout record set in 2008!

Jim Landwehr (P): Leadership matters, and good leadership emerges from strong, continuing participation of the membership across all the activities of the association. It starts with voting, not just for the national offices, but especially for the section and chapter offices, where much important work gets done.

Mary Mulry (VP): Voting gives members an opportunity to choose the leaders who will influence the future of statistics as a profession. Most individuals and organizations are going through belt-tightening, and ASA is no exception. Efficient direction and use of our financial and volunteer resources is more important now than ever.

Linda Gage (VP): It's a privilege to be given an equal voice in deciding the leadership and direction of the ASA. That's what our votes do. Please be assured that the ASA nominating committees seriously deliberate each year to seek candidates who will perform well in each position. The ballot is imminent and everyone has the chance to support the candidate that best represents their views and focus for the future.

What one thing do you enjoy the most in your current job? Why?

Mary Mulry (VP): In my current job, I am able to conduct research directed at improving the quality of statistics that have national importance. I think it is important that decisionmakers in government and business are informed by the best statistics possible.

Linda Gage (VP): Making a difference! Producing and interpreting official demographic statistics and assisting policymakers, government agencies, researchers, the press, and the public in the proper selection and use of available data from multiple sources results in more accurate analysis, decisions, and policies. What a reward!

Bob Rodriguez (P): In my work at SAS, I lead the development of statistical software. I especially enjoy meeting statisticians and biostatisticians at customer sites, user meetings, and professional conferences—both to learn about their work and their software needs and to keep up with new methodology.

Jim Landwehr (P): I'd say it's the challenge and opportunity to incorporate good statistical ideas into application areas that are new for my company and the industry. In my case, this currently involves collecting, understanding, and analyzing data underlying communications transactions in contact centers so as to improve the contact center operations and enhance the customer experience.

What is the one volunteer project you have done for ASA that you enjoyed the most? Why?

Linda Gage (VP): I've been fortunate to serve in many volunteer capacities within ASA and highly recommend it to others. Serving on the two most recent executive director search committees made it possible to interact with a small, but highly experienced and dedicated, cross-section of our membership to review applications, interview candidates, enjoy presentations, deliberate, and recommend a candidate for the Board of Directors' consideration. It was gratifying to see the tremendous amount of interest in the position and the high caliber of candidates. This was most enjoyable because the activity was critical to our organization and the results were both successful and long lasting.

Mary Mulry (VP): I have enjoyed the time I spent serving on the SRMS Executive Committee. I have found it gratifying to participate in the decisions to sponsor small conferences on special topics and then to see these conferences be very successful. Recently, I found it rewarding to suggest to the executive committee that SRMS launch a webinar program and see the initial one have a large number of subscriptions and produce some revenue for the section.

Jim Landwehr (P): Actually, all my volunteer work has been satisfying, albeit in quite different ways. Editorial and board work provide the satisfaction that you are contributing to important, long-run activities for the profession, but people rarely come up and offer personal appreciation for some decision or publication. The teacher-facing work I have been involved in through the quantitative literacy [QL] efforts are different, however. When you present teachers with material and ideas that they feel they can use effectively in the classroom, they provide immediate, positive feedback—or negative feedback if they don't like it. Fortunately, there has been a lot more of the former than the latter. It's nice to have people like what you do and express it, so I especially enjoyed leading QL workshops with other statisticians and mathematics teachers.

Bob Rodriguez (P): During my term as ASA vice president, I chaired the task force that wrote the new ASA strategic plan, adopted in 2008. It was enjoyable and energizing to interview ASA leaders and stakeholders, distill numerous conversations into goals and strategies, and build consensus for the plan.

Here is an optional bonus question: What is the one best point about your opponent?

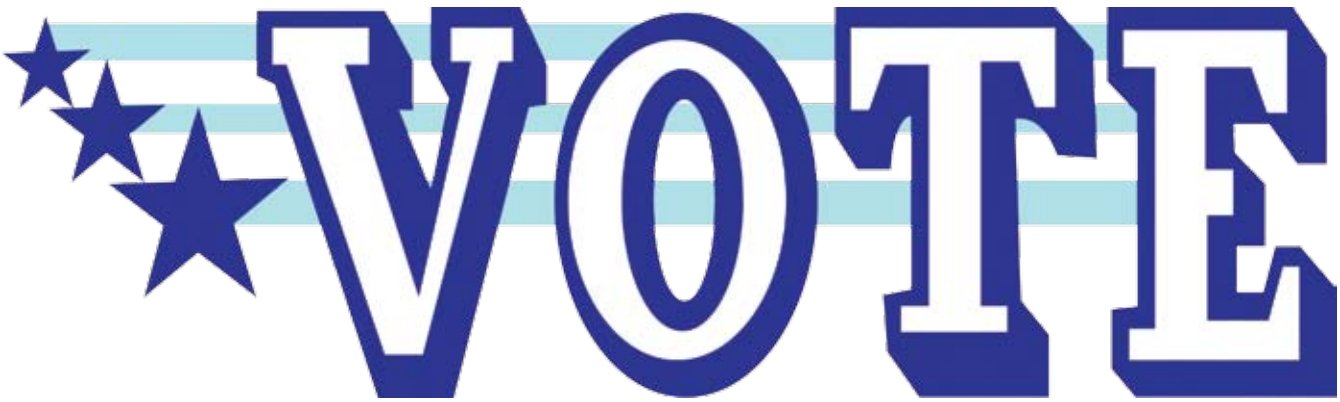
Linda Gage (VP): Mary Mulry is quite simply the consummate professional in my view. I have long respected her professional work, which is innovative and accurate. Mary is a very generous colleague who is always willing to discuss her research and assist others.

Jim Landwehr (P): I have known Bob through several publication-related activities and also through our joint involvement in NISS. He's a thoughtful, conscientious, hard-working person who gets done what needs to get done. If I weren't running myself, I'd be happy to vote for him.

Mary Mulry (VP): Linda has the personality, knowledge, judgment, and ability to get people to work together toward a common goal.

Bob Rodriguez (P): Jim Landwehr has served the association in many ways, and his contributions to the area of quantitative literacy are particularly notable.

I hope these candidates convinced you to vote for them. I really appreciate the candidates for taking the time to respond to my questions and help me complete this column (so I can turn on my TV).



ASA Board of Directors Candidates

The ASA announces the selection of candidates for the 2010 election. The winning candidates' terms will begin in 2011. The ASA is emailing ballots this year, so look for your ballots in your email inbox. Paper ballots will be mailed only to those without email addresses on file with the ASA. Voting begins March 16, 2010, and ends May 17, 2010. Results will be announced after the election ends.

All of the candidates' full biographies—including those of the international candidates—can be accessed at *www.amstat.org/candidatebios/index.cfm?fuseaction=viewbios*. The international candidates are Raymond L. Chambers from The University of Wollongong, Australia and Baiqi Miao, from the University of Science and Technology of China, China; their biographies were not available at the time of print.

PRESIDENT-ELECT 2011

Jim Landwehr


Landwehr

The ASA election procedures designate that this year's candidates for president-elect represent the industrial sector of our membership. I have worked in statistics research and applications in the telecommunications industry for virtually my entire career. For many years, I was a member and supervisor in the statistics research department at Bell Labs when it was part of AT&T and then Lucent Technologies. Since 2000, I have led a group of about 10 PhDs (in statistics and computer science) in the data analysis research department of Avaya Labs, which was spun off of Lucent. Our group pursues applied research and applications of data analysis technology that is shaped by important, real-world problems faced by the company.

I have been fortunate to be involved in a variety of professional activities in the ASA and related organizations. One of the most satisfying aspects of my "outside" professional activities has been my involvement with K–12 statistics education through quantitative literacy activities of the ASA-NCTM Joint Committee on Curriculum in Statistics and Probability. Over a 20-year period, I helped lead several projects that produced curriculum materials and workshops for teachers. I coauthored five books that introduce modern ideas of data analysis and statistics into grade 7–12 classrooms by supplementing standard math textbooks. Two of these—*Exploring Data and Exploring Surveys* and *Information from Samples*—have, I think, been particularly influential. Today, statistics and probability are definitely part of the conversation regarding the K–12 mathematics and science curricula and are being included more broadly in national standards documents, curriculum materials, and assessments.

What are the challenges and opportunities for the ASA and our profession? The ASA exists to further the careers of our members, both individually and collectively, by advancing the profession. The core factor for the ASA's past and continued success is volunteerism by our membership. While we need, and have, a highly competent professional staff, there would be no ASA as we know it without the voluntary efforts of our members. Hence, the overarching issue for the ASA is maintaining and strengthening this spirit of volunteerism as the issues, membership, and members' working environments evolve. Volunteers often receive valuable career growth and satisfaction through their contributions to the ASA. I will strive to ensure that meaningful and rewarding volunteer opportunities are broadly available, distributed, and appreciated.

Meetings and publications are at the heart of the ASA's activities. For meetings, JSM continues to be successful, but the overall meetings portfolio needs to broaden. We must make sure there are opportunities that appeal to all segments of our membership, especially the nonresearch-oriented groups. An idea to explore is creating smaller conferences and combining them with web-based training and communication sessions, both pre- and post-conference. Broadening the meetings portfolio can strengthen ties of current members to the association and increase the ASA's appeal to nonmembers who are involved in statistics—an important goal for increasing membership.

The role of professional journals has clearly changed, and there are well-known and difficult problems facing professional societies as the electronic era changes our communication habits. My view is that the core and enduring value of our journals comes from the quality standards around content, relevance, and significance achieved through the peer-review process. This process fundamentally depends on the voluntary efforts of reviewers and editors, along with iteration and responsiveness of authors. To address challenges, the ASA needs to stay closely connected with similar societies so useful models can be explored, tested, and adopted.

Two other important aspects of the ASA are statistics education at all levels and outreach to multiple communities. One current opportunity is to use the large and often enthusiastic population of AP Statistics students to expand the number of undergraduate and graduate students who study statistics and enter our field. The ASA can't do this by itself, but it should provide useful forums for sharing approaches and results. Education and outreach have been supported and seen as priorities by recent boards, and I will continue this. The challenge is to be sufficiently focused and effective.

Turning now to the profession overall, I see our main challenge as maintaining strong connections with the technology fields in which we work. We get to "play in everyone's backyard," as John Tukey once remarked. But to have fun and be effective, we have to continually relearn the terrain, and it's not easy or quick. Specific technology fields differ among statisticians, and each of us is responsible for meeting our individual needs. But the ASA can and must help by serving as the focal point for our common concerns, providing opportunities for individual growth and connections, and enabling us to collectively achieve the appropriate impact with other communities.

Present Position: Director, Data Analysis Research Department, Avaya Labs

Former Positions: Statistics Research Department, Bell Labs (1973–2000); Assistant Professor and Lecturer, University of Michigan (1970–1973)

Degrees: PhD in statistics, University of Chicago, 1972; BA (magna cum laude) in mathematics and economics, Yale University, 1966

Fields of Major Statistical Activity: Applications in data networks and analytics for contact centers, modeling for categorical data and logistic regression, graphical methods, clustering, K–12 statistics education

Publications: Approximately 65 publications in statistics and application journals, including *JASA*, *Technometrics*, *The American Statistician*, and *Statistical Science*

ASA Activities and Offices Held: Outstanding Statistical Application Award (2003); Frank Wilcoxon Award (2002); Founders Award (1994); Fellow (1990); Fellows Committee (2003–2005); E-Publications Task Force (2001–2004); Publications Representative to the Board (2000–2002); Editor of *The American Statistician* (1997–1999); Council of Sections Chair (1995); Executive Director Search Committee (1994–1995); Statistics Education, Physical and Engineering Sciences, and Statistical Graphics sections; New Jersey Chapter

Related Professional Activities: Chair of the Board of Trustees of the National Institute of Statistical Sciences; Governing Board of the Statistics and Applied Mathematical Sciences Institute; NAS-NRC Committee to Review NIST-Information Technology Laboratory, Statistical Engineering Division Panel; AAAS Fellow; NCTM; MAA; ISI; IMS; NSF

PRESIDENT-ELECT 2011

Robert N. Rodriguez

Rodriguez

We are entering a new decade with unprecedented opportunities for statisticians to serve society. During this election, we need to ask how the American Statistical Association can become a stronger, more prominent advocate for our members as they engage in these opportunities. Where should we be headed, and how do we get there?

Broadening the benefits of membership. If the ASA is to play a leading role in the future of statistics, we must provide benefits and services that attract, retain, and involve increasingly diverse groups of statisticians. Recent statistics graduates do not perceive the same value in membership that attracted previous generations to our association. Many graduates, including new PhDs, are entering areas of interdisciplinary practice such as business analytics, genomics, and medical informatics, for which JSM is not a focal point. Others, especially MS graduates, work in environments in which their problemsolving skills are prized, but in which statistics as a discipline is undervalued and the ASA has little recognition.

Universities award more than 450 PhDs and 1,750 MS degrees in statistics and biostatistics annually. Imagine how our chapters and sections could grow—not just in numbers, but in vitality—if the majority of these graduates made the ASA their professional home. To reach this level, we must provide benefits that are valued by all statisticians, including training in professional career skills and continuing education in special topics not covered in graduate programs.

We also must offer value in more interdisciplinary areas. These goals can be accomplished through webinars, thematic conferences, industry working groups, and a richer ASA web site. Our chapters and sections possess the energy and expertise needed for these efforts, and they can help transform new statisticians into active members by providing career support and a personal sense of connection, challenge, and impact.

Building on the ASA's strategic plan. Membership growth is one of eight areas of the strategic plan, which is the association's roadmap and a framework within which ASA presidents can address long-term goals. Our presidents have embraced the plan since its adoption in 2008, and the ASA is simultaneously moving forward in all areas. I strongly believe in building on this momentum.

Two areas, in my opinion, that require sustained effort are public awareness (strengthening the external perception of the ASA and the statistics profession) and visibility and impact in policymaking (giving the profession a greater voice in public policy and science policy, where critical decisions must be based on statistical evidence). If we, as an association, can succeed in these areas, the next generation will see the ASA as an effective representative of the discipline and of themselves—a compelling reason to join our community.

Ultimately, all areas of the plan are highly interdependent, and all depend on the financial stability of the association. A current concern is the decline in income from journal subscriptions and advertising, two activities that have subsidized others in the past. I believe creative new revenue sources, along with careful financial oversight, are needed to fund more programs while sustaining our traditional strengths in publications, meetings, and educational activities. The Statistical Practice Conference now being planned is an example of a novel meeting that can provide additional member benefits and generate revenue.

Putting the plan into practice. As an ASA vice president, I gained extensive experience in accomplishing goals within the association. While chairing the Strategic Planning Task Force, I learned the importance of delegating responsibility to volunteers with vision and practical insight, building consensus among stakeholders, and communicating progress to all members. Participation in minority pipeline workshops and international conferences has taught me the diversity of our profession is a strength that must be nourished. My career at SAS has given me a broad perspective on all sectors of our membership, because I manage development of statistical software that bridges the needs of academics, industry, and government with methodological advances in statistics and biostatistics. These experiences have prepared me to be an effective leader for the ASA.

Present Position: Senior Director, Statistical Software Research & Development, SAS Institute

Former Positions: At SAS Institute: Director, Statistical Software R&D (2003–2007); Manager, Linear Models and Statistical Quality Improvement R&D (1992–2003); Manager, Statistical Quality Improvement R&D (1987–1992); Senior Research Statistician (1983–1987); at General Motors Research Laboratories: Staff Research Scientist (1977–1983)

Degrees: PhD in statistics, The University of North Carolina at Chapel Hill, 1977; MS in statistics, The University of North Carolina at Chapel Hill, 1976; BS in mathematics, Case Western Reserve University, 1972

Fields of Major Statistical Activity: Statistical computing and software development, statistical quality improvement, distributional modeling

Publications: More than 40, including papers on statistical quality improvement published in the *Journal of Quality Technology*, *Encyclopedia of Statistical Sciences*, and *Biometrika* and papers on statistical computing and software development published in conference proceedings

ASA Activities and Offices Held: Founders Award (2009); Fellow (2004); Vice President (2006–2008); Strategic Planning Task Force Chair (2007); Organizational Efficiency Workgroup Chair (2008–2009); Executive Director Search Committee Chair (2006); Budget Committee Chair (2008); Executive Committee (2008); Committee on Committees (2006–2008); ASA-SIAM Book Series Editor-in-Chief (2002–2004) and Editorial Board (1996–2001); Publications Committee (2001–2004); Section on Physical and Engineering Sciences Chair (2003) and Program Chair (2000); *The American Statistician* Associate Editor (2000–present); Council of Chapters Representative, North Carolina Chapter (1997-2000); Statistical Graphics Section Secretary-Treasurer (1987–1990); North Carolina Chapter Secretary (1983–1984); JSM session organizer

Related Professional Activities: Adjunct Professor, Statistics and Operations Research, UNC-Chapel Hill; 2008 ASA/ASQ Fall Technical Conference keynote speaker; Editorial Review Board, *Journal of Quality Technology* (1982–2008); Shewhart Medal Committee, American Society for Quality; more than 75 presentations at SAS user group conferences; member of ACM, ASQ, ENAR, ICSA, IISA, IMS, ISI (elected)

VICE PRESIDENT-ELECT 2011

Mary H. Mulry

Mulry

The ASA strategic plan motivated a reorganization of the structure of committees. Now, the three vice presidents have the responsibility of fostering communication between the committees and the board, as well as among committees with related interests. Chairs of committees and some sections are assigned to one of the three new councils, each chaired by one of the vice presidents. The councils are the Council for Education, Council for Membership, and Council for Professional Issues and Visibility. The vice presidents are not expected to be experts in the council areas, but representatives of the ASA Board to the committees. They are to stimulate committees to work together in areas of common interest and to deliver recommendations from the committees to the ASA Board.

Each of the councils represents a vital area for the ASA, and the topics provide a structure for discussing issues facing the profession. Meeting the needs of the membership is a challenge for the ASA. We must investigate why the ASA membership is declining when the use of statistics is expanding. Finding new ways to aid statisticians in their careers will build the organization and the profession.

The ASA provides a peer group to members outside their places of employment and the universities in which they studied. The ASA must continue to increase opportunities for members to expand their networks and produce dialogue that facilitates professional and methodological advancement.

While chair of the Survey Research Methods Section (SRMS), I suggested starting an educational webinar program as a service and source of revenue. The SRMS Executive Committee agreed and recently formed a partnership with the American Association for Public Opinion Research for offering educational webinars. The two organizations have enough overlap in topics of interest that joining forces made more sense that potentially competing for the same audience. This is an example of how cooperation with other professional organizations on mutually beneficial joint ventures is a way to leverage the ASA's resources and provide more opportunities for members.

The focus on professional issues and visibility will promote statistics as a profession and elevate awareness of what statisticians do. We must find better ways to convince nonstatisticians who are managers and policymakers that collaborating with statisticians brings better solutions, leading to improvements in business and public policy. Having an ASA director of science policy has been a boost in raising the awareness of statistics.

Statisticians offer myriad techniques that are more sophisticated than presented in introductory courses. These techniques provide ways to deal with uncertainty and variability present in many endeavors. One example of needed outreach was the one-day meeting the Section on Defense and National Security held for policymakers during JSM 2009 to demonstrate how statistics can result in better decisions. The resources on the ASA web site regarding auditing elections are another example of the influence statisticians can have on important aspects of public policy.

Education is both the way we gain new professionals in our field and a way others gain an understanding of what our field provides. We must ensure that educators are aware of the ASA's *Guidelines for Assessment and Instruction in Statistics Education (GAISE) Report: A Pre-K–12 Curriculum Framework*. I say this because a newly retired teacher recently told me about a coordinator for mathematics in a rural elementary school who decided students did not need to learn division because they would always have calculators to do it for them.

Lately, *Amstat News* has carried a discussion about AP Statistics that is the type of dialogue we all need to see and ponder. However, we cannot forget that some problems with mathematical literacy start in grades pre-K through 4 and impede even basic statistics education.

As we move forward, improving communication between members of the ASA, groups within the ASA, and statisticians and nonstatisticians is essential to growing the ASA and expanding the reach of our profession. The ASA can provide a vehicle to leverage the creativity and energy of the ASA membership through working together. The result will be a strong organization with contributions to the common good beyond our individual careers.

Present Position: Principal Researcher, Statistical Research Division, U.S. Census Bureau; Adjunct Assistant Professor, Biostatistics Department, School of Public Health, University of North Texas

Former Positions: Independent Consultant (2000–2001); Director, M/A/R/C Research (1997–2000); Supervisory Mathematical Statistician, U.S. Census Bureau (1984–1997); Research Engineer, Lockheed Austin Division (1983–1984); Mathematical Statistician, U.S. Census Bureau (1980–1983); Research Staff, System Planning Corporation (1978–1980)

Degrees: PhD in mathematics, Indiana University, 1978; MA in statistics, Indiana University, 1977; MA in mathematics, Indiana University, 1975; BS in mathematics, Texas Christian University, 1972

Fields of Major Statistical Activity: Sampling, nonsampling error modeling and measurement, variance estimation, survey research methods

Publications: "Summary of Accuracy and Coverage Evaluation for Census 2000," *Journal of Official Statistics* (2007); "Estimating Heterogeneity in the Probabilities of Enumeration for Dual System Estimation," *Journal of the American Statistical Association* (1993); "Total Error in PES Estimates of Population," *Journal of the American Statistical Association* (1991); others in *Survey Methodology, Statistics in Transition, Encyclopedia of the U.S. Census,* and *Encyclopedia of Survey Research Methods*

ASA Activities and Offices Held: Fellow (1994); Survey Research Methods Section Chair (2008) and Program Chair (1997); Council of Sections Secretary (2008); North Texas Chapter Chair (2006–2009); Council of Chapters Representative, North Texas Chapter (1998–2003); Council of Sections Representative, Survey Research Methods Section (1993); Caucus for Women in Statistics Representative-at-Large (1986–1988); Washington Statistical Society Methodology Program Chair (1985–1986)

Related Professional Activities: *Journal of Official Statistics* Associate Editor (2001–present); *The American Statistician* Associate Editor (2000–2008); *JASA* Applications invited paper (1991); 2008 International Total Survey Error Workshop

VICE PRESIDENT-ELECT 2011

Linda Gage

Gage

The ASA provides a professional 'home' for thousands of statisticians and nonstatisticians. The ASA offers something to each of us, whether academic or applied, domestic or international, student or teacher—wherever we are on our career continuum. It may be a publication, the annual Joint Statistical Meetings, an opportunity to join with colleagues in a section, the satisfaction of working on a committee, and/or membership in a local chapter. The reach of the ASA is vast. We support and publish numerous high-quality journals and magazines and participate by the thousands in the annual meeting. Many of us join one or more of the ASA's sections, serve on one of the numerous ASA committees, or represent the association on one of the outside organization committees.

The 79 ASA chapters in the United States and Canada have thousands of members. As in the ASA, members are affiliated with academic, industry, and government organizations. Many chapter members are not ASA members. The ASA mission to promote the proper application of statistics and improve statistical education is enhanced through workshops, short courses, lectures, conferences, speakers, videotapes, and our web site.

To support endeavors of this magnitude and activities of this diversity, we depend on a dedicated core of paid professional staff and the continuous commitment of a legion of active volunteers. Volunteers, who reflect the diversity of the membership and interests of the association, are a critical element in identifying the interests of today's members and anticipating the needs of future members. As we move forward to realize our vision of being a world leader in promoting statistical practice, applications, and research; publishing statistical journals; improving statistical education; and advancing the statistical profession, it is crucial that we continue to promote statistical excellence—the hallmark of our association—while advancing outreach efforts to our chapters, mathematics and statistics students and faculty, statisticians in applied and government settings, and professionals in related disciplines.

I support our current, thoughtful, and well-articulated set of strategic goals and would like to apply my chapter, section, and committee membership experiences to help them materialize. A strong personal interest is to increase the involvement of our members and strengthen feelings of affiliation with the ASA. Of course, opportunities for involvement enhance recruitment and promote retention. And, selfishly, my deep respect for our professional staff and volunteers makes an opportunity to work with them for our mutual benefit most welcome.

After serving on the Committee on Committees and a task force and workgroup on committees within the ASA, I find it ironic that this vice presidential position will have new responsibilities for direct contact and communication between committees and the Board of Directors. This is a positive change—long overdue—and I would very much enjoy serving you in this role.

Present Position: Senior Demographer, California Department of Finance, Demographic Research Unit

Former Positions: Liaison to Demographic Programs, California Department of Finance, Demographic Research Unit (2001–2003); Chief, Demographic Research Unit, California Department of Finance (1981–2001); various positions in the California Demographic Research Unit (1975–1980); research and teaching assistant positions at the University of California (1973–1975)

Degrees: MA in sociology, University of California, Davis, 1975; BA, University of California, Davis, 1974

Fields of Major Statistical Activity: Data analysis, applications and methodology, state and federal statistics, statistical demography, applied statistics

Publications: "Thoughts on Using Multi-Year ACS Estimates for San Francisco and Tulare Counties, California," U.S. Census Bureau web site (2008); "Comparison of Census 2000 and American Community Survey 1999–2001 Estimates—San Francisco and Tulare Counties, California," U.S. Census Bureau web site (2005); Preface to *Methods and Materials of Demography Condensed*, 2nd ed. (2004); "Encyclopedia of the U.S. Census," State of California web site

ASA Activities and Offices Held: Workgroup on Organizational Efficiency of Committees (2008–2009); Council of Sections Governing Board Chair (2008); Appointments Advisory Committee (2007–2008); Fellow (2007); Presidential Task Force on Organization and Management of ASA Committees (2006); Founders Award (2006); Presidential Task Force on ASA Membership Teams Coordinator (2005); Committee on Committees Chair (2001–2004); Council of Chapters Chapter Representative (1996–2004); Chapter Service Recognition Award (2003); Executive Director Search Committee (2000 and 2006); ASA Representative to COPAFS (1999–2000); Committee on Committees (1999–2000); Section on Government Statistics Chair (1997); Curriculum Development, Continuing Education Workshop, "Improving Presentations" (1996); Constitutional Review Committee (1996); Committee on Meetings (1995–1997); JSM Program Chair (1995); JSM Program Committee (1994); 1993 Winter Conference Program Committee; Social Statistics Section Program Chair (1990); American Statistical Association and Statistics in the Public Sector Workshop Organizing Committee (1989); Committee on Small-Area Estimates (1985–1989); Sacramento Chapter Representative (1996–2008 and 2010–2012), President (1981–1982), Vice President (1980–1981), and Secretary (1979–1980); Annual Institute on Research and Statistics Cofounder (1979); Councilor (1976–1979)

Related Professional Activities: National Academy of Sciences, Committee on National Statistics Panel on the Design of the 2010 Census Program of Evaluations and Experiments; U.S. Census Bureau Census Advisory Committee of Professional Associations; U.S. Department of Commerce Decennial Census Advisory Committee; Population Association of America Public Affairs Committee; Population Association of America Committee on Population Statistics Chair; Federal-State Cooperative for Population Estimates Chair; National Summit on the Tabulation of Race and Multi-Race Health Data; Congressional Testimony, United States House of Representatives, Committee on Government Reform, Subcommittee on the Census hearing on "Oversight of the Census Bureau's Proposed American Community Survey"; National Academy of Sciences, Committee on National Statistics Panel on Formula Allocations

COUNCIL OF CHAPTERS BOARD REPRESENTATIVE 2011

Duane Steffey


Steffey

As observed in the ASA strategic plan, "The field of statistics suffers from lack of visibility and identity in spite of ever-increasing demands for statistical analysis in areas of science, government, and business that rely on massive databases and information technology. A weakness of the ASA is that it is not the 'face of statistics.' The ASA should become a primary source for the media on events that involve statistical issues, and for management in business and government on the role and value of statisticians."

Chapters can and should play a unique and valuable role in advancing this objective. Local outreach initiatives to public schools and elected officials are examples of how chapters can serve to promote the profession and the value statistical science brings to addressing contemporary issues.

Chapters are a vital part of the ASA, enriching our professional lives and contributing in important and diverse ways to the growth of the profession. I would welcome the opportunity to represent the interests of chapters to the ASA Board of Directors and to seek ways in which chapters can work effectively with the national organization to achieve our common goals.

Present Position: Director, Statistical and Data Sciences, Exponent Inc.

Former Positions: Managing Scientist, Data and Risk Analysis, Exponent Inc. (2004–2006); Professor (2003–2006), Associate Professor (1993–2003), and Assistant Professor (1988–1993), Department of Mathematics and Statistics, San Diego State University; Visiting Scholar, Department of Statistics, University of California, Davis (1998); Study Director, Committee on National Statistics, National Research Council (1992–1995); Associate Scientist, Probabilistic Risk Assessment, Westinghouse Electric Corporation (1981–1983)

Degrees: PhD in statistics, Carnegie Mellon University, 1988; MS in statistics, Carnegie Mellon University, 1984; BS in history and mathematics, Carnegie Mellon University, 1981

Fields of Major Statistical Activity: Statistical consulting, reliability and risk assessment, product development and manufacturing, statistics in law and public policy, hierarchical Bayesian inference, transportation statistics, defense testing and evaluation, census methodology

Publications: "Approximate Bayesian Inference in Conditionally Independent Hierarchical Models (Parametric Empirical Bayes Models)" (1989); "Counting People in the Information Age" (1994); "Statistics, Testing, and Defense Acquisition: New Approaches and Methodological Improvements" (1998); others in the *Journal of the American Statistical Association*, *Statistical Science*, *Communications in Statistics—Theory and Methods*, *Statistics in Medicine*, *Biometrical Journal*, *Jurimetrics*, *International Journal of Industrial Engineering, Transportation Research Record*, *Public Works Management and Policy*, *Journal of Ground Water*, *Journal of Family History*, *Recent Advances in Reliability Theory: Methodology, Practice, and Inference*, and *Encyclopedia of Quantitative Risk Analysis and Assessment*

ASA Activities and Offices Held: Council of Chapters Governing Board District 6 Vice Chair; Working Group on Visibility and Impact in Policymaking; *CHANCE* Editorial Board; Section on Risk Analysis Program Chair; San Diego Chapter President; Council of Chapters Governing Board Nominations Committee; Advisory Committee on Continuing Education Evaluation Subcommittee

Related Professional Activities: Institute of Mathematical Statistics; Society for Risk Analysis; National Science Foundation; numerous professional journals

Bonnie LaFleur


LaFleur

I would like to continue serving the ASA community by aiding chapters in disseminating information about association activities, providing continuing education opportunities, and promoting statistics as a career.

Present Position: Associate Professor, Division of Epidemiology and Biostatistics, University of Arizona

Former Positions: Associate Professor, University of Utah (2007–2008); Assistant Professor, Vanderbilt University (2001–2007); Assistant Research Professor, The George Washington University (1999–2001); Post-Doctoral Fellow, CDC/National Center for Health Statistics (1997–1999)

Degrees: PhD in biometrics, University of Colorado, Denver; MPH in biometry, San Diego State University; BA in sociology, University of California, San Diego

Fields of Major Statistical Activity: Application of statistical methods to cancer biology and novel biologic technologies (-omics), permutation methods, generalized linear and mixed models, methods and design of studies used in biomarker research

Publications: Sixty-eight publications in mainly biomarker development, incorporation of biologic correlates in clinical trials, and assay development

ASA Activities and Offices Held: Strategic Initiatives Subcommittee Chair; Biometrics Section Vice Chair; Council of Chapters District 5; Mid-Tennessee Chapter President; Southern California Chapter; Colorado-Wyoming Chapter; Women's Caucus

Related Professional Activities: Information Technology Oversight Committee Chair

COUNCIL OF SECTIONS BOARD REPRESENTATIVE 2011

Aparna V. Huzurbazar

Huzurbazar

I am honored to have the opportunity to serve as Council of Sections Governing Board Representative to the ASA Board of Directors. Throughout my career, I have served the ASA and wider statistical community at the international, national, and local levels. ASA sections are a core piece of our organization, representing subdisciplines within statistics that include both subject areas and industry groups. ASA sections communicate with the Council of Sections Governing Board through the Council of Sections. This is an important function in the organization, and I would work to effectively communicate information between the Board of Directors and the sections.

Present Position: Research Scientist, Statistical Sciences Group and Systems MTE-Project Lead, Enhanced Surveillance Campaign, Los Alamos National Laboratory; Adjunct Professor of Statistics, University of New Mexico

Former Positions: Professor of Statistics (2007–2009), Associate Professor (2001–2007), and Assistant Professor (1996–2001), University of New Mexico; Assistant Professor of Statistics, University of Florida (1994–1996)

Degrees: PhD in statistics, Colorado State University, 1994; BS in aerospace engineering, University of Colorado at Boulder, 1988; BA in mathematics, Claremont McKenna College, 1988; Certification: Six Sigma Master Black Belt, 2009

Fields of Major Statistical Activity: Bayesian statistics, flowgraph models, complex systems, reliability, survival analysis

Publications: "Stochastic Network Models for Survival Analysis," *JASA* (1997); "Modeling and Analysis of Engineering Systems Data Using Flowgraph Models," *Technometrics* (2000); "Posterior Sampling with Constructed Likelihood Functions," *Applied Stochastic Models in Business and Industry* (2006); *Flowgraph Models for Multistate Time-to-Event Data* (2005); others in *The American Statistician*, *Biometrics*, *Canadian Journal of Statistics*, *Journal of Risk and Reliability*, *Reliability Engineering and System Safety*, *Scandinavian Journal of Statistics*, and *Statistics in Medicine*

ASA Activities and Offices Held: Samuel S. Wilks Memorial Medal Committee (2010–2012); SBSS Secretary/Treasurer (2008–2009); SDNS Secretary/Treasurer (2009–2010); SDNS Awards Committee (2006–2008); Advisory Committee on Continuing Education Evaluation Subcommittee (2006–2007); ASA Representative to AAAS (1996–2002)

Related Professional Activities: International Society for Bayesian Analysis Program Committee (2009–2010); Caucus for Women in Statistics (2009–2010); COPSS Charter Committee (2006); ENAR/WNAR Biometric Society Representative to AAAS (2003–2005); COPSS Secretary/Treasurer (2001–2003)

A. John Bailer

Bailer

Present Position: Distinguished Professor and Chair, Department of Statistics, Miami University, Oxford, Ohio

Former Positions: Professor (1996–2005), Associate Professor (1993–1996), and Assistant Professor (1988–1993), Department of Mathematics and Statistics, Miami University, Oxford, Ohio; Staff Fellow, Division of Biometry and Risk Assessment, National Institute of Environmental Health Sciences (1987–1988)

Degrees: PhD in biostatistics, The University of North Carolina at Chapel Hill, 1986; MA, The University of North Carolina at Chapel Hill, 1984; BS and AB, Miami University, Oxford, Ohio, 1982

Fields of Major Statistical Activity: Quantitative risk estimation, design and analysis of environmental and occupational health studies, promoting quantitative literacy

Publications: Articles appearing in *Biometrics*, *Environmetrics*, *CHANCE*, *Journal of Statistical Computation and Simulation, Risk Analysis, Environmental Toxicology and Chemistry*, *American Journal of Industrial Medicine*, *American Journal of Public Health, and Occupational and Environmental Medicine*; *Statistics for Environmental Biology and Toxicology* (1997); *Analyzing Environmental Data* (2005); *Statistical Programming in SAS* (2010)

ASA Activities and Offices Held: Section on Risk Analysis Chair (2009); Statistics and the Environment Section Publications Chair (2001–2002); Statistics and the Environment Section Representative on the 1997 ENAR Program Committee; Cincinnati Chapter President (1996–1997), Vice President (1995–1996), and Secretary/Treasurer (1994–1995); *Journal of the American Statistical Association* Associate Editor (2006–2007)

Related Professional Activities: International Statistical Institute Council (2009–2013), Risk Assessment Committee (2000–present), and Elections Committee Chair (2009–present); IBS/ENAR Regional Advisory Committee (2006–2008), 2007 Continuing Education Advisory Committee, 2005 Program Chair, ENAR Spring Meetings Program Committee (1999–2000), ENAR Spring Meetings Local Arrangements Committee (1991–1992), and *Biometrics* Associate Editor (1997–2005); NRC/IOM Committee on Improving Risk Analysis Approaches Used by the U.S. EPA, Committee to Review the OMB Risk Assessment Bulletin, Committee on Spacecraft Exposure Guidelines, Committee on Toxicologic Assessment of Low-Level Exposures to Chemical Warfare Agents, and Consultant to Committee on Implications of Dioxin in the Food Supply; National Toxicology Program Report on Carcinogens Subcommittee and Technical Report Subcommittee of the Board of Scientific Counselors (1997–2000)

Statisticians Comment on Status of Climate Change Science

Richard L. Smith, University of North Carolina; L. Mark Berliner, The Ohio State University; and Peter Guttorp, University of Washington and Norwegian Computing Center

In November 2009, ASA Past-President Sally Morton joined with the leaders of 17 other science organizations to sign a letter to all U.S. senators summarizing the consensus of climate change science (*www.amstat.org/outreach/pdfs/climateletterfinal.pdf*). In short, the letter cited the strong scientific evidence that climate change is happening and that human activities are the primary driver. It went on to list the many likely consequences, some of which are already starting to occur.

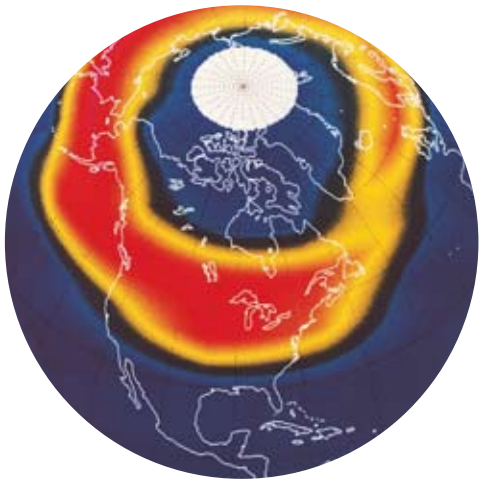
As members of the ASA's Climate Change Policy Advisory Committee, we commented on early drafts of the letter and, upon reviewing the final version, advised Morton to sign it. We are well aware that some disagree with the statements in the letter. The views of climate change 'skeptics' and 'deniers' appear in many media, from blogs and videos to op-eds and congressional testimony. We prefer to think of the views of skeptics as part of the scientific spectrum, but nevertheless believe they are a minority who do not represent the mainstream scientific viewpoint.

Some organizations that feature these views in sophisticated advertising campaigns have manipulated the evidence to create the impression that the consensus among climate scientists is quite different from what it is. Here, we comment on some of the most common arguments that climate change is not happening or that humans are not responsible.

Influence of Solar Activity

The idea that solar variability, rather than greenhouse gases, could explain a large part of the observed variability in climate gained considerable publicity due to the 1991 *Science* paper by Eigil Friis-Christensen and Knud Lassen (see "The Paper That Convinced Me of the Connection Between CO_2 and Climate Change"). This point is still heavily debated. Nicola Scafetta and Bruce West, for example, argue in two recent *Physics Today* pieces that traditional reconstructions of the solar signal underestimate the influence of solar effects on climate. Their arguments were rebutted in the same publication by Philip Duffy, Benjamin Santer, and Tom Wigley. At the core of the dispute are two reconstructions of the solar intensity signal—each formed by combining data from several satellites—one containing a trend, the other not.

We do not have the expertise to say which reconstruction is to be preferred, but we believe it is important to set such disputes in the broader context of climate research. The relevance of this issue is in detection and



attribution studies in which the climate signal is apportioned over different external forcings, including both greenhouse gases (GHGs) and solar fluctuations. Different constructions of the solar signal could lead to different attributions of GHGs, which, in turn, could affect projections of future climate change in which GHGs are considerably increased.

Nevertheless, there is no credible physical theory that would deny the GHG influence. If the claims made about the solar influence are correct, that could somewhat modify projections of future temperature increases, but there is already plenty of uncertainty about those projections. Therefore, we do not feel controversies about the solar signal should play a major

Richard L. Smith is a statistics professor at The University of North Carolina and the Mark L. Reed III Distinguished Professor.

Mark Berliner is a statistics professor at The Ohio State University and has held positions at the National Center for Atmospheric Research and National Institute of Statistical Sciences.

Peter Guttorp is a statistics professor at the University of Washington, researcher at the Norwegian Computing Center, and director of the Northwest Research Center for Statistics and the Environment.

The Paper That Convinced Me of the Connection Between CO_2 and Climate Change

Peter Guttorp, University of Washington

Fifteen years ago, most scientists had not yet convinced themselves that greenhouse gases led to observable climate change. Indeed, the influence of solar activity was still a viable explanation for the observed increase in average global temperatures, thanks largely to a 1991 *Science* article by Eigil Friis-Christensen and Knud Lassen that showed temperatures were highly correlated with sunspot numbers.

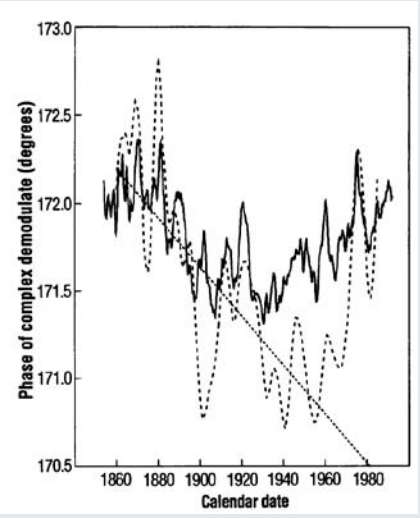
A 1995 *Science* article by David J. Thomson, titled "The Seasons, Global Temperature, and Precession," provided the first strong evidence in favor of an observable greenhouse gas effect. Also notable is that the work was based primarily on a careful statistical analysis of the temperature series, rather than on climate models. To me, this paper was the first smoking gun that global warming is connected to the increase of CO_2 concentrations in the atmosphere.

There have been many works since to substantiate the connections, but an explanation of Thomson's paper may be helpful to *Amstat News* readers.

The amount of solar radiation reaching the Earth depends on the angle of Earth's rotation to the ecliptic (the plane of the orbit) and its distance from the Sun (because the Earth's orbit is elliptical). The former follows the "tropical" year, the time between two vernal equinoxes, which is 365.2442 days and governs seasons. The distance of the Earth from the sun follows the "anomalistic" year, the time between perihelion (farthest point from the sun) in Earth's orbit, which is currently 365.2596 days.

The interaction between these two cycles so close in time yields long temperature cycles, which result in the quarternary ice ages. The shortest of these cycles is about 26,000 years, very long compared to the instrumental record of temperature.

Because these cycles are so close in value, one must use statistical tools to study their influences. Complex demodulation, in effect, removes one of the influencing cycles and looks at the remaining spectrum of a quantity, called the "phase."



Phase of the Jones-Wigley Northern Hemisphere temperature series (solid) with average phase from 156 northerly land stations (dashed) and the line expected if the anomalistic year frequency dominates the tropical year

continued

role in the assessment of climate science overall. It is a legitimate area of research to try to quantify the solar signal more accurately, including its uncertainty, and to assess the influence of such uncertainty on future projections.

'Hockey Stick' Curve

A considerable amount of controversy has concerned the reconstruction of temperatures over the last millennium, in particular the famous "hockey stick" curve, first published by Michael Mann, Raymond Bradley, and Malcolm Hughes in a 1998 *Nature* article.

In 2006, Rep. Joe Barton (R-TX), then chair of the House Energy Committee, requested statistician Edward Wegman to re-examine the evidence behind the hockey stick curve. At the same time, the National Research Council (NRC) formed a committee, also containing several statisticians, to report more broadly on the scientific underpinnings of paleoclimatic research.

The report by Wegman (along with David Scott and Yasmin Said) supported 2005 criticisms made by Steven McIntyre and Ross McKitrick in *Geophysical Research Letters* of the statistical methods used in creating the hockey stick curve and the selection of proxies for the reconstruction. The NRC report was issued in 2006 and affirmed that these questions are relevant, but also pointed out that the evidence for a hockey stick shape was robust and had been reproduced in numerous other studies.

The NRC report also emphasized the inherent uncertainty of such reconstructions, especially concerning the existence of a "medieval warm period" and the estimation of temperature extremes in the early part of the millennium. Since 2006, a number of new studies have appeared proposing alternative

statistical techniques for paleoclimatic reconstructions, including assessments of uncertainty and distributions of extremes. Presently, this is a lively area of statistical research on climate change.

In summary, while the Wegman report served to highlight relevant statistical issues, the research community has responded successfully to these challenges.

Temperature Leveling Off?

Another area of controversy has been the apparent leveling off of temperatures post-1998 and the suggestion that greenhouse gas warming has ended. However, this is largely a selection effect arising from the specific choice of 1998 as a starting year. Overall assessments of trend, including the past decade, still show a strong increase in global mean temperatures. Annual temperatures are affected by many sources of variability. For example, it is well known that 1998 was a peak El Niño year. Though the effect of El Niño on temperature varies strongly with season and location, the 1998 El Niño was an extremely warm event.

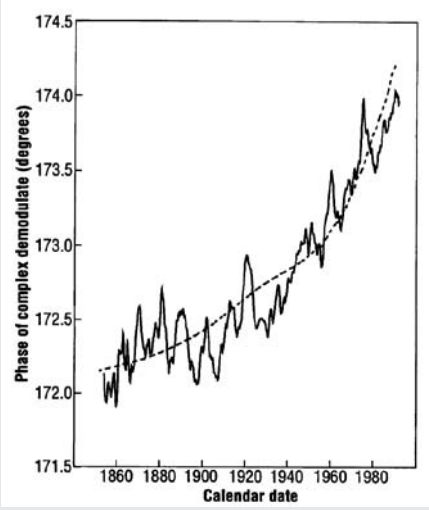
What are relevant are the long-term trends, not the influence of specific events. From this point of view, the slight decrease of observed temperature post-1998 is of no relevance to assessments of the long-term trend. We also note that reliance on global temperature hides much of the story and effects of climate change. For example, the 2009 average temperature over the southern hemisphere was higher than any observed since at least 1880.

A recent contribution to this topic is that of Susan Solomon and collaborators in *Science*, who in an article published online in January, showed that increases in stratospheric water vapor may have explained part of the post-1998 cooling.

continued from p. 14

When one removes the influence of the tropical year, the phase should be flat if the dominant frequency is that of the tropical year. If the anomalistic year is dominant, we would expect to see a linear phase in the residuals with slope equal to the inverse of the difference between the frequencies (57.3 arc seconds per year). The figure above shows the phase of the Jones-Wigley Northern Hemisphere temperature series (solid line), the average phase for 156 stations above 23°N (dashed line) and the dotted line with a slope equal to the precession constant (the rate at which the Earth's axis rotates).

The analysis shows that between 1880 and 1920 the dominant frequency in the temperature series is the anomalistic one. To explain the phase diagram after 1920, a statistician would look at the "residuals," the difference between the predicted (dotted) line and the estimated phase. The figure below shows the residuals, together with a fit to the logarithm of atmospheric CO_2 levels.



Since the fit is excellent, we have two possible explanations: Either the CO_2 levels are influencing the phase and thus changing the distribution of temperature (i.e., the climate) or there is a common underlying feature driving both the phase change and CO_2 levels. No mechanism has been proposed that can do the latter.

'Climategate'

Some have perceived the well-publicized leak of emails associated with researchers at the Climate Research Unit (CRU) of the University of East Anglia in November 2009—dubbed "Climategate"—as weakening the scientific case for climate change. In our view, none of the Climategate revelations change the fundamental science about climate change. To the extent they concern scientific challenges to the theory of anthropogenic global warming (AGW), they

involve issues that have already been extensively debated in the scientific literature and elsewhere. Nevertheless, it seems desirable to review some of these issues and indicate our view of them:

1. Following Climategate, the view has been widely repeated that climate scientists are secretive about their raw data and suppress data products that are inconsistent with AGW. This is not true. CRU is only one of several centers that have made extensive data archives available to the public; in the United States, the leading such center is the National Climate Data Center (NCDC), a division of NOAA. These data archives contain daily, monthly, and annual data from weather stations around the world, as well as gridded data (e.g., aggregates into 1° and 5° latitude and longitude boxes) that are intended to be directly comparable with the output of climate models. There are also extensive archives of proxy data, such as tree ring and borehole temperature records, that are used in paleoclimatic reconstructions of meteorology before the instrumental record began. Other organizations have created extensive archives of climate model runs, both past data (e.g., 20th century) runs that can be compared directly with the observational record and future model projections that have been at the center of Intergovernmental Panel on Climate Change reports. For numerous sources of data and computer code, see *www.realclimate.org/index.php/data-sources*.

2. In one respect, the criticisms made in the Wegman, Scott, and Said report do seem to have been reinforced by the recent Climategate revelations. Wegman analyzed the social network of paleoclimatic researchers, suggesting that their conclusions were suspect because few outsiders had deeply scrutinized the results. The email exchanges have, indeed, shown considerable evidence of a social network in action. However, the more relevant point for the broader picture of climate research is that the conclusions of these researchers have, by now, been scrutinized by many others outside that small community and have largely held up to that scrutiny.

3. We do think there are weaknesses in the ways climate data are currently processed. While it would not be reasonable, or even possible, to make every source of raw data available to the public, it is important that raw data sources used in creating public data sets—such as gridded data summaries—be fully documented, as well as the computer algorithms used to create public data sets. In many cases, these algorithms involve subtle statistical judgments (e.g., about outliers, adjustments for missing data, and temporal and/or spatial correlations) that should be open to scrutiny by others, including statisticians who may possibly have ideas for improving them.

Some of the leaked emails suggested that authors tried to keep data secret after publication of the results. Such data secrecy, we believe, is not appropriate in most cases. The *Journal of the American Statistical Association (JASA)* has a data policy (see *http://pubs.amstat.org/page/jasa/information-for-authors*) that requires that "Whenever a data set is used, its source should be fully documented. When it is not practical to include the whole of a data set in the paper, the paper should state how the complete data set can be obtained." Many other scientific journals have similar policies, but it not clear how rigorously any of the policies are enforced in practice. We believe the *JASA* policy, or something similar, should be the norm in scientific publishing.

Climate Change Policy Advisory Committee

In addition to its work on their letter signed by Sally Morton, Climate Change Policy Advisory Committee members spent two days on Capitol Hill last year educating staff about the role statisticians play in climate change science and how statisticians view climate change. Committee members also responded to requests from congressional staff to review a climate change paper by an economist and, more recently, to produce a review of the health effects of climate change. This year, the committee plans to continue its outreach to Congress, educating them on the status of climate change science and the effects of climate change. For more information about the Climate Change Policy Advisory Committee and its activities, see *www.amstat.org/committees/ccpac*.

The leaked emails of Climategate highlight relevant issues to the assessment of climate research, including data handling and documentation. On broader issues of response to skeptics in such areas as the hockey stick reconstruction, the influence of the solar signal, and the interpretation of the post-1998 leveling off of temperatures, we think climate skeptics have raised legitimate points in each case—several times involving statistical methods or the assessment of associated uncertainties—that should be the focus of further research. However, these points do not change our view that the climate is warming, that anthropogenic influences are likely responsible, and that appropriate mitigation measures need to be considered. ■

Call for Nominations

2010 Mortimer Spiegelman Award

The Statistics Section of the American Public Health Association invites nominations for the 2010 Mortimer Spiegelman Award, honoring a statistician aged 40 or younger who has made outstanding contributions to health statistics.

Nominations are due April 1, 2010, and should include a nominating letter, the candidate's birthday, a description of the candidate's contributions to public health, and the candidate's CV. Up to three supporting letters may be submitted.

Electronic nominations are preferred and can be emailed to David Dunson, Chair, 2010 Spiegelman Award Committee at *dunson@stat.duke.edu* or mailed to 2010 Spiegelman Award Committee in care of David Dunson, Department of Statistical Science, Box 90251, Duke University, Durham, NC 27708-0251. ■

Biostatistics Internship Opportunities Available

A 2001 ad hoc meeting of biostatistics leaders from academia, industry, and the National Institutes of Health (NIH) addressed a national shortage of trained biostatisticians. In response to the recommendation that summer internships "be supported for undergraduate students to expose them to biostatistics and bioinformatics," the National Heart, Lung, and Blood Institute (NHLBI) funded three annual summer internship programs, called the Summer Institute for Training in Biostatistics (SIBS).

The target participants for these summer institutes are outstanding quantitatively oriented undergraduate students with an interest in the biological sciences, and the primary purpose of the institutes is to interest students in further biostatistics training at either the master's or PhD level.

Under an NHLBI-issued limited competing renewal, the three programs continued in the summers of 2007, 2008, and 2009. As of 2007, 202 participants had completed the program and 164 participants had graduated from college. Additionally, 58% had entered graduate school to study statistics or biostatistics and another 18% had entered graduate school to study a related field.

More recent data from two of the three institute sites indicate that 98 additional trainees completed their programs in 2008 or 2009, including 42 who will have graduated from college by spring of this year. Of these graduates, 27 (64%) have applied for or begun graduate training in biostatistics or statistics, four are employed in biostatistics or statistics, and two are in graduate programs in applied math.

In 2008, the NHLBI and National Center for Research Resources (NCRR) solicited applications for up to seven SIBS II programs, to be held in the summers of 2010, 2011, and 2012. In 2009, eight SIBS II undergraduate training grants were awarded to the three existing SIBS programs and five new programs. Following are program dates and contact information for each program:

Boston University, June 7–July 16
24 trainee positions
http://sph.bu.edu/sibs

Emory University, May 24–July 1
20 trainee positions
www.sph.emory.edu/bios/SIBS

University of Iowa, June 7–July 30
16 trainee positions
www.icts.uiowa.edu/content/summer-institute-training-biostatistics-sibs

NC State University – Duke Clinical Research Institute, June 7–July 16
25 trainee positions
www.stat.ncsu.edu/sibs

University of Pittsburgh, June 20–July 31
20 trainee positions
www.biostat.pitt.edu/sibs

University of South Florida, May 17–June 25
25 trainee positions
http://health.usf.edu/publichealth/epb/sibs/index.htm

Washington University – St. Louis, June 7–July 16
20 trainee positions
www.biostat.wustl.edu/sibs

University of Wisconsin, June 7–July 16
20 trainee positions
www.biostat.wisc.edu/Educational_Resources/SIBS

All SIBS programs are residential summer training programs in biostatistics for undergraduate or beginning graduate students majoring in mathematics, science, or other quantitatively oriented areas of study. Additionally, they maintain the following guidelines:

- Participation is limited to U.S. citizens or permanent residents
- Trainees will meet practicing biostatisticians, epidemiologists, and geneticists and learn the basic principles and applications of biostatistics
- Trainees will apply statistical methods to biomedical research through coursework and hands-on experience with data collected in major clinical and epidemiological studies
- Trainees will learn about career and graduate training opportunities in biostatistics
- Trainees will earn college credit that may transfer to home institutions
- Trainees will have access to facilities at top universities

Tuition and fees and the cost of housing, meals, and extracurricular activities are covered. In many programs, travel expenses to the program sites also are covered. General program information is available at *www.nhlbi.nih.gov/funding/training/redbook/sibsweb.htm*, though prospective trainees should contact the individual SIBS sites for specific information about their programs and application forms. Students may apply to multiple SIBS programs, but may accept only one offer. Admission decisions are being made on a rolling basis; applications will be accepted until all trainee positions are filled. ■

Member Spotlight
Cemal Unal

Unal

I can remember certain events very well. In particular, I remember being a high-school graduate in Ankara, Turkey. It was 1982 and I had to take a nationwide exam to enter a university. The score from this exam would determine which university I went to and what I studied. I wanted to be an engineer, so I listed the top universities with engineering and statistics degrees. Well, you can guess the rest.

I studied statistics for four years at Middle East Technical University (METU). This university has a strong undergraduate statistics program. At the beginning, with all the math and *p*-values, I was lost. As I studied more and became exposed to real-life problems involving statistical methods, however, I started to like statistics. I would say it is very important to help students understand the value of what they are studying during the early years of their education. This keeps them motivated and optimistic for the future.

After earning my undergraduate degree in 1987, I decided to study more statistics (by now, I was loving it) and applied for the master's program. In 1990, I earned my master's degree from METU and won a scholarship to study in the United States. For the love of statistics, I packed my stuff and moved to North Carolina State University—where there was, and still is, a strong statistics program for technology and clinical drug development.

While earning my PhD, I was lucky to have internship opportunities with a variety of companies. I worked for a company making cereal boxes, for another company making computer chips, and finally for a pharmaceutical company. My excitement about the use of statistics in real life reached its peak when I started working for GlaxoWellcome as a statistician/statistical programmer.

As a statistical programmer, I used my skills to do data analysis and statistical modeling while learning the terminology and process for drug development. The more I learned about drug development, the more I appreciated the use of statistics in this industry. For the first time, I thought I did the right thing by studying statistics.

While I worked in one therapeutic area at GlaxoWellcome, I had the opportunity to work in a variety of therapeutic areas in a contract research organization (CRO), for which I worked for about eight years as a statistician. In the CRO environment, I learned how to work with other people and supervise statisticians. Even though I had management responsibilities, I always considered myself a statistical scientist and enjoyed being a statistician more than a manager. One must be careful when making a decision about whether to stay on the technical track (i.e., hands-on statistician) or move to the management track and pick the one he or she would enjoy the most.

After leaving the CRO, I went to work in the oncology area at Merck. What a rewarding position. I still remember the letters we got from people who participated in our clinical trials. It was such an honor to be part of a team developing drugs for cancer and giving hope to people. Each therapeutic field has its own way of designing, conducting, and analyzing data from clinical trials. From study design to data collection, oncology was the most challenging and the most fun for me.

As statisticians, we should learn how to work with and educate ourselves about relevant topics in other disciplines. While I

worked in the pharmaceutical industry, I noticed I worked with medical experts more than other departments. For a statistician to be successful in the pharmaceutical industry, he or she needs to understand the therapeutic area and disease under study, read the literature, and consult with other statisticians.

I strongly suggest attending workshops and seminars on disciplines of interest, as well as statistical subjects. For example, designing a clinical study protocol requires not only a strong statistical background but an understanding of the disease to be studied. Statisticians should ask experts questions in their respective fields so they can come up with the right statistical considerations and statistical methods for data analysis. After reading and working as a statistician in cancer drug development, I thought I could put medical and statistical minds together and find a cure.

Currently, I am the vice president of biostatistics and data management at Pozen Inc. I live in Raleigh, North Carolina, and have been married to a statistician for almost 20 years. I have two wonderful kids. Traveling, soccer, biking, drawing, tennis, and exercising are among my hobbies. I believe in giving back to society and organize and participate in charity events. ■

Call for Papers

ISR to Publish Energy Statistics Issue

Ali S. Hadi, *International Statistical Review* Editor-in-Chief

Papers are being accepted for a special issue of the *International Statistical Review* (*ISR*) that focuses on aspects of energy statistics. Carol Joyce Blumberg of the Energy Information Administration and Abdel A. El-Shaarawi of the National Water Research Institute, Canada, will serve as guest editors.

General areas for papers include the following:

- Reviews/surveys of significant developments in theory, methodology, statistical computing, and graphics as related to energy statistics
- Relationships between energy statistics and statistics education
- Emerging areas of research or applications related to energy statistics
- New developments and/or challenges in energy statistics
- History of energy statistics

General topics within energy that are of high interest include the following:

- Measuring the supply and/or consumption of energy
- Forecasting future supply and/or consumption (demand) of energy
- Forecasting future energy prices
- Data quality issues
- Issues related to renewable energy sources statistics
- Measuring environmental effects of energy use

Papers will be refereed and some manuscripts may be supplemented by a discussion and rejoinder. Papers that have been published or accepted for publication in other refereed publications will not be accepted.

Submit papers as either Word or PDF files by January 9, 2011, to Liliana Pinkasovych at *l.pinkasovych@cbs.nl*. Provide a cover letter that indicates the manuscript is for the special issue of *ISR* on energy statistics. Further instructions can be found at *http://isi.cbs.nl/ISR/isr-authors.htm* or *www3.interscience.wiley.com/journal/117998483/home*. ■

Staff Spotlight
Lisette Werbowetzki

Werbowetzki

Hello, my name is Lisette Werbowetzki and I am the newest member of the ASA's meetings department. I will be planning various ASA-sponsored conferences and working with the other members of the meetings department to plan the ASA's largest annual conference, the Joint Statistical Meetings. I am excited to be part of this team and want to take a minute to tell you a bit about myself.

I'm originally from Greenbelt, Maryland. I went to the University of Maryland (Go Terps!) and graduated with a bachelor's degree in communication and a cognate in criminology.

Upon graduating, I knew I wanted to pursue a career in meeting planning, so I moved to northern Virginia and took a job with the Healthcare Distribution Management Association as an administrator for its meetings and membership department. After gaining valuable experience there, I moved on to the International Claim Association (ICA) as the membership and events manager. I planned the ICA's Annual Education Conference and its smaller winter and spring meetings. Today, I am thrilled to be a meetings planner for the ASA.

In my free time, I like to ride horses (something I've done practically since I was born), go hiking, and watch movies. I also love to travel. I've been to Italy, Puerto Rico, and Jamaica and look forward to adding more exciting international destinations to that list.

I enjoyed meeting some of you during the ASA's 8th International Conference on Health Policy Statistics and look forward to meeting many more of you at this year's Joint Statistical Meetings and Conference on Radiation and Health. If you have any questions or need assistance, please don't hesitate to contact me at *lisette@amstat.org*. ■

Call for Papers

Special Issue to Focus on Industry

Jorge Luis Romeu, editor of the *Colombian Journal of Statistics*, invites papers for a special issue focusing on statistics in industry and industrial statistics. The goal of the issue is to engage researchers and practitioners in a dialogue that leads to more effective applications of statistics in industry.

Papers describing innovations in statistical methods and applied research are especially sought; however, applications to problems in engineering, manufacturing, the process/chemical industry, the physical sciences, or the service and agricultural industries are welcome. The mathematical level of the papers may range from basic to that of the *Journal of Quality Technology* or *Technometrics*.

Papers will be accepted until August 30 and should be sent to *recoles_fcbog@unal.edu.co*.

For more information, email Romeu at *jlromeu@syr.edu*. For formatting instructions, visit *www.estadistica.unal.edu.co/publicaciones/estadistica/rce/ingles/autores.html*. Papers will be double blinded and selected based on subject matter, technical correctness, usefulness, interest, clarity, and readability. ■

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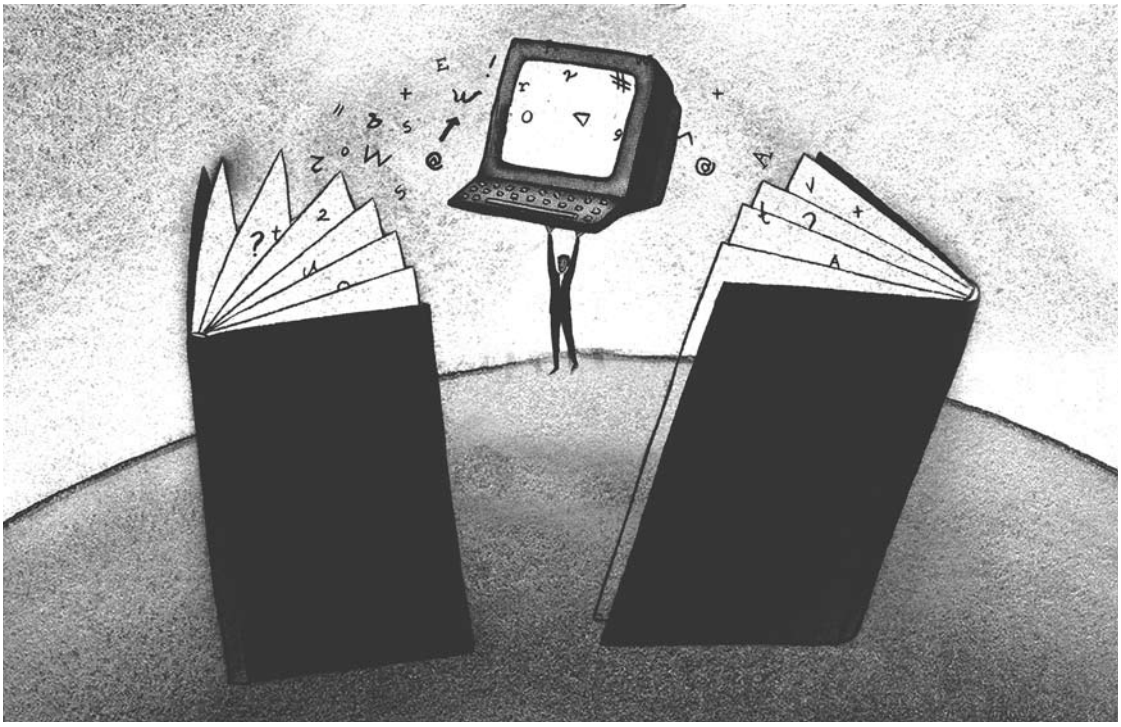

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COPAFS Corner

COPAFS Focuses on Statistical Activities

Stephanie Shipp and Stephen Cohen, ASA Representatives to COPAFS

COPAFS is the Council of Professional Associations on Federal Statistics and comprised of the membership of 60 organizations, including professional organizations, business, research institutes, and others interested in federal statistics. As a member of COPAFS, the ASA has two representatives from the Government Statistics Section who attend the quarterly COPAFS meeting and report back to the ASA membership. Highlights of the December 4, 2009, meeting held at the Bureau of Labor Statistics follow.

COPAFS Executive Director Ed Spar began the meeting by noting that the government is still running on a continuing resolution, and no one knows when the budgets will be finalized. Expectations are that the U.S. Census Bureau will continue to receive anomalies to flat funding, but budgets for other agencies are still in the air.

The Bureau of Labor Statistics (BLS) is considering a redesign of the Consumer Expenditure Survey, and COPAFS has been asked to provide a two-day workshop on the topic. The last redesign dates to the early 1980s, and the process would be lengthy, so BLS is not rushing into it. Spar will keep COPAFS members posted.

Initial plans for the Demographic Analysis (DA) measure of census coverage were to report persons missed and duplications for only the national and regional levels. During a recent meeting of the 2010 Census Advisory Committee, Spar and others made the case for reporting the component measures for states. The DA project is on target to report results by the end of next year, and COPAFS will provide a workshop on the topic.

Turning to the American Community Survey (ACS), Spar mentioned that the first five-year data are due in 2010. However, these data will be weighted to estimates based on the 2000 census, while the next set of five-year estimates (released in 2011) will be controlled to estimates based on the 2010 census. There is concern about the inconsistencies the first set will have with the 2010 census and the discontinuities with the second set (exacerbated by the transition to 2010 geography), so discussions about how to best handle these releases are in progress at the U.S. Census Bureau.

Spar reported that the redesign of the COPAFS web site is moving along and that the COPAFS meeting dates for 2010 are March 5, June 4, September 24, and December 3.

Ataman Ozyildirim of The Conference Board announced that the upcoming Centre for International Research on Economic Tendency Surveys (CIRET) conference will be held in New York on October 16. For more information, contact Ozyildirim at *Ataman.Ozyildirim@conference-board.org*.

Data.gov Initiative

Paul Bugg of the Office of Statistical and Science Policy at the Office of Management and Budget (OMB) described Data.gov (launched in March 2009) as a flagship initiative reflecting the administration's commitment to transparency and open government. The basic ideas are that the free flow of information between government and the public is essential to a democratic society and that the public's ability to discover and understand information is of broad social benefit.

An early question from the audience concerned how Data.gov relates to Fedstats. Bugg explained

Treasures from the ASA Archives

Summary Statement of Problems Considered by the Census Advisory Committee (1950)

This document includes a summary of the evaluation of census procedures and results and the introduction of a monograph program to show detailed analyses of census results beyond the basic reporting done previously. American Statistical Association Records, MS 349, Box 6, Folder 6, Special Collections Department, Iowa State University Library.

To find this and other treasures from the archive, visit *www.lib.iastate.edu/spcl/manuscripts/MS349.html*. If you have questions, email *spclref@iastate.edu* or call (515) 294-6672.

Committee on ASA Archives and Historical Materials

that Data.gov goes beyond federal data and enables users to search across agencies by topic. One could, for example, search for "household income" to identify income data provided by various agencies. Bugg also explained that the current platform, or web site, is a first step from which the Data.gov system will evolve.

A key objective of Data.gov is to assist finding and using government data. There are more than 24,000 "dot-gov" web sites, and one often needs to understand the government's organizational structure to find data sets of interest. Data are not always downloadable from legacy systems with outdated technology. Data.gov is designed to transcend stovepipes and encourage innovative applications by enabling access to data in formats that can be analyzed.

In response to a question about who is responsible for Data.gov, Bugg stressed it is not OMB, although he attributed its origin to OMB's chief information officer. Data.gov, he said, can be thought of as a set of links providing easier access to data already available. Responsibility for confidentiality rests with the agencies that collect and report the data, and the originating agencies need to be aware of any implications of wider access through Data.gov.

Data.gov defines raw data as machine-readable, structured data sets that can be used for multiple purposes and "mashed up" with other data (combined on the fly by a wide range of users). Some attendees expressed confusion about the definition. There will be an opportunity for the public to comment on Data.gov through the Federal Register.

Data.gov favors XML, CSF/TXT, and RSS formats and prefers not to post data in PDF format or HTML tables containing data. As a matter of policy, agencies retain control of their data, provide metadata, and are aware of the implications of broad access through Data.gov.

Bugg described a senior advisory group that provides OMB with a forum for working with those responsible for data generation and dissemination and provides advice about strategic and other issues. The advisory group consists primarily of federal entities (such as the Interagency Council on Statistical Policy) and does not include data user groups.

National Survey of Residential Care Facilities

Lauren Harris-Kojetin of the National Center for Health Statistics explained that the National Survey of Residential Care Facilities (NSRCF)

has two major government partners: the Department of Health and Human Services and the Department of Veterans Affairs. Its goals are to provide general purpose national-level data to support decisionmaking and to fill a significant gap in the collection of data on providers of long-term care. The survey estimates the size of the residential care industry and the characteristics of both the facilities and residents who live in them.

The NSRCF defines residential care facilities as places that are licensed, registered, or otherwise regulated by the state. They provide room and board (at least two meals per day) and around-the-clock, on-site supervision, as well as help with personal care or healthcare related service for a primarily adult population. Facilities also must have at least four beds. They are licensed to serve the mentally ill or mentally retarded. Developmentally disabled populations are excluded. Harris-Kojetin noted there is no definition that applies across all states, and that states license facilities under terms such as assisted living, board and care, congregate care, family care, and personal care.

The survey is needed because the aging population has increased the need for long-term care services, little is known about these facilities, and current surveys are designed for other purposes. Harris-Kojetin said the number of residential care facilities has grown rapidly and now rivals the number of nursing homes nationwide.

The survey consists of a facility questionnaire, resident sampling questionnaire, and resident questionnaire. The sample is a two-stage national probability design, with facilities sampled first, then residents within the facility. The goal is to sample 2,250 facilities and 8,450 residents. The survey starts with telephone eligibility screening, followed by computer-assisted personal interviews conducted in person. The facility questionnaire is conducted with the facility administrator, and the resident questionnaire is conducted with staff members knowledgeable about selected residents (e.g., a nurse aide or floor supervisor). The residents themselves are not interviewed.

Harris-Kojetin described a pretest and the response rates it experienced (without attempts to reverse refusal). Reasons for refusal included the inability to contact the facility director, director's/staff's lack of time, lack of interest, or corporate refusal (some facilities are part of a chain). Harris-Kojetin also described outreach activities, including meetings with the Center for Excellence in Assisted Living (CEAL). An association of associations related to the industry, CEAL provides insight into contact materials and promotes participation in the survey (e.g., through a joint letter sent in advance that communicates industry support for the survey).

Harris-Kojetin described a number of other measures taken to gain cooperation. She also noted that the NSRCF is a long survey, taking about three hours to administer. Once facilities agree to participate in the survey, however, few drop out due to the lengthy process. Getting initial agreement is the challenge. The low dropout rate may be due in part to the pre-interview worksheet sent to help facilities prepare for the interviews. The worksheet ensures there are no major surprises in the interview process and reduces the sense of respondent burden.

The upcoming NSRCF schedule is as follows:

March–April	Training
March–October	Facility recruitment
April–October	Data collection
Early 2010	Public use files, methods report, and release of first findings product

Who Creates Jobs? Small vs. Large vs. Young

Ron Jarmin of the U.S. Census Bureau noted the persistence of the debate over whether small businesses are responsible for job creation. There are two camps in the debate: those who contend that most new jobs are created by small businesses and those who argue that this is not true. Jarmin suggested there is truth to both positions and presented data from a longitudinal (1992–2005) database of private-sector, non-farm business establishments with firm identifiers.

The data included the size of businesses and their ages. Size was constructed by aggregating establishment employment numbers to firm totals, and firm age was defined as the age of the oldest establishment at the time of firm birth. Spin-offs

Correction

Mike Brick's name was misspelled in "SRMS Launches Webinar Series," which appeared on Page 24 of the January issue. We apologize for the error.

from existing businesses were not treated as new or startup businesses.

If one looks at only firm size, most new jobs are in small businesses, but Jarmin's work stresses the contribution of firm births, or "startups," to job growth and the distinction between gross and net job creation. As he described it, there is a huge churn in firms and jobs and an "up or out" dynamic for young businesses. Many young businesses fail, but those that survive contribute to dynamic growth.

A key to Jarmin's analysis is the relationship between firm size and age. New or startup firms tend to be small, while older firms tend to be larger. When one controls for the age of firms, there is a positive relationship between firm size and job growth.

Looking at data for 2005, Jarmin noted that among the largest firms, the biggest job gains were from the oldest firms, while among the smallest firms, most growth was among the youngest. This makes sense, as startups (businesses in their first year) cannot lose jobs (relative to the previous year). And because there are so many startups in the course of a year, small firms account for a large number of new jobs. Among small firms, job growth was greatest during the startup year, with the number of jobs added dropping sharply in years two and beyond. Again, there is an up or out dynamic, with the failure of many new businesses resulting in the destruction of many of the new jobs they contributed. One can contrast the gross versus net creation of new jobs.

Jarmin then described the challenge of "picking winners," or establishing policies to promote job growth. While startups and surviving young firms contribute disproportionately to job growth, idiosyncratic factors seem to dominate in the determination of which ones survive—factors that are not observable or predictable for policy purposes.

Jarmin concluded by suggesting we need a more nuanced view of small businesses and their contribution to job creation. It is not just the size of businesses that matters, but their age. Another issue is the quality of jobs, and Jarmin noted that we need to look beyond the simple counting of new jobs to the kinds of jobs being produced by younger firms,

the kinds of workers in these jobs, and the long-term labor market outcomes.

Local Employment Dynamics: Synthetic Data for OnTheMap Version 4

Jeremy Wu of the U.S. Census Bureau described OnTheMap as an online dynamic mapping and reporting tool for the bureau's Local Employment Dynamics (LED) data. He also gave an overview of the integrated, synthetic data underlying the product.

The first OnTheMap release was in 2006, covering 14 states and data from 2002–2003. The product has grown through successive releases, covering 47 states and data for 2002–2008. A December 2010 release will cover 47+ states with data for 2002–2009.

OnTheMap allows one to select where workers live or work and report characteristics such as age, earnings, and cross-state flows. The base unit is the census block, and the product features innovative disclosure protection. Wu showed a screenshot of a Las Vegas–area map shaded where construction/manufacturing workers are employed and side-by-side maps, one showing workers in blocks near the Strip and the other expanding to show where those workers live. Data tables are presented with the maps, and while the examples illustrated census blocks, one could show data by other geographies, such as ZIP code or traffic analysis zones.

Turning to the data, Wu noted that censuses date to ancient Rome and China, but sampling was first discussed in 1895. Even then, the idea was not well received, even among statisticians, who clung to the notion that there was no substitute for a complete count. The debate went on for decades, and it was not until 1937 that the bureau developed sampling techniques to measure unemployment during the Depression. Sampling was then introduced to the decennial censuses and is now used in other surveys such as the Current Population Survey and American Community Survey.

With the introduction of sampling, it became clear that a 5% random sample is better than a 5% nonrandom sample and the field of mathematical statistics was born. But Wu noted that the field of sample surveys has not lived happily ever after, as computers and administrative records databases have released a flood of data and surveys are increasingly hampered by declining response rates, increasing labor costs, and confidentiality concerns. As recently as the 1990s, there was concern that we could either have access to microdata or confidentiality protection, but not both.

However, Wu described an LED approach that provides both with a design that involves record linkages, noise infusion, imputation, synthetic data modeling, and measures of goodness and quality. A slide diagramming how the synthetic data are prepared conveys its complexity. And with the workplace/residence data comprising an origin/destination matrix for 8 million census blocks (8 million times 8 million), the underlying database is huge.

Wu described OnTheMap and its data innovation as the latest development in sampling. It took decades for sampling to be accepted; Wu said he hopes it will not take so long for this innovation to become accepted and widely used.

Asked if these data have been accepted for academic research, Wu noted that academic researchers have been involved in their development, but the data are not yet widely used. There was agreement that more formal measures of goodness and quality are needed for the data to become more widely accepted in academic research. ■

Statistical Methodology

Special Issue on Statistical Methods for the Social Sciences

In honor of the 10th Anniversary of the Center for Statistics and the Social Sciences at the University of Washington, there will be a special issue of *Statistical Methodology* featuring statistical methods for the social sciences. Featured topics include multivariate categorical data, continuous outcomes, missing data, and social networks. The guest editors are Adrian E. Raftery and Michael Ward.

The issue will feature papers by Stephen Fienberg, Robert Franzese Jr., Andrew Gelman, Adam Glynn, Claire Gormley, Bryan Jones, Brendan Murphy, Adrian Raftery, Donald Rubin, Tamas Rudas, and Jon Wakefield. For information please visit the Statistical Methodology web site at *www.elsevier.com/locate/stamet* or contact G. Jogesh Babu at *babu@stat.psu.edu* or Adrian Raftery at *raftery@u.washington.edu*. ■

Data Sharing and the Scientific Community

Dear Editor,

I wish to reply to Professor Devore's letter in the January 2010 issue of *Amstat News*. Some journals are now requesting that data sets be made available for use by others, but this is not possible for all data sets for several reasons.

First, there is the problem that Professor Devore has already encountered: The data set does not belong to the authors of the article, but belongs to a pharmaceutical or other company. If this is the case, then ask the company concerned; do not blame the author approached.

Second, especially in the case of human subjects, the privacy laws are very stringent, rightly so in my opinion. The laws are enforced and are becoming more restrictive with respect to publication as the years go on. No author would risk sending data that has not been completely de-identified. Further, they would have to approach their institutional review board for permission to send it. Professor Devore would have to say exactly what he wanted to do with it, how it would be protected, who would have access to it, etc. and prove that his purpose really requires that data set. The whole process would take months or more. Unless one owes Professor Devore a great debt, the time and effort would not be worth it to most professionals. This would apply to data collected before any privacy laws were enforced also.

Is there a risk to people's privacy? Yes. Let me give an example based on a similar case, not the original example. A trial was done comparing two options with a two-year follow-up. In one of the papers written about the data, it was stated that there was only one case of a massive infection and that patient was HIV positive. There is no way that data can now be released with that case in it. If you remove the case, the data set will be different and, from the published results, it will be possible to estimate the age, sex, etc. of the missing case. You cannot assume that, with the correct resources and knowledge, no one can trace that patient and therefore their identity. Many of us can see how it can be done.

The question of errors is, in most cases, minor. Errors abound. Reviewers should spot many of them, but often we do not—the extra zero changing 0.0002 to 0.00002, the wrong *p*-value quoted, sometimes the wrong subscript in an equation. If the main outcome is not affected, most people admit it at meetings, but otherwise accept that these things happen. There is a paper from the 1980s—a very important paper that I often refer people to—that has an attachment to its web version admitting an error in the logarithm base used. It is still an important paper.

The other problem is that many data sets are used many times over (reducing, of course, the value of successive analyses) and often used internally for graduate work. Releasing the data set for others wastes the time and resources invested in the data set, as well as requiring new institutional reviews. Even data without human subjects takes time and money to collect the specimens, prepare for study, and run tests, often requiring nightly trips to the laboratory. Why not join up with a research group [or] tutor technicians and students in return for the later use of the data? The best one can do is create dummy data sets for teaching. It is what I preferred to do.

Sincerely,
M. G. E. Peterson
Consultant

January's letter to the editor from Jay Devore reports on his difficulties obtaining data sets from journal article authors. Barring the privacy, proprietary, and other concerns offered by M.G.E. Peterson, few of us would disagree that sharing data should be part of the scientific community's culture.

Affirming "data sharing is essential for expedited translation of research results into knowledge, products, and procedures to improve human health," the National Institutes of Health (NIH) has a strong data-sharing policy (*http://grants.nih.gov/grants/guide/notice-files/NOT-OD-03-032.html*) and facilitates appropriate data sharing.

NIH officials in the Office of Extramural Research (OER) recommend the following process for requesting data, assuming the data are appropriate for sharing:

i) Approach the principal investigator (PI) of the NIH grant that funded the data you seek

ii) If unsuccessful, have your institution's research/grant administration office approach the PI's home institution research/grant administration office

iii) If unsuccessful, have your institution's research/grant administration office approach the NIH extramural research office of the institute or center that funded the grant

iv) If unsuccessful, contact OER for additional guidance

Resistance to data sharing was brought to my attention on my first day with the ASA by Stan Young of the National Institute of Statistical Sciences (NISS). In 2008, Young and I selected a data set produced by two NIH grants and followed the above procedure, except that we contacted the PI directly because, at that time, the OER procedure did not specify a research/grant administration office should carry out steps i and ii. After step ii, the PI emailed me, saying her group would not provide the data because it didn't have to (since its grants were funded prior to NIH's 2003 data-sharing policy.)

Not finding step iii helpful, I contacted OER again and an officer was assigned to assist Stan and me. His approach was to facilitate communication between parties and provide them with guidance on NIH policies. He recommended that the contact be between the research/grant administration offices of the requestor and the PI since institutions, as the actual grant recipients, are responsible for administering the grants consistent with the terms and conditions of the grant award. He offered to provide guidance on NIH policies to both administration offices and to facilitate communication between the institutions if the discussions did not progress satisfactorily.

For more assistance on NIH sharing policy issues, OER provides an email address (*sharing@nih.gov*) and a web site highlighting various NIH sharing policies (*http://sharing.nih.gov*).

This process is involved and takes time and persistence. It is also not guaranteed to yield success; Stan's and my request has yet to yield the data. (I did not track the process after the administration office to administration office contact was recommended.) Nevertheless, I see the NIH process as the most promising route in the short run if one is seeking data obtained through an NIH grant.

Devore also stated, "Authors of an article to be published in a nonproprietary journal have an obligation to make their data available to anyone requesting it." While I'm not sure how one convinces other journals to adopt such a policy, the *Journal of the American Statistical Association (JASA)* does have a data policy (*http://pubs.amstat.org/page/jasa/information-for-authors*) along these lines: "Whenever a data set is used, its source should be fully documented. When it is not practical to include the whole of a data set in the paper, the paper should state how the complete data set can be obtained." Unfortunately, I think *JASA* is more the exception than the rule.

Steve Pierson
ASA Director of Science Policy
pierson@amstat.org

Dear Editor,

I write to draw attention to an odd error on Page 33 of the January issue of *Amstat News*. The statement is made that Karl Pearson used Weldon's data "… when developing the chi-square statistic." I have not checked early issues of *Biometrika*, but I am almost certain that KP never mentioned "the chi-square statistic." He would always have written the Greek character, and not a representation as a pseudo-English word, but, in speech, he would certainly have said "chi squared"!

When some 70 years ago I first encountered North American statistical texts, I was surprised by the use of "square," where British usage is always "squared," but of course I had to learn that, in mathematical speech, generally USA practice is always to say "x square" for what my earliest algebra lessons had taught me to call "x squared."

I have written semi-facetiously about something of no deep importance to statistics, but I think we can be sure that KP followed English educational custom. I knew Egon Pearson quite well and would certainly have noticed if his usage had differed. I suggest that *Amstat News* could spare a paragraph to comment on historic origins. What is the practice in other modern European languages? I am almost certain that French is equivalent to my side of the English Channel, but I cannot answer for German or Spanish, etc. I expect that Stephen Stigler would know.

Sincerely,
David J. Finney

I would like to thank Dr. Finney for his attention to detail. Indeed, he appears to be exactly correct. I examined two articles [written] by Karl Pearson in 1900 and 1934 ["On the Criterion That a Given System of Deviations from the Probable in the Case of Correlated System of Variables Is Such That It Can Be Reasonably Supposed to Have Arisen from Random Sampling," *Philosophical Magazine*, and "On a New Method of Determining 'Goodness of Fit,'" *Biometrika*] and one by Egon Pearson in 1965 ["Some Incidents in the Early History of Biometry and Statistics, 1890-94," *Biometrika*], and they use the symbol X^2. In *Biometrika*, the words "chi-squared" are used consistently. Searching online in Web of Science for "chi-square" produced nothing in recent years, but "chi-squared" produced several articles.

Robin Plackett, in her 1983 article in the *International Statistical Review*, "Karl Pearson and the Chi-Squared Test," also used "chi-squared." However, I regret to inform Dr. Finney that it is not difficult to find prominent sources, such as the NIST/SEMATECH e-Handbook, using "chi square."

Weldon's data, which inspired [Karl] Pearson and motivated the article by Zacariah Labby in Vol. 22, No. 4 of *CHANCE* magazine, also appear in [Karl] Pearson's 1900 *Philosophical Magazine* article.

Michael D. Larsen
Editor, *CHANCE*

The Federal Budget Request for FY 2011

Keith Crank, ASA Research and Graduate Education Manager

On January 27, President Barack Obama gave his State of the Union address. In it, he said he would not increase discretionary spending (except for national security activities), beginning with the 2011 budget. On February 1, he submitted his fiscal year (FY) 2011 budget to Congress. How well does the budget request match his address? And what does it mean for the National Science Foundation (NSF) and National Institutes of Health (NIH), as both agencies fall into the nonsecurity, discretionary spending category?

The total request is $3.8 trillion, compared to an estimated $3.7 trillion for FY 2010. Of this, only $0.5 trillion is nonsecurity, discretionary spending. The FY 2011 request for this category reflects a 6% decrease from FY 2010. (Security-related discretionary spending is $0.9 trillion, which is a 5% increase over FY 2010.)

For NSF, the FY 2011 request is $7.4 billion, which is an 8% increase over the FY 2010 appropriation of $6.9 billion. This increase is not spread evenly over the various directorates at NSF, and the Mathematical and Physical Sciences Directorate (MPS) will see only a 4.3% increase. This, of course, also is not spread evenly, and the Division of Mathematical Sciences (DMS) will receive a 5% increase under the president's budget request.

DMS also is dropping some of its educational activities. Programs that will be discontinued include VIGRE, SCREMS, IGMS, and CSUMS. While some of the funds used for these programs will be used for other educational activities, the education budget for the division is expected to decrease by about $2 million. Overall, the budget for the core research activities in the division is expected to increase by more than $13.5 million, or about 6.6%.

The Measurement, Methodology, and Statistics Program (MMS) within the Social, Behavioral, and Economic Sciences Directorate (SBE) also provides funding for statisticians. Although SBE will receive a 5.3% increase under the president's budget, the research divisions within SBE will see only a 3% increase in the research portion of their budgets.

As with NSF, the president's budget includes an increase for NIH. However, the increase is a more modest 3.2% increase over FY 2010. It's impossible to tell how much is spent on statistics and biostatistics, but over the past few months, the ASA has made a strong effort to emphasize the importance of our discipline to the NIH research activities.

It's a long way from the president's budget request to the congressional appropriations, and it will be many months before we see what happens this year. In a time when everyone is talking about "fiscal responsibility," it may appear the 8% increase for NSF is unlikely. But, the report accompanying the 2010 appropriations strongly encouraged the president to keep NSF on its doubling path, so there is reason to be optimistic.

To contact me, send an email to *keith@amstat.org*. Questions and comments are always welcome. ■

Budget Requests

Details about the NSF and NIH budgets can be found at the following:

NSF: *www.nsf.gov/about/budget/fy2011/index.jsp*

NIH: *http://officeofbudget.od.nih.gov/br.html*

This month's guest columnist, building on the themes of recent National Research Council reports, makes a strong case for more rigor and statistics in forensic science. Calling for a new agency to lead the way, Spiegelman urges fellow statisticians to help realize the changes many deem necessary.

~Steve Pierson, ASA Director of Science Policy, *pierson@amstat.org*

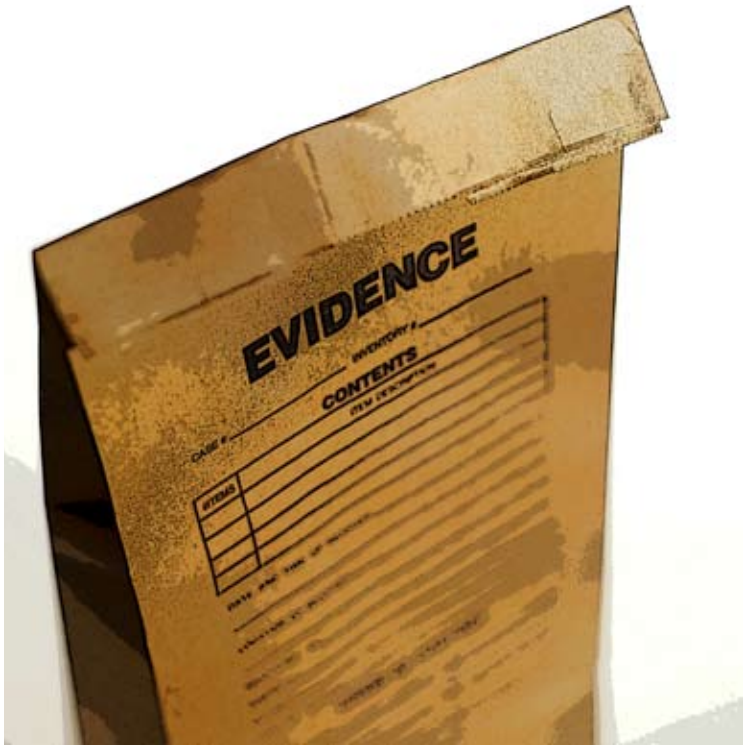
Weak Forensic Science Has High Cost

Clifford Spiegelman, Texas A&M University Department of Statistics

Forensic science is perceived by many as the "magic bullet" that links evil deeds to specific people. This is the story line of movies, television shows, and books. Few forensic examiners or technicians in these shows make errors, and when they are made, they are caused by 'rogue' forensic examiners or over-zealous technicians who do not follow accepted procedures.

In the real world, forensic science is used to determine occurrences and reconstruct crimes. It is used to identify suspects and possible crime scenes and to eliminate others. It also is used in criminal trials and appeals. Key to forensic science's use in the real world is the confidence that law enforcement, the judicial system, and society at large place in it.

As currently constructed, however, the practice of forensic science should largely get a no-confidence vote, with the possible exception of DNA evidence (even though the scientific community has yet to be allowed access to the DNA database.) Indeed, Michael Saks and Jonathan Kohler, in a 2005 *Science* review article, name forensic science testing errors as a contributing factor in 63% of the wrongful convictions in 86 DNA cases studied by the Innocence Project. False or misleading statements by forensic examiners contributed to 27% of the false convictions studied.



The painful truth is that nearly all forensic procedures have been developed without much involvement from the statistical community or enough involvement from the independent, university-based scientific community or federal research labs.

As a result, forensic results are typically stated with uncertainty statements that cannot be supported. For example, it is typical in firearm toolmark identifications to state that, to a practical certainty, the defendant's gun fired the bullets found in a decedent. Two recent National Research Council (NRC) reports (*www.nap.edu/catalog.php?record_id=12589* and *www.nap.edu/catalog.php?record_id=12162*) conclude there is no statistical foundation for such an absolute statement. Also, some federal and state jurisdictions recently ruled that firearm toolmark examiners may only testify that it is more likely than not that the defendant's gun fired the bullets found in a decedent. (See *State of Ohio v. Anderson* and *U.S. v. GLYNN*.) That is, the courts require only a better than 50-50 chance of a match.

The broader scientific community has noted the blatant failures of forensic science, but the justice system has not paid careful enough attention. In a December 3, 2003, editorial, *Science* editor-in chief Donald Kennedy wrote, "It's not that fingerprint analysis is unreliable. The problem, rather, is that its reliability is unverified either by statistical models of

Probability Statements Should Be Introduced into Scientific Testimony

A probability of a match, unless that probability is practically zero or one, would be a key first step to improving forensic science. In the case of the convicted Martin Luther King Jr. assassin, the James Earl Ray rifle was determined to be an inconclusive match to the assassination bullet by all of the several examiners used by the House Select Committee on Assassinations (HSCA). A finding of an 80%, 50%, or 20% chance of a match, along with an interval of uncertainty for that chance, would have been informative to Congress, the public, and possibly the judicial system. In current murder cases, it would provide a measure of the strength of evidence.

Current presentations in court state that when the match of the defendant's gun to a murder bullet is inconclusive, the prosecutor can state that the bullet could well have come from the defendant's gun. A probability for a match would be helpful to assess a proposed match. In addition, matches should be specific to a subclass of weapons. The uniqueness of firearm toolmarks has never been established. Using probability statements that can be defended is in the best interests of the defense and prosecution, and it will help the courts to make correct decisions more of the time. Such statements also are supported by the National Resource Council's *Strengthening Forensic Science in the United States: A Path Forward*, which recommends establishing a National Institute of Forensic Sciences.

Methods that produce probability statements have yet to be tested and will require the cooperation of law-enforcement agencies. I was recently part of a group invited to submit a full proposal to the National Institute of Justice to test a method in District of Columbia (DC) criminal cases that would produce viable probability statements that could be defended through an application of Bayes' theorem. While the DC Public Defender's Service agreed to participate in the proposed research, the DC Metropolitan Police Department did not, so the full proposal did not go forward. Without the cooperation of law enforcement, having bullets and weapons available for experimentation is impossible without case-by-case litigation.

A successful test of this method would be a good precursor to trying the method on the bullet fragment recovered from Martin Luther King Jr. It would provide the probability of a match to the James Earl Ray rifle and rifles with similar subclass characteristics.

While automated identification in our proposal was not available at the time of the HSCA study, Bayes' theorem and Bayesian methods were. Had there been input from statisticians, it is likely that information that is more useful would have been provided to Congress.

fingerprint variation or by consistent data on error rates. Nor does the problem with forensic methods end there. The use of hair samples in identification and the analysis of bullet markings exemplify kinds of 'scientific' evidence whose reliability may be exaggerated when presented to a jury." Other points of view, mostly from within the forensic science community, are more sympathetic to the current state of forensic science.

I and several colleagues recently showed that the House Select Committee on Assassinations' (HSCA) compositional bullet lead analysis (CBLA) study in the JFK investigation was seriously flawed. The two other assassinations studied by the HSCA were those of Martin Luther King Jr. and Sen. Robert F. Kennedy. I have looked at the forensic aspects of both investigations. In the Martin Luther King Jr. investigation, forensic science likely could have provided more help, and the issue can still be addressed. The practice of firearm toolmark examiners then (and now for the most part) was to attribute a weapon to a crime scene to a practical certainty. Other possible decisions by the examiners are that the weapon was certainly not involved in the crime (a finding that is rarely made if the brand of weapon is a possibility) or that the findings are inconclusive.

Much needs to be done to make forensic science more scientific. In "Probability Statements Should Be Introduced into Scientific Testimony," I make the case for introducing probability statements in science testimony. That faces resistance, however, in that a key police agency has declined participation in a study of one proposed method.

The NRC report *Strengthening Forensic Science in the United States: A Path Forward* had many recommendations, one of which I'll highlight. To address the identified lack of rigorous certification programs for forensic scientists, of strong standards and protocols for analyzing and reporting on evidence, and of peer-reviewed journal articles on scientific bases and reliability of many forensic methods, the report called for the establishment of a National Institute of Forensic Sciences (NIFS). Requirements for the NIFS include the following:

- It must be an independent federal agency established to address the needs of the forensic science community
- It must have a culture that is strongly rooted in science, with strong ties to the national research and teaching communities, including federal laboratories

- It must have strong ties to state and local forensic entities, as well as to the professional organizations within the forensic science community
- It must not be in any way committed to the existing system, but should be informed by its experiences
- It must not be part of a law-enforcement agency
- It must have the funding, independence, and sufficient prominence to raise the profile of the forensic science disciplines and push effectively for improvements
- It must be led by persons who are skilled and experienced in developing and executing national strategies and plans for standards setting; managing accreditation and testing processes; and developing and implementing rulemaking, oversight, and sanctioning processes

The NRC also noted that no federal agency exists that meets these well-considered and important criteria.

The Innocence Project, based in New York City, is taking a coordinating role in implementing many of the NRC forensic science recommendations through a coalition called Just Science. I have signed their petition to Congress to establish an agency like NIFS and would encourage readers to do the same: *www.just-science.org*.

It is time for forensic science to become part of the mainstream scientific community. Probability statements in scientific statements are one step. NIFS is another. Statisticians should be integrally involved by educating the public about the weaknesses of forensic science, urging and developing solutions, and working with forensic scientists. ■

Statistics Key in Financial Services Industry

Sami Huovilainen

Statistics has a long history in the financial services industry. Initially, the primary application of statistical methods was predicting risk, which intensified when the first credit-scoring systems were built in the 1950s. Today, the financial services industry is considered one of the most information-driven industries, where analytics and statistical models play a key role in decisionmaking every day. Statistical tools are applied in reducing loss, generating revenue, segmenting customers, and modeling web data. The rapid increase in easily accessible data has resulted in the growing need for analysts with expertise in statistics.

What Is Decision Management?

In the consumer bank division of Citigroup, the decision management group strives to improve its global network and experience from an array of markets, businesses, and financial products to do the following:

Develop tools and insight to support a comprehensive consumer-driven business strategy

Uncover strategic growth opportunities by providing partners an objective perspective and proven approaches

Enable partners to make better business decisions through ground-breaking, analytical solutions

Supply partners with a cost-effective and efficient process and infrastructure for providing analytics globally

The work entails using advanced statistics techniques and mining large amounts of customer data to help the organization make decisions that enable growth and profitability. The environment is fast paced, and most data-driven recommendations prepared by analysts are quickly executed by business managers.

Working in decision management means continuous problemsolving, and many of those problems involve advanced statistics techniques. Throughout my 10-year career in the credit card industry, I've put my statistics and economics coursework to good use. In a broad sense, my day entails keeping up with the global economic environment, understanding competitors' moves, modeling consumer behavior, and applying statistical methods to various situations to uncover growth opportunities.

Talent Profile

While business knowledge, ability to influence, analytical skills, and financial acumen are all important for success in decision management, a deep knowledge of statistical methods is critical. Today's competitive environment drives companies to compete with analytics, making it important for decision management teams to stay abreast of state-of-the-art tools and methods.

At CitiCards, about 70% of the analysts have graduate degrees, and about 10% of these are PhDs in quantitative disciplines. Some choose to focus on tool development, while others prefer a combination of applying statistics tools and finance to develop business strategies.

Career in Decision Management

Perhaps the most appealing aspect of my career has been the endless amount of learning and development opportunities. Citi, in particular, places a premium on developing its employees. In addition to enhancing quantitative skills, one can develop people management skills and learn about finance and international markets. Also, given that the industry is information driven, my academic background in statistical methods (e.g., generalized linear models, decision trees) has been strengthened through daily interaction with business leaders. These opportunities have enabled me to provide valuable solutions and insight.

The good news for graduating statisticians is that many industries are applying statistics in decisionmaking, thus creating many career opportunities. The financial services industry is an exciting and rewarding place to work. I've seen rapid expansion in decision management's role—and I don't see an end to that pattern. ■

Judges Wanted for ASA Project Competition

The ASA/NCTM Joint Committee on Curriculum in Statistics and Probability is seeking judges for the ASA Project Competition. Judging takes place via email during the summer and requires about four hours. If interested, email Megan Mocko at *mmeece@stat.ufl.edu* or call (352) 273-2975.

Conferences Celebrate C. R. Rao's 90th Birthday

S. B. Rao and T. J. Rao, C. R. Rao Advanced Institute of Mathematics, Statistics, and Computer Science

Two recent conferences celebrated the 90th birthday of C. R. Rao, a Fellow of the American Statistical Association. The International Conference on Frontiers of Interface Between Statistics and Sciences took place in Hyderabad, Andhra Pradesh, India, December 30, 2009, through January 2, 2010, and was organized by a new institute named after C. R. Rao: C. R. Rao Advanced Institute of Mathematics, Statistics, and Computer Science (C. R. RAO AIMSCS). The Advances in Statistical Science conference took place in Kolkata, West Bengal, India, January 10–11 and was organized by the Indian Statistical Institute (ISI).

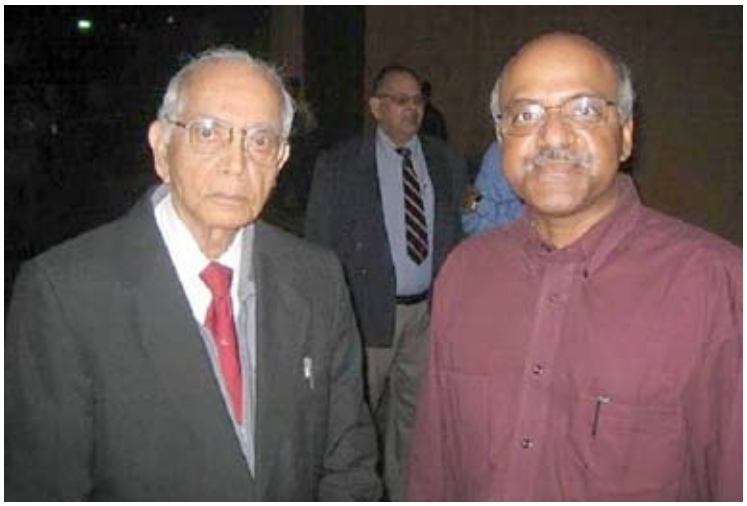
The Hyderabad conference was attended by 250 people from the United States, Europe, and Japan and a number of C. R. Rao's students working in different parts of the world. The highlights of the conference were plenary talks by Abel Laureate S. R. S. Varadhan, IEEE Medal of Honor Laureate T. Kailath, and Robert Koch Fellow S. E. Hasnain and the presentation of about 170 research papers on bioinformatics, econometrics and socioeconomic planning, astrostatistics, machine learning, game theory, data mining, mimo wireless, operations research, cryptology, environmetrics, and multivariate statistical inference.

A one-day session was organized by K. R. Parthasarathy on quantum statistical inference that highlighted the role of the quantum Cramér-Rao bound, which provides a more precise bound than Heisenberg's principle of uncertainty.

T. J. Rao and G. M. Naidu organized a session devoted to research contributions made by C. R. Rao that generated several technical terms in statistics bearing his name and led to considerable research. In sessions organized by J. S. Rao, references also were made to his contributions to multivariate analysis, diversity measures, and characterizations of probability distributions.

T. N. Srinivasan and T. K. Kumar organized sessions on econometrics, and A. Kondapi organized sessions on biotechnology.

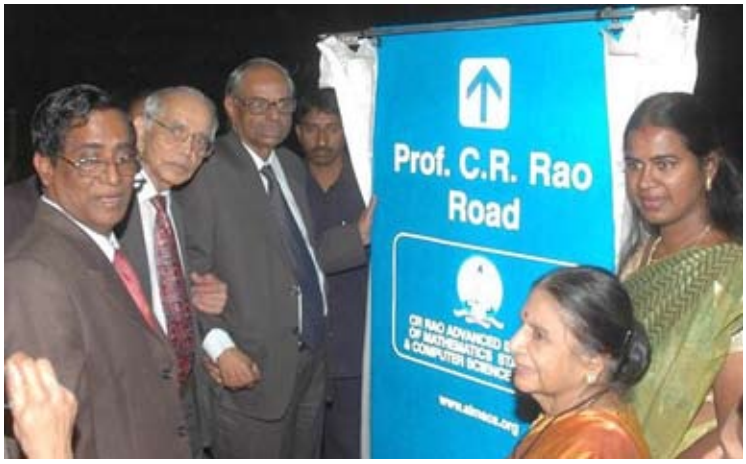
The conference was inaugurated on December 30, 2009, with a function to honor C. R. Rao for his achievements in the field of statistics and his service to India. A highlight was the release of a special postal cover bearing a portrait of C. R. Rao and cancellation with the logo of C. R. RAO AIMSCS.



From left: C. R. Rao with ASA President, Sastry Pantula

Chief Post Master General of Andhra Pradesh Circle releases the special postal cover in honor of C. R. Rao in the presence of C. Rangarajan, chair of the Prime Minister's Economic Advisory Council, and S. E. Hasnain, vice chancellor of the University of Hyderabad.

On the eve of the international conference, a function was held to celebrate the opening of Prof. C. R. Rao Road, a stretch covering the University of Hyderabad and several educational institutions. The



Mayor B. Karthika Reddy unveils Prof. C. R. Rao Road in the presence of C. Rangarajan, chair of the Prime Minister's Economic Advisory Council, while Rao's wife, Bhargavi, looks on.

Greater Hyderabad Municipal Corporation resolved to name the road after C. R. Rao in recognition of the services rendered by the "legendary figure of Indian Science, Padma Vibhushan Prof. C. R. Rao, world's renowned statistician."

The conference in Kolkata also was well attended by participants from a number of countries. A highlight of the conference was the presentation of an album containing 168 photos taken of C. R. Rao with others at various functions during his 40 years of service at ISI.

At the age of 90, C. R. Rao continues to be active, publishing research papers and promoting statistical education and research in India. He has published about 50 papers and helped edit 14 statistics handbooks since he retired in 2000. ■

IISA and ISPS Joint Conference

Sessions Focus on Younger Statisticians

K. S. Rao, Local Organizing Committee Chair; S. Rao Jammalamadaka, International Organizing Committee Chair; Sastry Pantula, ASA President; R. C. Tiwari, International Indian Statistical Association President

The focus was on younger statisticians during the International Indian Statistical Association (IISA) conference that took place January 4–8 at Andhra University in Visakhapatnam, Andhra Pradesh, India. J. L. Narayana made a passionate plea for appropriate critical thinking and statistical training for the next decade, a theme that was repeated in sessions such as "Some Emerging Issues in Clinical Trials," "Accelerating Pharmaceutical Development," "Use of Statistics in the Pharmaceutical Industry," "Statistics in Agriculture," and "Statistics as a Profession." ASA members who attended included ASA President Sastry Pantula, ASA Executive Director Ron Wasserstein, and ASA Past Vice President Bob Rodriguez.

In all, 512 people, including 30 students, attended the conference. There were six plenary sessions, 48 special invited sessions, 39 invited sessions (contributed paper sessions), and four sessions on student paper competitions. Plenary speakers were C. R. Rao, S. R. S. Varadhan, S. Rao Jammalamadaka, Robert Elston, J. L. Narayana, and B. L. S. Prakasa Rao.

There were also competitions for the Nair Young Statistician Award and MS Project Presentation Award. Young researcher awards went to P. G. Sankaran of Cochin University of Science and Technology and Ranjan Maitra of Iowa State University. Best student paper presentation awards were given to Rejeesh John of Cochin University of Science and Technology and C. L. Usha of Al-Ameer College of Engineering and IT, Vizag. Also recognized were N. Balakrishnan and Kirti Shah for their service to IISA and J. K. Ghosh, who received the IISA Life-Time Achievement Award.

C. R. Rao, Jammalamadaka, Narayana, Pantula, P. Rajasekhar Reddy, and R. C. Tiwari were honored in a special ceremony. Photographs are available at *http://picasaweb.google.com/ksraoau*.

The next IISA conference will be held April 21–24, 2011, at North Carolina State University. For more information or to offer suggestions, contact Ghosh at *ghosh@stat.ncsu.edu*. ■

ISOSS Conference in Cairo a Success

Shahjahan Khan, ISOSS President

Standing (from left): Kaye Bashford (Australia), Sharif A. Abdelhalim (IDB, Saudi Arabia), Magued Oslam (LOC chair, Egypt), Jef Tuegels (ISI president, Belgium), Zeinab Amin (LOC co-chair, Egypt), Mohammad Hanif Mian (ISOSS vice president, Pakistan), Edward Wegman (USA), and Jim Berger (USA); Sitting (from left): Shahjahan Khan (ISOSS president, Australia), Wafik Younan (LOC treasurer, Egypt), and Ali S. Hadi (ISOSS president-elect, USA/Egypt)

Opening session of ICCS-X (from left): Jef Tuegels (ISI president), Shahjahan Khan (ISOSS president, Australia), Lisa Anderson (AUC provost), Magued Osman (LOC chair, Egypt), and Ali S. Hadi (ISOSS president-elect, USA/Egypt)

More than 300 people attended the 10th Islamic Countries Conference on Statistical Sciences (ICCS-X), held at the American University in Cairo (AUC) in New Cairo, Egypt. The conference was dedicated to the late Mir Maswood Ali, a statistician from Bangladesh and founder of the department of statistical and actuarial sciences at the University of Western Ontario, Canada.

In the opening session, AUC Provost Lisa Anderson spoke about the importance of statistics, from ancient times to the modern day. ISOSS president Shahjahan Khan emphasized interaction between statisticians from developed countries and those in developing countries—especially with those of the IOC member states—for improving the quality of government statistics and statistical research and enhancing its state-of-the-art applications. Magued Osman, chair of the local organizing committee and head of IDSC, spoke about the role statistics plays in development and good governance. Ali S. Hadi, vice provost of AUC and editor of *ISI Review*, welcomed participants and spoke about the scientific and cultural activities of the conference.

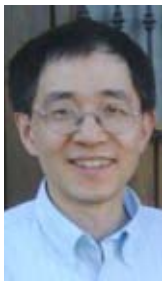
The highlights of the conference were the four keynote speakers. Jef L. Teugels, president of the International Statistical Institute, talked about extreme value distributions with applications. He analyzed data from natural disasters with extremes coming from the 1970 cyclone in Bangladesh and Hurricane Katrina. Jim Berger covered Bayesian adjustments of multiplicity in the testing regime of a huge number of tests coming from multidisciplinary scientific studies. Edward Wegman, who testified in front of Congress twice on the scientific aspects of climate change, discussed the rapid changes in data science and the challenges of analyzing large data sets for scientific applications. Kaye Bashford, former president of the Statistical Society of Australia, discussed applications of multivariate data analysis for determining the best quality of wheat production.

A series of panel discussions related to the conference theme—Statistics for Development and Good Governance—was presented along with invited sessions. Topics discussed during the sessions included statistics education, demography and aging, small-area sampling, medical meta-analysis, statistical inference, and directional data analysis.

Details about the conference and other ISOSS activities can be found at *www.isoss.com.pk*. ■

Proposals Sought for Late-Breaking JSM Sessions

Xuming He, JSM 2010 Program Chair



He

JSM Pro-gram Committee members begin planning the JSM program a year before the meeting takes place, allowing them to organize such a large meeting. However, to include sessions on new developments of high interest, they hold back two invited session slots for late-breaking talks. Members of the American Statistical Association, Institute of Mathematical Statistics, Statistical Society of Canada, International Biometric Society (Eastern/Western North American Region), International Chinese Statistical Association, and International Indian Statistical Association are encouraged to submit a proposal for one of these sessions by April 17.

A late-breaking session must cover one or more technical, scientific, or policy-related topics that arose in the one-year period prior to JSM 2010. Proposals for late-breaking sessions must be emailed to JSM 2010 Program Chair Xuming He at *xuming.he@gmail.com* with a copy to the ASA Meetings Department at *meetings@amstat.org* and include the following:

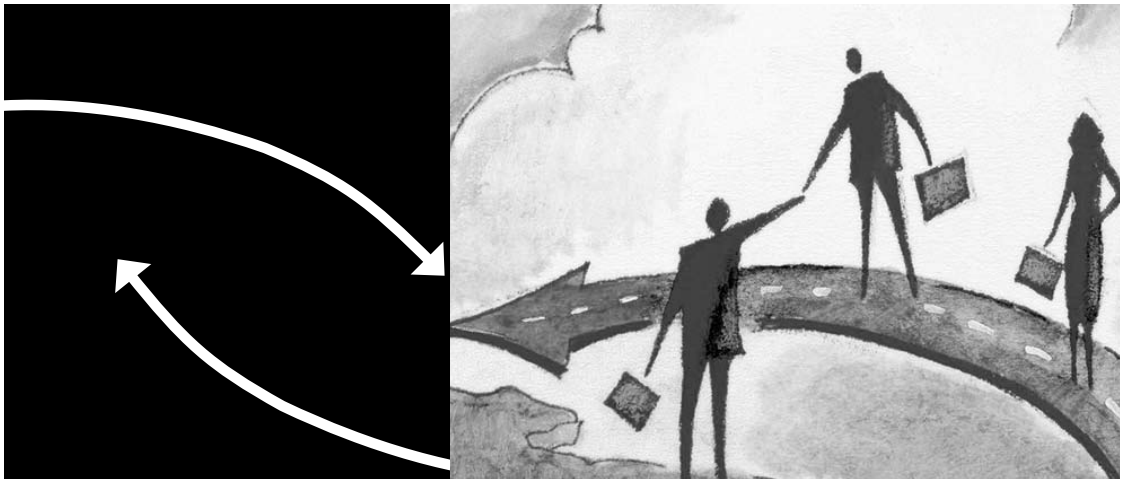
- Session description, including title, summary of statistical and scientific content, explanation of timeliness, and comments about the target audience
- Session format (e.g., chair and four panelists; chair, two or three speakers, and discussant)
- Names, affiliations, and contact information for the session organizer, chair, and all participants
- Title for each presentation
- Web links to relevant technical reports or news reports, if applicable

Organizers should make sure all participants agree to participate before the proposal is submitted. The JSM participation guidelines state that a speaker can give a main presentation and participate in a late-breaking session.

Two late-breaking sessions will be selected from the proposals received by April 17. Proposals will be judged on statistical and scientific quality, novelty, timeliness of the subject, potential audience appeal, and completeness. A description of the late-breaking sessions and other special sessions will appear in a later issue of *Amstat News*. ■

ASA invites you to help with our

member get a member campaign



Invite your colleagues to join the ASA, or tell us who they are and let us do the work!

get involved:

Direct your colleagues to join online today at *www.amstat.org/mgm*

Provide us with your colleagues' names online at *www.amstat.org/mgm* and we will do all the work

Go to *www.amstat.org/mgm* and print the applications to distribute in-person

Every time someone you refer joins, you will receive a* $10 gift certificate* *good for any ASA product or service.

***member get a member** certificates are processed and awarded quarterly.*

Chance Project Moves to CAUSEweb


Snell

Beginning March 15, the online materials that support the Chance Project will move to *www.CAUSEweb.org/wiki/chance*. Laurie Snell has overseen development of these materials at Dartmouth College for nearly two decades, but hopes to 'really' retire after celebrating his 85th birthday this year. Jeanne Albert and Bill Peterson of Middlebury College will assume the editorial duties.

The Chance Project began as a teaching course introduced by Snell and Peterson in the early 1990s through funding from the Pew Foundation. The goal was to help students become critical readers of news stories that involve probability and statistical reasoning. With subsequent support from the National Science Foundation (NSF), the project team expanded to include Peter Doyle of Dartmouth College, Joan Garfield of the University of Minnesota, Tom Moore of Grinnell College, and Ngambal Shah of Spelman College.

Over the years, project activities have included summer workshops for faculty, a lecture series featuring outside experts, and ongoing development of web materials. Dan Rockmore of Dartmouth and Charles Grinstead of Swarthmore became key collaborators in the last two areas.

The project's constant has been its electronic newsletter, *Chance News*, which abstracts current news stories and suggests class discussion questions. From 1992 to 2004, the newsletter was compiled and distributed by the Chance team; however, it moved to a wiki format in 2005, which allows readers to add new articles and edit existing ones. ■

Upcoming Webinars

For those interested in learning more about the wiki environment, tune in at 2 p.m. Eastern time on April 13, when Jeanne Albert and Bill Peterson discuss the philosophy of the Chance Project and the mechanics of posting online contributions. Register for the webinar at *www.CAUSEweb.org/webinar*.

Other upcoming CAUSE webinars include those in the Teaching & Learning series on the second Tuesday of each month, hosted by Jackie Miller of The Ohio State University, and those in the activity series on the fourth Tuesday of each month, hosted by Leigh Slauson of Capital University.

National Lab Day

"*Encouraging young people to be makers of things, not just consumers of things.*"
—President Barack Obama

President Obama recently announced the establishment of National Lab Day, a day to bring together science, technology, engineering, and math (STEM) professionals and teachers who provide high-quality, hands-on, discovery-based lab experiences for students.

To learn how you can become involved, visit *www.amstat.org/education/asa-nldresourcepage.cfm*.

Obituary
Søren Bisgaard

Bisgaard

Søren Bisgaard, Isenberg Professor of Management at the University of Massachusetts-Amherst, died in Boston on December 14, 2009, after a year-long struggle against mesothelioma.

Bisgaard was an expert on quality management and applied statistics who had an international reputation. His was recognized for his work and granted several awards, including the Ellis R. Ott Award (1990), the Wilcoxon Prize (1998), the Shewell Award (1981 and 1987), the Brumbaugh Award (1987, 1995, and 2008), the Shewhart Medal (2002), and the George Box Award (2004). He was a Fellow of the American Statistical Association and American Society for Quality and an academician of the International Academy for Quality.

Bisgaard began his studies in engineering, earning a bachelor's in production engineering from the Copenhagen College of Engineering in 1975 and a master's in industrial engineering from the Technical University of Denmark in 1979. He went on to earn a PhD in statistics from the University of Wisconsin in 1985. His broad background, together with an abiding love for the philosophy of science, was evident throughout his academic career.

From 1987 to 1998, Bisgaard was professor of industrial engineering and director of the Center for Quality and Productivity at the University of Wisconsin. He then served as professor for the Institute for Technology Management and director of the department for quality management and technology at the University of St. Gallen in Switzerland. Since 2001, he was a professor of industrial statistics at the University of Amsterdam. In 2002, he was named the Eugene M. Isenberg Professor of Technology Management in the Isenberg School of Management at the University of Massachusetts-Amherst, a post he held until his death. He was the Isenberg school's interim dean from 2006–2007.

Bisgaard published numerous papers, books, and book chapters on topics related to industrial statistics and quality engineering. His research was fueled by real problems, often those encountered while consulting. His training

as an engineer was instrumental in leading him to important applied problems and in understanding their basic structure; his background as a statistician and scientist led him to general solutions with wide application. Bisgaard's "Quality Quandaries" articles in *Quality Engineering* were a noteworthy vehicle for reaching a broad audience of industrial practitioners. He was interested in applying quality improvement techniques to a variety of public issues, as illustrated in his most recent book: *Solutions to the Healthcare Quality Crisis: Cases and Examples of Lean Six Sigma in Health Care*.

Bisgaard was a leader in industrial statistics. He was in demand as a keynote speaker for international conferences and as a consultant for major corporations. He served on the editorial boards of the *Journal of Quality Technology, Quality Engineering*, and *Technometrics* and was, for many years, on the management committee of *Technometrics*. Bisgaard was frequently asked to serve on the selection boards for major awards in fields associated with quality improvement and applied statistics. He played a major role in establishing the European Network of Business and Industrial Statistics (ENBIS), which advanced industrial statistics in Europe and illustrated his commitment to organizing and supporting the nexus between academics and statistical practitioners in industry and business.

Alongside his many professional accomplishments, Bisgaard will be remembered for his generosity and support of young colleagues, insight and erudition, love of sailing (true to his Danish upbringing, he was an expert sailor), strong principles and high academic standards, good spirits, personal charm, and warm companionship.

Bisgaard is survived by his wife, Sue Ellen Bisgaard, and brothers—Jesper, Peter, and Jens—and their families.

Contributions in his memory may be made to the International Mesothelioma Program at *www.impmeso.org* or ENBIS at *www.enbis.org*.

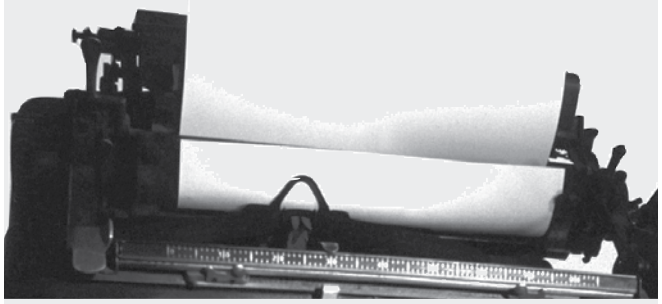
Obituary
James F. Hannan

James F. Hannan, a professor emeritus in the Department of Statistics and Probability at Michigan State University, died January 26, 2010; he was 87.

Hannan was born in Holyoke, Massachusetts. After early graduation from St. Michael's College, he served in World War II as a meteorologist for the Army Air Corp in India and China. Following the war, he accomplished graduate work at Harvard (MS, 1947) and the University of North Carolina (PhD, 1953). Hannan taught three years at Catholic University in Washington, DC and joined Michigan State University in 1953. Perhaps he is best known for his work in repeated games and compound and empirical Bayes decision theory. He was recognized as a Fellow of ASA and IMS. Details of his interesting life will appear in "A Conversation with James Hannan" in *Statistical Science*. ■

STATISTICIANS IN THE NEWS

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



Michigan State Winter University program in Naples takes on education

Michigan State University education expert, and ASA member, William H. Schmidt spoke about "Education in a Global Context" to an audience of 100 alumni and others during the 14th annual Winter University program held January 20 in Naples, Florida

The Luckiest Places to win the lottery

Statistician Stacie Taylor helps readers of the WHIO.tv web site in Dayton, Ohio pick their lottery numbers. Taylor said random auto-picks is a good way to go and suggests picking a game with fewer number choices.

OO-ALC chief of staff retires

Aksel Aydoner, operations and research analyst and mathematical statistician at Ogden Air Logistics Center in Utah, retired January 29 after 33 years with the career of federal service.

Smithsonian Congress of Scholars Annual Symposium

ASA member Juanita Tamayo Lott gave an overview of the Ethnic Studies movement she helped pioneer during the Smithsonian's symposium: Activist Scholars Looking Forward/Looking Back: Bringing Culturally Diverse Scholarship to the Smithsonian.

Statistics and the Environment

Nominations Sought for Two Awards

The Section on Statistics and the Environment (ENVR) is seeking nominations for the ENVR Distinguished Achievement Award and the new ENVR Young Investigator Award. Both awards are given in recognition of outstanding contributions to the development of methods, issues, concepts, applications, and initiatives of environmental statistics. The Young Investigators Award is meant to encourage and recognize younger members of the environmental statistics community.

We use a broad definition of environmental statistics—from theoretical/foundational through applications and policy—and seek to recognize the full range of activities of academic, government, and industrial statisticians and scientists engaged in statistics and the environment. Environmental statistics is interdisciplinary and outstanding contributions may occur outside of traditional niches defined by disciplines.

To be eligible for a Distinguished Achievement Award, nominees must have made distinguished contributions to environmental statistics; joined ENVR at least three years prior to June 1, 2009; and not have received the award in a previous year (see *www.amstat-online.org/sections/envr/ssedaap.html*).

Criteria for the Young Investigators Award include having made distinguished contributions to environmental statistics; being a current member of ENVR; not being a recipient of the Distinguished Achievement Award from a previous year; and not having reached his or her 41st birthday during the calendar year of the award. (In the special case of an individual who has received his or her terminal degree in statistics fewer than 12 years prior to the nomination deadline, a nominee will be eligible who has not yet reached his or her 46th birthday during the calendar year of the award.)

For both awards, the committee considers only those members for whom nominations are submitted. Committee members do not offer nominations but encourage members to make a thorough search for good candidates.

Nomination materials should consist of a nomination letter featuring the nominee's contributions to environmental statistics, a CV of five or fewer pages for the nominee, up to three supporting letters, and a clear statement for which of the two awards the nominee should be considered. If being considered for the Young Investigators Award, submit the birth date of the nominee. The committee will use the "Jonathanian" method of calculating the age of the nominee.

Nominations must be received by March 15 as a PDF document (preferred) or Word file. If submitting as hard copy, send the original and five copies. Submit nominations to Stephen L. Rathbun at *rathbun@uga.edu* or Department of Epidemiology and Biostatistics, 132B, Coverdell Center, University of Georgia, Athens, GA 30602.

The awards committee will make the selection and successful nominees will receive their awards at the ENVR business meeting and reception during the Joint Statistical Meetings in Vancouver in August 2010. Questions regarding the award should be addressed to Rathbun at *rathbun@uga.edu.* ■

Biopharmaceutical

Career Video 'Trial' Sees First Positive Result

In an effort led by section members Jeremy Jokinen and Steve Gulyas, a number of section members have been working with Creative Street Media Group to develop a web site aimed at attracting high-school and college students to biostatistics.

Section members previewed a demo of the web site and filmed statisticians talking about their jobs during JSM 2009. The video was edited and viewed during the section's November meeting in Alexandria, Virginia, and ASA Education Programs Administrator Rick Peterson was so impressed with the (not ready for prime time) effort, he shared the link on the AP Stats electronic mailing list.

Peterson soon received an email from an AP Statistics teacher in Michigan who shared the video with his students last fall. Based on that experience, one of his students is now restricting her college applications to universities that offer degrees in biostatistics—the first documented positive result for the video.

To see a preview, go to *www.amstat.org/careers/whichindustriesemploystatisticians.cfm.* ■

Bayesian Statistical Science

Short Courses, Roundtables Prepared

The ASA recently chose the final set of short courses for JSM 2010, and, among those, the Section on Bayesian Statistical Science (SBSS) is sponsoring the following three:

Bayesian Adaptive Methods for Clinical Trials, presented by Brad Carlin of the University of Minnesota, Don Berry and Jack Lee of M.D. Anderson Cancer Center, and Scott Berry of Berry Consultants—This course introduces hierarchical Bayes methods for the design, interim monitoring, and analysis of clinical trials data and demonstrates their usefulness in challenging applied settings. Methods appropriate for phases I, II, and III of the American regulatory system will be covered. Illustrations using the R, WinBUGS, and BRugs software packages also will be provided.

Bayesian Ecology: Hierarchical Modeling for Ecological Processes, presented by James Clark and Alan Gelfand of Duke University—This course will present, in substantial detail with data analysis, four illustrative process modeling contexts: forest dynamics, species distributions and biodiversity, pathogens on hosts, and species diffusion processes.

Monte Carlo and Bayesian Computation with R (cosponsored with the Section on Physical and Engineering Sciences), presented by Jim Albert and Maria Rizzo of Bowling Green State University—R tools will be described for generating random variables, computing criteria of statistical procedures, and replicating the procedure to compute quantities such as mean squared error and probability of coverage. R commands for implementing simulation-based procedures such as bootstrap and permutation tests will be outlined. The use of R in Bayesian computation will be described, including the programming of the posterior distribution and the use of different R tools to summarize the posterior. Special focus will be on the application of Markov chain Monte Carlo algorithms and diagnostic methods to assess convergence of the algorithms.

SBSS also will sponsor the following roundtables:

Decisionmaking in Public Policy: Problems from DOT, FDA, and NASA, led by David Banks of Duke University—This roundtable will focus on how Bayesian methods have been embraced, ignored, or gingerly poked at by a number of federal agencies in the context of many specific policy applications.

Bayesian Modeling for Space-Time Surveillance of Disease, led by Andrew Lawson of the Medical University of South Carolina—This discussion will focus on the difference between space-time retrospective modeling of disease variation and modeling for surveillance purposes. Alternatives also will be discussed.

Bayesian Methods in Genomics: Searching for Unity in Diverse Data Sources, led by Bhramar Mukharjee of the University of Michigan—During this roundtable, we will focus on recent important Bayesian applications in genomics and identify emerging areas where involvement of Bayesian researchers may be beneficial.

Meta-Analysis: Current State, Recent Developments, and Unresolved Problems, led by Dalene Stangl, Duke University—This roundtable invites participants to discuss the current state, recent developments, and unresolved problems in meta-analysis. Participants are encouraged to bring ideas and questions from their own work. ■

Social Statistics

Contributed Papers Sought for Symposium

The 2010 International Methodology Symposium, titled "Social Statistics: The Interplay Among Censuses, Surveys, and Administrative Data," will take place at the Crowne Plaza Hotel in Ottawa, Ontario, Canada, from October 26–29. Members of the community from private organizations, government, or academia are invited to attend, particularly if they have a special interest in statistical or methodological issues resulting from the use of multiple sources of data.

Proposals must be submitted by email to *symposium2010@statcan.gc.ca* by March 31.

For more information, visit *www.statcan.gc.ca/conferences/symposium2010/index-eng.htm*.

Biometrics

JSM Session Chairs Needed

Want to get more involved in JSM, but aren't planning to submit an abstract? How about volunteering to chair a session? Chairing a session is an important responsibility and a great way to meet people. If interested, contact the JSM 2010 section program chair, Hormuzd Katki, at *katkih@mail.nih.gov.* ■

Teaching of Statistics in the Health Sciences

Section Awards Announced

Robert Oster, Section Publications Officer; Carol Bigelow, 2009 Section Program Chair; and Patrick Arbogast, 2009 Section Chair

Officers of the Teaching of Statistics in the Health Sciences (TSHS) Section are pleased to recognize the section's JSM award winners for 2008 and 2009.

In 2008, the Young Investigator Award was given to Eleanor Pullenayagum of McMasters University for "Teaching Bayesian Statistics in a Health Research Methodology Program." The Best Contributed Paper Award was given to Scott Emerson of the University of Washington for "The Scientist Game: Power and Subterfuge in the Statistical Design of Studies."

The 2009 Best Contributed Paper Award went to H. James Norton of the Carolinas Medical Center and George W. Divine of Henry Ford Hospital for "Use of Interesting Examples in Teaching Introductory Biostatistics: Three Controversies and Two Paradoxes." This was a wonderfully accessible and visually appealing slide show of examples of statistics gone awry. As the authors pointed out—and the audience experienced for themselves—presenting misuses of statistics in everyday life is a highly effective means of piquing interest in statistical literacy. The presentation can be requested by emailing Norton at *jnorton@carolinas.org.*

The 2009 Best Invited Session Paper Award goes to Steven C. Grambow, Cynthia J. Coffman, Lawrence H. Muhlbaier, Linda S. Lee, Haiyan Zhou, and William E. Wilkinson of Duke University School of Medicine and the Clinical Research Training Program for "Duke Medicine Online Core in Clinical Research: Customized Environment for Practicing Health Professionals." Grambow described the key features of their highly structured program: multimedia-based, interactive, and hands-on.

Honorable mentions go to Dominique Haughton, Mayokun Soremekun, and Guillaume Weisang of Bentley University for "The Virtual Data Analysis Classroom: A Live Demonstration." Haughton spoke to us 'live' from a village in France and demonstrated her success with the Centra software system and technology for distance teaching in real time.

2010 Awards

The section will offer the following awards in 2010: Young Investigator Award, Best Invited Paper Award, Best Contributed Paper Award, and Best Contributed Poster Award. The TSHS Executive Committee also is developing guidelines for a new award for outstanding teaching (of statistics in the health sciences). More information about section awards and their guidelines can be found at *www.bio.ri.ccf.org/ASA_TSHS/html/awards.htm.*

Newsletter Archive

All issues of the Teaching of Statistics in the *Health Sciences Newsletter* from 1990 through the present can be found at *www.bio.ri.ccf.org/ASA_TSHS/html/newsletter.htm.* Feel free to look at these and see what our section has done over the years. The TSHS Executive Committee welcomes comments on the newsletter and web site. ■

Survey Research Methods

2010 Travel Award Competition Open to Students

Dawn E. Haines, Chair of the Student Travel Award Committee and Section Treasurer

The Survey Research Methods Section (SRMS) will repeat its successful Student Travel Award Competition in 2010. This initiative encourages students to gain exposure to opportunities in survey research methods and become familiar with the section and its work.

Up to two travel awards of $750 will be granted to graduate students to attend the 2010 Joint Statistical Meetings in Vancouver, British Columbia. Preference will be given to students presenting a paper or poster at the conference. Winners are expected to attend JSM sessions and the SRMS mixer to be recognized for the award.

The application deadline is April 9, 2010. Interested students can download the application from *www.amstat.org/sections/srms/travelapp_2010.pdf.* A current member of SRMS must support the application. ■

For more information about these events, visit *www.amstat.org/dateline*. Announcements are accepted from educational and not-for-profit organizations only. Commercial enterprises should contact the ASA Advertising Department at *advertise@amstat.org*.

* Indicates events sponsored by the American Statistical Association or one of its sections, chapters, or committees

›› Indicates events posted since the previous issue

2010

March

17–19—IAENG International Conference on Data Mining and Applications 2010, Hong Kong, China
This conference will be held under the International MultiConference of Engineers and Computer Scientists 2010. The IMECS 2010 is organized by the International Association of Engineers (IAENG) and serves as a good platform for researchers. For more information, visit *www.iaeng.org/IMECS2010/ICDMA2010.html* or contact IAENG Secretariat, Unit 1, 1/F, 37-39 Hung To Road, Hong Kong, International HK, Hong Kong; (852) 3169-3427; *imecs@iaeng.org*.

17–20—Conference on Frontier of Statistical Decisionmaking and Bayesian Analysis, San Antonio, Texas
This conference consists of plenary, invited, and poster sessions. Plenary speakers include Donald Berry, Lawrence Brown, Persi Diaconis, Stephen Fienberg, and Alan Gelfand. The conference will provide an overview of the past, present, and future developments of statistical decisionmaking and Bayesian analysis. Prior to the conference, short courses on various statistical topics will be offered. For more information, visit *http://bergerconference2010.utsa.edu* or contact Keying Ye at *Keying.Ye@utsa.edu*.

22—A Celebration of the Contributions of Donald A. Berry, New Orleans, Louisiana
In honor of Donald A. Berry and his contributions to the statistics and health-related research communities, two invited sessions and a dinner will be held during ENAR 2010. Invited speakers include Jim Berger, Janet Wittes, Steven Goodman, Giovanni Parmigiani, Michael Krams, Telba Irony, and Dalene Stangl. The sessions will overview Berry's contributions and discuss the future of clinical trials. For more information or tickets for the dinner, contact Dalene Stangl, 212 Old Chemistry, Box 90251, Durham, NC 27708; (919) 684-4263; *dalene@stat.duke.edu*.

23–26—DAGStat2010: Statistics Under One Umbrella, Dortmund, Germany
DAGStat is a network of scientific and professional organizations that develop and promote statistical theory and methodology. The aim of the working group is to offer a panel for shared activities and public relations to reach a stronger cognition of statistics. Lectures will cover aspects of theoretical and applied statistics. For more information, visit *www.statistik.tu-dortmund.de/DAGStat2010/en* or contact Jörg Rahnenführer, Vogelpothsweg 87, Dortmund, International 44227, Germany; +49 231 755 3121; *rahnenfuehrer@statistik.tu-dortmund.de*.

25–26—Conference on Resampling Methods and High-Dimensional Data, College Station, Texas
This conference aims to bring together researchers working in resampling methods and high-dimensional data. It will provide a unique platform for taking stock of recent developments in each area and exploring the limits of resampling methods in a high-dimensional setting. Keynote speakers are Peter Bickel, Jianqing Fan, Peter Hall, and Bin Yu. For more information, visit *www.stat.tamu.edu/Spring-Conf-2010* or contact Soumendra Lahiri, Dept. of Statistics, Texas A&M University, College Station, TX 77845; (979) 845-3141; *snlahiri@stat.tamu.edu*.

26–27—Third Midwest Statistics Research Colloquium, Chicago, Illinois
This conference will bring together members of the statistical research community from across the Midwest. It is inclusive of first-rate theoretical work, computational work, and serious applied work. Students are especially encouraged to participate. Participation is limited by space, so all participants must register at *www.stat.uchicago.edu/Midwest/2010*. For more information, contact Steven MacEachern, Dept. of Statistics, 404 Cockins Hall, 1958 Neil Ave., Columbus, OH 43210; *snm@stat.osu.edu*.

April

7–9—MAF2010 - Mathematical and Statistical Methods for Actuarial Sciences and Finance, Ravello, Italy
The aim of this conference is to provide new theoretical and methodological results and significant applications in actuarial sciences and finance by the capabilities of the interdisciplinary mathematical and statistical approach. The conference will cover a variety of subjects in actuarial science and financial fields. Open to academics and professionals, the conference is designed to promote the cooperation between theoreticians and practitioners. For more information, visit *maf2010.unisa.it* or contact Marcella Niglio, Via Ponte Don Melillo, Fisciano, International 84084, Italy; *maf2010@unisa.it*.

16–17—24th New England Statistics Symposium, Cambridge, Massachusetts
This symposium will include four mini-courses on April 16 and several invited sessions on the theme "Statistics in the Sciences." Keynote speakers are Iain Johnstone and Jennifer Chayes. Several options for sponsorship opportunities are available. For details, visit *www.stat.harvard.edu* or contact Dale Rinkel, 1 Oxford St., Cambridge, MA 02138; (617) 495-5496; *symposia@stat.harvard.edu*.

25–27—22nd Annual Kansas State University Conference on Applied Statistics in Agriculture, Manhattan, Kansas
This conference will bring together statisticians from academia, industry, and government to discuss ideas and advances in the application of statistics to solve agricultural research problems. A keynote speaker, workshop, and series of contributed papers and poster presentations will be included. For more information, visit *www.ksu.edu/stats/agstat.conference* or contact John Boyer, Department of Statistics, Dickens Hall, Kansas State University, Manhattan, KS 66506; (785) 532-0518; *jboyer@ksu.edu*.

27—University of Pennsylvania Annual Conference on Statistical Issues in Clinical Trials: From Bench to Bedside to Community, Philadelphia, Pennsylvania
This conference will focus on statistical issues in comparative effectiveness research, bringing together leading scientists to present and lead open discussions about the state of the art and developing statistical methods. Also included will be two panel discussions. Participants from academic institutions, industry, and government agencies with an interest in contributing to these discussions are encouraged to register. For more information, visit *www.cceb.upenn.edu/biostat/conferences/ClinTrials10* or contact Donna Zikowitz, 421 Curie Blvd., Philadelphia, PA 19104; (215) 573-2728; *zikowitz@mail.med.upenn.edu*.

29–5/1—2010 SIAM International Conference on Data Mining, Columbus, Ohio
This conference will provide a venue for researchers to present their work in a peer-reviewed forum. It also provides an ideal setting for graduate students and others new to the field to learn about cutting-edge research by hearing outstanding invited speakers and attending tutorials (included with conference registration). A set of focused workshops also will be held on the last day of the conference. The proceedings of the conference will be published in archival form and made available on the SIAM web site. For more information, visit *www.siam.org/meetings/sdm10* or contact Amol Ghoting, 1101 Kitchawan Road, RT 134, Yorktown Hts., NY 10598; (914) 945-2193; *aghoting@us.ibm.com*.

May

1—Workshop on Link Analysis in Adversarial Data Mining, Columbus, Ohio
Papers are being accepted for this workshop, which will be held with the 2010 SIAM Data Mining Conference. Submissions should be sent via email to *abadia@louisville.edu*. See *www.siam.org/meetings/sdm10/submissions.php* for

submission details. For more information about the workshop, visit *date.cecsresearch.org/workshop.htm* or contact Antonio Badia, J. B. Speed 112 CECS Department, Louisville, KY 40292; (502) 852-0478; *abadia@louisville.edu*.

››3–7—Summer Institute: Workshops in Research Methodology, Charleston, South Carolina
This series of two-day workshops will include Bayesian Biostatistics (May 3–4), Analysis of Genetic Association Studies (May 3–4), Design of Early Phase Clinical Trials (May 6–7), and Analysis of Complex Sample Survey Data (May 6–7). Presenters include Valerie Durkalski, Mulugeta Gebregziabher, Sharon Yeatts, Jordan Elm, Yuko Palesch, Kelly Hunt, Renee Martin, Betsy Hill, Emily Kistner-Griffin, Andrew Skol, and Andrew Lawson. For more information, visit *http://academicdepartments.musc.edu/dbe/seminars/Summer%20Institute/SummerInstitute_Dec09.pdf* or contact Andrew Lawson, 135 Cannon St., Charleston, SC 29425; (843) 876-1865; *lawsonab@musc.edu*.

19–22—Conference on Nonparametric Statistics and Statistical Learning, Columbus, Ohio
This conference will bring together researchers in nonparametrics and statistical learning from academia, industry, and government in an atmosphere focused on the development of both statistical theory and methods. The areas are broadly defined, with nonparametrics encompassing distribution-free statistics, rank-based and robust statistics, Bayesian nonparametric methods, permutation-based methods, nonparametric regression, and density estimation. Statistical learning includes a range of methods focused on the general goals of discovery, classification, and prediction. Six prominent researchers will present plenary talks relating to both fields. There also will be eight contributed paper sessions and two contributed poster sessions where junior investigators and graduate students are expected to participate. For more information, visit *www.stat.osu.edu/~nssl2010* or contact Steven MacEachern, Department of Statistics, The Ohio State University, 1958 Neil Ave., Cockins Hall, Rm. 404, Columbus, OH 43210-1247; (614) 292-5843; *snm@stat.osu.edu*.

20–22—Statistical Analysis of Neural Data (SAND5), Pittsburgh, Pennsylvania
This workshop series is concerned with analysis methods for neural signals from sources such as EEG, fMRI, MEG, 2-Photon, and extracellular recordings. It aims to define important problems in neuronal data analysis and useful strategies for attacking them, foster communication between experimental neuroscientists and those trained in statistical and computational methods, and encourage young researchers to present their work and interact with senior colleagues. Travel funds are expected to be available. For details, visit *sand.stat.cmu.edu* or contact Rob Kass, Department of Statistics, Carnegie Mellon University, Pittsburgh, PA 15213; (412) 268-8723; *kass@stat.cmu.edu*.

23–26—38th Annual Meeting of the Statistical Society of Canada, Québec City, Québec
This conference will bring together academic, government, and industrial researchers as well as users of statistics and probability. Featured will be workshops and invited and contributed sessions on all areas of statistics and probability. About 450 statisticians are expected to participate. For details, contact Thierry Duchesne, Université Laval, Département de mathématiques et de statistique, Pavillon Vachon, Québec, Quebec G1K 7P4, Canada; (418) 656-2131, Ext. 5077; *thierry.duchesne@mat.ulaval.ca*.

***24–26—33rd Annual Midwest Biopharmaceutical Statistics Workshop, Muncie, Indiana**
Plenary speakers will address how the role of statistics is adapting to recent changes within the pharmaceutical industry and the impact of these changes. Invited talks will follow a similar theme and be presented in four parallel tracks: clinical, discovery/pre-clinical, nonclinical, and post-approval. Abstracts for the poster session must be submitted by April 19; students are encouraged to submit posters for the Charlie Sampson Award. The workshop will be preceded by a half-day short course. For more information, visit *www.mbswonline.com* or contact Melvin Munsaka, One Takeda Pkwy., Deerfield, IL 60015; (847) 582-3533; *mmunsaka@tgrd.com*.

***25–26—Quantitative Methods in Defense and National Security 2010, Fairfax, Virginia**
This conference will promote collaboration between users who have quantitative defense and national security problems and quantitative professionals such as statisticians, mathematicians, operations researchers, and engineers. Papers are wanted on quantitative methods that can be used to solve problems in defense and national security and that describe defense and national security data analysis problems. The program will consist of invited sessions, contributed presentations, and a special poster session. For more information, visit *www.galaxy.gmu.edu/QMDNS2010* or contact Jeffrey Solka, 18444 Frontage Road, Suite 324, Code Q21, Dahlgren, VA 22448; (540) 653-1982; *Jeffrey.Solka@navy.mil*.

25–27—Joint Research Conference on Statistics in Quality, Industry, and Technology, Gaithersburg, Maryland
The Quality and Productivity Research Conference and the Spring Research Conference on Statistics in Industry and Technology will be held jointly at the National Institute of Standards and Technology (NIST). The goal of the conference is to stimulate interdisciplinary research among statisticians, engineers, and physical scientists in quality and productivity, industrial needs, and the physical sciences. The conference will feature presentations on statistical issues and research approaches drawn from collaborative research. For more information, contact Will Guthrie, 100 Bureau Drive, Stop 8980, Gaithersburg, MD 20899-8980; (301) 975-2854; *will.guthrie@nist.gov*.

June

3–4—Statistical Science: Making a Difference, Madison, Wisconsin
A series of events are planned to celebrate the 50th anniversary of the founding of

the department of statistics and its achievements in making a difference in statistics and the sciences through theory/methods and applications/practice. The main event will highlight major advances and emerging topics in statistical science during the last 25 years. For more information, visit *www.stat.wisc.edu* or contact Denise Roder, 1300 University Ave., MSC 1220, Madison, WI 53706; (608) 262-2937; *50th@stat.wisc.edu*.

5–8—IWMS 2010 - 19th International Workshop on Matrices and Statistics, Shanghai, China
This conference will stimulate research and foster the interaction of researchers in the interface between statistics and matrix theory. There will be invited and contributed papers. Potential participants should visit *www1.shfc.edu.cn/iwms/index.asp* for online registration and submission of abstracts. For details, visit *www1.shfc.edu.cn/iwms/index.asp* or contact Yonghui Liu, Shanghai Finance University, Shanghai, International 201209, China; *IWMS2010@shfc.edu.cn*.

››*6–9—Southern Regional Conference on Statistics (SRCOS) 2010, Virginia Beach, Virginia
This conference—including speakers, a workshop, and student poster presentations—will stimulate research and foster interaction among researchers. There is support available for student travel. The deadline for presentation and proposal is April 10. For more information, visit *http://sci.odu.edu/math/srcos2010* or contact Norou Diawara, Department of Mathematics and Statistics, ODU, Norfolk, VA 23529; (757) 683-3886; *ndiawara@odu.edu*.

10–12—2010 International Symposium on Financial Engineering and Risk Management (FERM2010), Taipei, Taiwan
FERM2010 will allow academic researchers and industry practitioners to exchange state-of-the-art knowledge and discoveries in financial engineering and risk management, as well as discuss the recent financial crisis, research interests, and industry trends. Keynote speakers will include Tim Bollerslev, Jay Dweck, and Harrison Hong. In addition, 15 invited sessions, 15 contributed sessions, and a poster session are planned. For more information, visit *www.fin.ntu.edu.tw/~ferm2010* or contact Program Committee, Center for Research in Econometric Theory and Applications, National Taiwan University, Taipei, International 106, Taiwan; 886-2-33661072; *ferm2010.prog@gmail.com*.

12–19—Statistical and Machine Learning Methods in Computational Biology, Lipari, Italy
Lectures will focus on new statistical challenges posed by deep sequencing techniques to inference and analysis of network structure that take into account the scale of data available. A series of tutorials also will be offered from introductory topics to statistics to probabilistic and machine learning methods. For more information, visit *lipari.cs.unict.it/LipariSchool/Bio* or contact Raffaele Giancarlo, Dipartimento di Matematica, Via Archirafi 34, Palermo, International 90123, Italy; +39-091-238-91067; *raffaele@math.unipa.it*.

14–16—Pacific Coast Statisticians and Pharmacometricians Innovation Conference, San Luis Obispo, California
This conference will provide statisticians and pharmacometricians a forum to share pertinent information concerning the application of these disciplines to the pharmaceutical and biotechnology industries. Keynote speakers are Joga Gobburu and Stephen Senn. The program will include short courses and presentations. For details, contact Brian Smith, One Amgen Center Drive, MS 38-3-B, Thousand Oaks, CA 91360; (805) 447-1378; *brismith@amgen.com*.

14–17—23rd Nordic Conference on Mathematical Statistics (NORDSTAT), Voss, Norway
NORDSTAT is a biennial meeting for statisticians and probabilists. For more information, visit *www.nordstat2010.org/index.php* or contact Inger Lise Ravnanger, Torgalmenning 1a, Bergen, International N-5808, Norway; +47 55553655; *mail@kongress.no*.

16–18—45th Scientific Meeting of the Italian Statistical Society, Padua, Italy
The 2010 conference will include plenary, specialized, contributed, and poster sessions. These can be in any area of interest relevant to theoretical and applied statistics. For details, visit *www.sis-statistica.it/meetings/index.php/sis2010/sis2010* or contact Patrizia Piacentini, Department of Statistical Sciences, via C. Battisti 241, Padova, International I-35121, Italy; *segrorg@stat.unipd.it*.

16–18—Sparse Structures: Statistical Theory and Practice, Bristol, United Kingdom
The aim of this workshop is to bring together theory and practice in modeling high-dimensional data to come to a better understanding of the possibilities for finding robust rigorously founded methods. Space is limited. Abstracts for posters are due March 15. Those who want to attend or submit an abstract should email *sustain-sparsity@bristol.ac.uk* by March 15. For more information, visit *www.sustain.bris.ac.uk/ws-sparsity* or contact Azita Ghassemi, Department of Mathematics, Bristol, International BS8 1TW, UK.

20–23—ICSA 2010 Applied Statistics Symposium, Indianapolis, Indiana
Short sources will be offered on June 20, and approximately 50 scientific sessions will take place from June 21–23. Keynote speakers include Donald Rubin, Ji Zhang, Xihong Lin, ShaAvhrée Buckman, and Gregory Campbell. Contributed paper abstracts may be submitted to Jun Xie at *junxie@stat.purdue.edu* or Menggang Yu at *meyu@iupui.edu* by May 1. The symposium also will sponsor J-P Hsu student awards and travel grants, with the application deadline of March 15. For more information, visit *www.icsa.org/2010* or contact Yongming Qu, Lilly Corporation Center, Indianapolis, IN 46285; (317) 571-0764; *quyo@lilly.com*.

20–23—ISF2010 - 30th International Symposium on Forecasting, San Diego, California
This conference—attracting the world's leading forecasting researchers, practitioners, and students—will include keynote speaker presentations, academic sessions, workshops, and social programs. For details, visit *www.forecasters.org* or contact Pam Stroud, 53 Tesla Ave., Medford, MA 02155; (509) 357-5530; *isf@forecasters.org*.

28–7/2—ICORS 2010, Prague, Czech Republic
The International Conference on Robust Statistics aims to be a forum for the development and application of robust statistical methods. It is an opportunity to meet, exchange knowledge, and build scientific contacts with others interested in the subject. For more information, visit *icors2010.karlin.mff.cuni.cz* or contact Jana Jureckova, Department of Statistics, Sokolovska 83, Prague 8, International CZ-186 75, Czech Republic; *icors2010@karlin.mff.cuni.cz*.

29–7/1—International Conference on Probability Distributions and Related Topics in Conjunction with NZSA Conference, Palmerston North, New Zealand
This international conference is devoted to all aspects of distribution theory and its applications, including discrete, univariate, and multivariate continuous distributions; copulas; extreme values; skewed distributions; conditionally specified distributions; and life distributions in engineering and survival analysis. For more information, visit *http://nzsa_cdl_2010.massey.ac.nz* or contact Narayanaswamy Balakrishnan, Department of Mathematics and Statistics, Hamilton, International L8S 4K1, Canada; (905) 525-9140, Ext. 23420; *bala@mcmaster.ca*.

29–7/9—International Statistical Ecology Conference 2010, Canterbury, United Kingdom
In addition to invited and contributed speaker sessions, this conference will include a series of workshops. The deadline for early (reduced-cost) registration is March 31. For details, visit *www.ncse.org.uk/isec2010* or contact Alexa Laurence, University of Kent, Canterbury, International CT2 7NZ, UK; 01227 827253; *a.f.laurence@kent.ac.uk*.

30–7/2—2010 International Conference of Computational Statistics and Data Engineering, London, United Kingdom
For details, visit *www.iaeng.org/WCE2010/ICCSDE2010.html* or contact IAENG Secretariat, Unit 1, 1/F, 37-39 Hung To Road, Hong Kong, International, China; (852) 3169-3427; *wce@iaeng.org*.

July

4–9—IWSM 2010, Glasgow, United Kingdom
The 25th International Workshop on Statistical Modeling (IWSM 2010) will be hosted by the University of Glasgow in Scotland. For more information, visit or contact Claire Ferguson, Department of Statistics, 15 University Gardens, Glasgow, International G12 8QW, Scotland; 0141 330 5023; *c.ferguson@stats.gla.ac.uk*.

***5–9—ISBIS-2010 (International Symposium on Business and Industrial Statistics), Slovenia**
The key themes of this conference are industrial applications of statistical image analysis, future directions for handling large and complex data sets, financial services, health services, quality and productivity improvement, and decisionmaking in business and industry. For more information, visit *www.action-m.com/isbis2010* or contact Milena Zeithamlova, Vrsovicka 68 101 00, Prague, International 10, Czech Republic; +420 267 312 333; *milena@action-m.com*.

6–8—LASR 2010: High-Throughput Sequencing, Proteins, and Statistics, Leeds, United Kingdom
This workshop will focus on developments at the interface of statistical methodology and bioinformatics. For more information, visit *www.maths.leeds.ac.uk/lasr2010* or contact Jochen Voss, Department of Statistics, University of Leeds, Leeds, International LS2 9JT, UK; *workshop@maths.leeds.ac.uk*.

››11–13—Ninth International Conference on Ordered Statistical Data and Their Applications, Zagazig, Egypt
OSDA 2010 will provide an international forum for presentation and discussion of new results on ordered statistical data and reviews of existing literature. It will be dedicated to all aspects of ordered statistical data, including approximations; bounds; characterizations; inequalities and their applications; stochastic ordering; statistical inference and prediction problems; censored data and survival analysis; applications of ordered data; reliability theory; entropies, information theory, and optimization techniques; nonparametric and ranked set sampling techniques; numerical computations and simulations; Bayesian analysis techniques; and asymptotic theory. The conference language will be English. For more information, visit *www.stat.osu.edu/~hnn/osda2010.html* or contact Haikady Nagaraja, 402 Cockins Hall, 1958 Neil Ave., Statistics Dept. OSU, Columbus, OH 43210; (614) 292-6072; *hnn@stat.osu.edu*.

››12–16—11th International Meeting on Statistical Climatology, Edinburgh, Scotland
This is the latest in a series of meetings designed to promote good statistical practice in the atmospheric and climate sciences and enhance the lines of communication between the atmospheric and statistical science communities. The themes for this IMSC include analysis techniques for multi-model ensembles of climate simulations, understanding recent climate change and predicting the near-term future, extreme events, predictions of climate change relevant for impacts, reconstructing and understanding climate change over the Holocene, and statistical methods for the analysis of climate data. For more information, visit *http://cccma.seos.uvic.ca/imsc/11imsc.shtml* or contact Gabi Hegerl, Room 353, Grant Institute, The King's Buildings, Edinburgh, International EH8 9TA, Scotland; *Gabi.Hegerl@ed.ac.uk*.

12–23—SAMSI: 2010 Summer Program on Semiparametric Bayesian Inference: Applications in Pharmacokinetics and Pharmacodynamics, Research Triangle Park, North Carolina
The aims of the program and workshop are to identify the critical new developments of inference methods for pharmacokinetics (PK) and pharmacodynamics (PD) data, determine open challenges, and establish inference for PK and PD as an important motivating application area of nonparametric Bayes. For more information, visit *www.samsi.info/programs/2010bayes-summer-program.shtml* or contact Jamie Nunnelly, P.O. Box 14006, RTP, NC 27709; (919) 685-9350; *nunnelly@niss.org*.

27–31—LinStat 2010, Tomar, Portugal
The aim of this conference is to bring together researchers sharing an interest in a variety of aspects of statistics and its applications to discuss current developments. There will be plenary talks and sessions with contributed talks, as well as a special session with talks by graduate students. For more information, visit *www.linstat2010.ipt.pt* or contact Francisco Carvalho, Estrada da Serra - Quinta do Contador, Tomar, International 2300-313, Portugal; +351249328100; *fpcarvalho@ipt.pt*.

***31–8/5—2010 Joint Statistical Meetings, Vancouver, British Columbia, Canada**
JSM (Joint Statistical Meetings) is the largest gathering of statisticians held in North America. It is held jointly with the American Statistical Association, the International Biometric Society (ENAR and WNAR), the Institute of Mathematical Statistics, the Statistical Society of Canada, the International Indian Statistical Association, and the International Chinese Statistical Association. Attended by more than 5,500 people, activities include oral presentations, panel sessions, poster presentations, continuing education courses, an exhibit hall, a placement service, society and section business meetings, committee meetings, social activities, and networking opportunities. For more information, visit *www.amstat.org/meetings* or contact ASA Meetings Department, 732 North Washington St., Alexandria, VA 22314; (888) 231-3473; *jsm@amstat.org*.

August

5–7—16th ISSAT International Conference on Reliability and Quality in Design, Washington, DC
For more information, visit *www.issatconferences.org* or contact Conference Secretary, P.O. Box 1504, Piscataway, NJ 08855; *rqd@issatconferences.org*.

22–27—COMPSTAT 2010, Paris, France
This conference will cover the development and implementation of new statistical ideas, user experiences, and software evaluation. The program should appeal to software developers and anyone working in statistics who uses computers, whether at a university, company, government agency, or research institute. For more information, visit *www.compstat2010.fr* or contact Gilbert Saporta, 292 rue Saint Martin, Paris, International 75003, France; +33140272268; *gilbert.saporta@cnam.fr*.

29–9/1—SAMSI: 2010–11 Program on Complex Networks, Research Triangle Park, North Carolina
This program is built around network modeling and interference, flows on networks, network models for disease transmission, and dynamics of networks. For more information, visit *www.samsi.info/workshops/index.shtml* or contact Terri Nida, 19 TW Alexander Drive, RTP, NC 27709; (919) 685-9350; *info@samsi.info*.

30–9/3—Prague Stochastics 2010, Prague, Czech Republic
Prague Stochastics 2010 is next in a series of international conferences on stochastics organized in Prague since 1956. The scientific program will be aimed at covering a wide range of stochastics, with special emphasis on the topics of this lively field that have been pursued in Prague. For more information, visit *www.utia.cas.cz/pragstoch2010* or contact Lucie Fajfrova, Pod Vodarenskou vezi 4, Prague 8, International 18208, Czech Republic; *pragstoch@utia.cas.cz*.

September

12–15—SAMSI: 2010–11 Program on Analysis of Object Oriented Data Opening Workshop, Research Triangle Park, North Carolina
Modern science is generating a need to understand and statistically analyze populations of increasingly complex types. Analysis of object oriented data (AOOD) is aimed at encompassing an array of such methods. For more information, visit *www.samsi.info/programs/2010aoodprogram.shtml* or contact Terri Nida, 19 TW Alexander Drive, RTP, NC 27709; (919) 685-9350; *info@samsi.info*.

13–15—ENBIS 2010 - 10th Annual Conference of the European Network for Business and Industrial Statistics, Antwerp, Belgium
This conference will include keynote lectures, invited and contributed sessions, workshops and pre- and post-conference courses. The social program will include a reception at Antwerp City Hall and dinners in the medieval cellars in downtown Antwerp and Marble Hall of the Antwerp Zoo. For more information, visit *www.enbis.org* or contact Peter Goos, Prinsstraat 13, Antwerp, International 2000, Belgium; +3232654059; *peter.goos@ua.ac.be*.

October

20–22—International Conference on Modeling, Simulation, and Control 2010, San Francisco, California
This conference is held under the World Congress on Engineering and Computer Science, organized by the International Association of Engineers. For more information, visit *www.iaeng.org/WCECS2010/ICMSC2010.html* or contact IAENG Secretariat, Unit 1, 1/F, 37-39 Hung To Road, Hong Kong, International HK, Hong Kong; (852) 3169-3427; *wcecs@iaeng.org*.

December

››5–10—International Biometric Conference, Florianopolis, Brazil
This conference will bring together approximately 800 statisticians and others interested in the development and application of statistical and mathematical theory and methods to the biosciences. The meeting program includes oral and poster presentations of methodological advances, applications to specific subject-matter challenges, and educational offerings. Special celebratory events are planned. For more information, visit *www.rbras.org.br/~ibcfloripa2010* or contact Dee Ann Walker, 1444 I Street NW, Washington, DC 20005; (202) 712-9049; *info@tibs.org*.

6–10—Australian Statistical Conference 2010, Fremantle, West Australia
Delegates from all areas of work in statistics will be encouraged to communicate their knowledge and expertise and join world-class Australian and international statisticians to discuss new work. The theme for the 2010 conference, "Statistics in the West: Understanding Our World," provides opportunities for presentations on a range of topics. For more information, visit *www.statsoc.org.au* or contact Promaco Conventions, Unit 10 22 Parry Ave., Bateman, International 6150, Australia; +61 8 9332 2900; *promaco@promaco.com.au*.

2011

January

***5–7—2011 Living to 100 Symposium, Orlando, Florida**
This conference, held by the Society of Actuaries, will include thought leaders from around the world who will share ideas and knowledge about aging, changes in survival rates and their impact on society, and observed and projected increases in aging populations. For more information, visit *http://livingto100.soa.org* or contact Jan Schuh, 475 N. Martingale Road, Suite 600, Schaumburg, FL 60173; *jschuh@soa.org*.

5–7—Fourth International IMS/ISBA Joint Meeting, Park City, Utah
A central theme of this conference is Markov chain Monte Carlo and related methods and applications. The conference also will feature plenary speakers Jeff Rosenthal, Nicky Best, and Michael Newton and six invited sessions. Nightly poster sessions will offer substantial opportunity for informal learning and interaction. Limited financial support for junior investigators is anticipated. The meeting will be accompanied by a satellite workshop on adaptive MCMC methods, intended to provide a snapshot of the methodological, practical, and theoretical aspects of an emerging group of methods that attempt to automatically optimize their performance for a given task. For details, visit *madison.byu.edu/mcmski/index.html* or contact Brad Carlin, MMC 303, Division of Biostatistics, School of Public Health, 420 Delaware St. SE, Minneapolis, MN 55455; (612) 624-6646; *brad@biostat.umn.edu*.

May

10–13—International Conference on Design of Experiments (ICODOE-2011), Memphis, Tennessee
The goal of this conference is to bring together leading researchers in design and analysis of experiments, including combinatorial design, and practitioners in the pharmaceutical, chemometrics, physical, biological, medical, social, psychological, economic, engineering, and manufacturing sciences. The conference will focus on emerging areas of research in experimental design and novel innovations in traditional areas. For more information, visit *www.msci.memphis.edu* or contact Manohar Aggarwal, 373 Dunn Hall, University of Memphis, Memphis, TN 38152; (901) 678-3756; *maggarwl@memphis.edu*.

June

20–24—Seventh International Conference on Mathematical Methods in Reliability, Beijing, China
This international conference will focus on theory, methods, and applications of reliability models and associated inferential issues. For more information, visit *www.mmr2011.cn* or contact Lirong Cui, Beijing Institute of Technology, School of Management and Economics, Beijing, International PRC, China; 1-905-525-9140; *Lirongcui@bit.edu.cn*.

26–29—ICSA 2011 Applied Statistics Symposium, New York, New York
For more information, contact Wei Zhang, 900 Ridgebury Road, Ridgefield, CT 06877; (203) 791-6684; *wei.zhang@boehringer-ingelheim.com*.

30–7/3—Statistics 2011 Canada/IMST-2011-FIM XX, Montréal, Quebec
This conference is dedicated to all areas of mathematical and statistical sciences. In addition to traditional theoretical/applied areas, interdisciplinary research is encouraged. Historically, this conference has concentrated on applied and theoretical statistics, Bayesian statistics, bioinformatics, biostatistics, combinatorics, computer and information sciences, design and analysis of experiments, ergodic theory, functional analysis, graph theory, multivariate analysis, number theory, partial differential equations, and topology. For more information, contact Yogendra Chaubey, 1455 de Maisonneuve Blvd. W, Montréal, Quebec H3G 1M8, Canada; +1 514 848 2424, Ext. 3258; *stat2011@mathstat.concordia.ca*.

July

››3–6—2nd IMS Asia Pacific Rim Meetings, Tokyo, Japan
This meeting series provides a forum for scientific communication and collaboration among researchers in Asia and the Pacific Rim. The program will cover a range of topics in statistics and probability, as well as recent developments and the state of the art in a variety of modern research topics and applications. For more information, contact Runze Li, Dept. of Statistics, The Penn State University, University Park, PA 16802-2111; (814) 865-1555, *ril4@psu.edu*.

***30–8/4—2011 Joint Statistical Meetings, Miami Beach, Florida**
JSM is the largest gathering of statisticians held in North America. Attended by more than 5,000 people, activities include paper and poster presentations, panel sessions, continuing education courses, an exhibit hall, a career placement service, society and section business meetings, committee meetings, social activities, and networking opportunities. For more information, visit www.amstat.org/meetings or contact ASA Meetings, 732 North Washington Street, Alexandria, VA 22314; (888) 231-3473; *meetings@amstat.org*.

September

››4–8—11th European Network for Business and Industrial Statistics (ENBIS) Conference, Coimbra, Portugal
Theoretical and practical papers covering all areas of business and industrial statistics are invited. For more information, visit *www.enbis.org* or contact Marco P. Seabra dos Reis, Department of Chemical Engineering, University of Coimbra, Polo II, Rua Sílvio Lima, Coimbra, International 3030-790, Portugal; (+351) 239 798 700/727; *marco@eq.uc.pt*. ■

Professional Opportunity listings may not exceed 65 words, plus equal opportunity information. Ads must be received by the first of the preceding month to ensure appearance in the next issue (i.e., September 1 for the October issue). Ads received after the deadline will be held until the following issue.

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

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

Rates: $320 for nonprofit organizations (with proof of nonprofit status), $475 for all others. Member discounts are not given. A URL link may be included in display ads in the online version of *Amstat News* for an additional $100. Display advertising rates are at *www.amstat.org/ads.*

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

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

Also look for job ads on the ASA web site at *www.amstat.org/jobweb.*

Arizona

■ Statistician/Biostatistician. The College of Nursing and Health Innovation at Arizona State University seeks a statistician/biostatistician at the research associate professor/research professor level dedicated to partnership with faculty on programmatic research. This is a full-time, academic year appointment. Salary and rank is commensurate with experience and productivity. Appointment begins fall semester 2010. Review of applications begins immediately and continues until filled. Please visit *nursingandhealth.asu.edu/employment/biostatistician.htm* for details. Arizona State University is an AA/EOE.

California

■ The Department of Statistics at University of California, Riverside, seeks Consulting Statistician Collaboratory *www.collaboratory.ucr.edu*. Statistical modeling and data analysis with on and off campus clients, supervise statistics

graduate students, and develop and expand collaboratory project portfolio and proposal writing. REQ: MS in statistics or equivalent experience, strong training in applied statistics, significant experience with SAS and data analysis. Prefer experience in consulting environment. Resume: *humanresources.ucr.edu/jobs/job#09-12-009.*

Illinois

■ The Department of Health Studies at University of Chicago invites applications for tenure-track/tenured faculty positions in biostatistics w/interests in causal inference, survival analysis, clinical trials and/or statistical genomics, but all areas of biostatistics will be considered. To apply, please visit University of Chicago's ACO web site at *tinyurl.com/yeat4r9*. Applications received by March 1, 2010, receive full consideration; however, we will accept applications until positions are filled. The University of Chicago is an AA/EOE.

■ At Abbott, every day is filled with new discoveries and leading-edge innovation. This senior research statistician will work with project team to decide appropriate study design and statistical methodology, protocol review, randomization schedule, sample size, and power calculations. Ensure data for statistical analyses are accurate. Requires MS with 0–8 years experience or PhD with 0–7 years of experience. Apply to URL: *http://track.jobviper.com/ViewJob.asp?id=658793-1612-7197.* EOE.

Maryland

■ Laureate Education Inc. The Senior Statistical Analyst will be responsible for articulating data-driven solutions that inform decisionmaking for internal clients, and in developing models, methods or processes for implementation. The senior analyst will be expected to have a deep understanding of analytical methodologies in order to complete unstructured assignments with little supervision. Master's degree and SAS and/or SPSS required. Please forward resumes to *andrew.cook@laureate-inc.com*. Laureate Education Inc., and all of its

subsidiaries or affiliates are equal opportunity employers. EOE.

Massachusetts

■ MS Biostatistician. Collaborate with medical and scientific researchers in design, analysis, and publication of cancer clinical trials and related research. Requirements: strong background in statistical principles, data analysis, computing (especially SAS and R), communication skills, and 1–2 years of experience. Send CV, names of three references to: MS Biostatistician Job Search, Biostatistics & Computational Biology, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115; *biostatistics.job-search@jimmy.harvard.edu.* Dana-Farber Cancer Institute is an AA/EOE

New York

■ Memorial Sloan-Kettering Cancer Center has positions available for masters level biostatisticians. The successful applicant will engage in wide variety of collaborative projects w/medical investigators and statisticians. Projects involve the design, analysis and publication of clinical, laboratory, or cancer prevention research. Qualifications include excellent programming skills, proficiency in database manipulation, and good verbal and written communication skills. Please email cover letter and CV to: *EPIBIOSTATS@mskcc.org*. Memorial Sloan-Kettering Cancer Center is an AA/EOE.

■ Tenure-track Assistant/Associate Professor Positions, Department of Biostatistics and Computational Biology, University of Rochester. Appointees should have or expect to develop interest in a specific application area (e.g., cancer, cardiology or environmental health sciences). Engage in methodologic research, teach and advise doctoral students. Cover letter, CV, three references, transcripts if new PhD to: Malora Zavaglia, URMC, Biostatistics, 601 Elmwood Avenue,

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Applications will be accepted from December 15, 2009 – April 15, 2010

THE UNIVERSITY OF HONG KONG

Founded in 1911, The University of Hong Kong is committed to the highest international standards of excellence in teaching and research, and has been at the international forefront of academic scholarship for many years. Ranked 24th among the top 200 universities in the world by the UK's *Times Higher Education*, the University has a comprehensive range of study programmes and research disciplines spread across 10 faculties and about 100 sub-divisions of studies and learning. There are over 23,400 undergraduate and postgraduate students coming from 50 countries, and more than 1,200 members of academic and academic-related staff, many of whom are internationally renowned.

Department of Statistics and Actuarial Science

Applications are invited for the following appointments in the Department of Statistics and Actuarial Science, subject to funding, from September 1, 2010 or as soon as possible thereafter, with the possibility of renewal. The posts will initially be made on a three-year fixed-term basis. Appointment with tenure will be considered during the second three-year contract.

1. Professor/Associate Professor/Assistant Professor in Statistics/ Applied Probability (Ref.: RF-2009/2010-445)

2. Associate Professor/Assistant Professor in Actuarial Science (Ref.: RF-2009/2010-446)

The Department of Statistics and Actuarial Science is under the Faculty of Science and has representation on 4 Faculty Boards: Arts, Business & Economics, Science and Social Sciences. It serves the University and the discipline of Statistics and Actuarial Science through the inter-related functions of teaching, consultation and research. Information about the Department and its mission can be obtained at http://www.hku.hk/statistics.

For post (1), applicants should have a Ph.D. degree in statistics or related disciplines such as applied probability, statistical finance and actuarial science. Candidates with demonstrated ability of research and experience in teaching are preferred.

For post (2), applicants should have a Ph.D. degree in actuarial science or related disciplines such as applied probability and statistics. Candidates possess all or some of the following are preferred: (i) an actuarial qualification from a recognised professional body of actuaries; (ii) work experience in actuarial science and mathematical finance; and (iii) teaching experience in actuarial science, probability, stochastic calculus and mathematical finance.

The level offered depends on the appointee's years of experience, publications and on-going research. In line with the University's guideline, the primary criterion for a Professorship is demonstrated excellence in research and scholarship, but evidence of leadership in curriculum, pedagogy development and teaching effectiveness will also be taken into account.

Annual salaries will be in the following ranges (subject to review from time to time at the entire discretion of the University):

Professor	:	HK$897,060 - 1,256,460
Associate Professor	:	HK$661,980 - 1,023,720
Assistant Professor	:	HK$504,480 - 779,640

(approximately US$1 = HK$7.8)

Applicants should indicate clearly the reference number and *which* level they wish to be considered for.

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

Further particulars and application forms (152/708) can be obtained at http://www.hku.hk/apptunit/; or from the Appointments Unit (Senior), Human Resource Section, Registry, The University of Hong Kong, Hong Kong (**fax**: (852) 2540 6735 or 2559 2058; **e-mail**: senrappt@hku.hk). **Review of applications will start from March 1, 2010**. Candidates who are not contacted within 6 months of the date of their applications may consider their applications unsuccessful.

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

Box 630, Rochester NY 14642. The University of Rochester is an AA/EOE.

■ Hunter College of The City University of New York. Tenure-track faculty position available September 2010 for a statistician with a background in biostatistics or bioinformatics. Rank and salary open. Doctoral degree in statistics required. Applicants should expect to teach both undergraduate and master's level courses in statistics. Send CV and three letters of reference to Professor Ada Peluso, *statsearch@hunter.cuny.edu*. EOE.

North Carolina

■ The Statistical and Applied Mathematical Sciences Institute (SAMSI), a national institute in North Carolina, seeks postdoctoral fellows for 2010-2011. Fellows are typically appointed for two years, earn a very competitive salary, and receive exceptional mentoring. See *www.samsi.info* for further information. Members of underrepresented groups are particularly encouraged to apply. Statistical and Applied Mathematical Sciences Institute is an AA/EOE.

Ohio

■ The Ohio State University Statistics Department invites applications for a regular clinical faculty position in biostatistics. PhD in biostatistics/statistics, and excellence in teaching. Demonstrated record of teaching and collaborative research is required. Send vitae, three letters, and graduate transcripts to: Thomas Santner, Division of Biostatistics, The Ohio State University, 310 W. 10th Avenue, Columbus, OH 43210. To build a diverse workforce Ohio State encourages applications from minorities, veterans, women, and individuals with disabilities. Flexible work options available. EEO/AA Employer.

■ The Center for Biostatistics at The Ohio State University invites applications for a master's level biostatistician position involving collaboration with biomedical researchers. Requirements: master's degree in biostatistics/statistics, excellent written/oral communication skills, proficiency with statistical software (especially

Division of Biostatistics
School of Public Health – University of Minnesota

FULL PROFESSOR OF BIOSTATISTICS

The Division of Biostatistics, School of Public Health, at the University of Minnesota is announcing one opening for a tenured or tenure-track faculty position at the Full Professor rank.

We are especially interested in individuals with (1) experience in research collaboration in clinical trials, or (2) an academic and research record in Bayesian methods and applications, especially for data with complex (e.g., spatiotemporal) correlation structures. We will consider applications from candidates with PhDs in areas besides biostatistics.

For candidates interested in a clinical trials position, at the present time, the Division has statistical and data coordinating centers for NIH-funded clinical trials networks in HIV/AIDS, and in lung and cardiovascular disease. We need faculty who can contribute to the continuation and expansion of our work in these areas. We will also give serious consideration to applicants with a strong research record in related areas. A successful candidate for the position described here will be expected to take an active part in the design and conduct of clinical trials, methodological research and collaborations with other researchers at the University of Minnesota and with researchers involved in trial networks.

For candidates interested in a Bayesian statistics position, the Division has significant strengths in this area, with several faculty having active research agendas and both methodological and applied funding in areas such as spatial epidemiology, cancer control, adaptive clinical trials, and bioinformatics. These grants complement our larger, more collaborative research projects with investigators in the University's Academic Health Center. The demand locally and nationally for biostatisticians with expertise in Bayesian methods is substantial and accelerating.

Applications received before March 15, 2010, will be considered for a first round of interviews. However we will continue to accept applications until the position is filled.

The Division of Biostatistics (www.sph.umn.edu/biostatistics) currently includes 33 graduate faculty and 68 staff. The Division offers MS, MPH, and PhD degrees, and interacts in teaching, advising and research with the U of Minnesota School of Statistics. Current research in statistical methodology includes survival analysis, longitudinal models, generalized linear models, statistical aspects of genetics, genomics and proteomics, analysis of spatial and longitudinal data, Bayes and empirical Bayes methods, structural and latent variable modeling, computer-intensive methods such as Markov chain Monte Carlo, and statistical data mining.

Besides HIV/AIDS, lung and cardiovascular disease collaborations, the Division collaborates actively on research in cancer prevention and treatment, dentistry and periodontology, environmental and occupational health, health policy, chronic disease care and smoking prevention. Multi-year grants and contracts for various Divisional projects total over $150 M.

A successful candidate will also be responsible for teaching and advising students at the graduate level. At the present time, the Division has 63 graduate students (44 MS and 19 PhD). The salary range for this faculty position will be very competitive, and the University of Minnesota offers excellent fringe benefits.

Applicants should submit a cover letter, current curriculum vitae, and the names of at least three references on-line at *<http://employment.umn.edu/applicants/Central?quickFind=85530>*. Please reference requisition # 164967. In addition, three letters of recommendation should be sent to: Biostatistics Search Committee, Division of Biostatistics, A460 Mayo Building, MMC 303, 420 Delaware Street SE, Minneapolis, MN 55455. For questions contact Sally Olander (brown198@umn.edu).

The University of Minnesota is an equal opportunity educator and employer.

RUSH UNIVERSITY MEDICAL CENTER

Head of the Center for Medical Computational Sciences

Rush University is seeking nominations and applications for the position of Head of the Center for Medical Computational Sciences. This new center is being developed to be an innovative academic home of biostatistics, bioinformatics and allied computational sciences at Rush. The Center is to be a resource to the four colleges of the University as well as to the translational researchers across the Rush Translational Consortium.

Rush is a vibrant academic medical center with a range of NIH-supported research including in the areas of neurological, orthopedic, geriatric and HIV diseases. At Rush, over 1700 students are engaged across the spectrum of biomedical sciences. The campus is undergoing an exciting renovation of infrastructure with a new hospital coming on-line in two years.

Candidates should have a distinguished record of research, education, service and experience in managing externally funded collaborative research studies. The candidate should have a record of accomplishment which would allow an academic appointment as professor or associate professor with an advanced degree in biostatistics or some related quantitative sciences discipline. Salary will be commensurate with academic accomplishment. Female and minority candidates are encouraged to apply.

Review of applications will begin immediately and continue until the position is filled. Candidates should communicate their interest in the position in a letter outlining their professional capabilities and accomplishments via email to *Sue_E_Leurgans@rush.edu*. In addition, candidates should include the names, addresses, phone numbers and email addresses for three professional references.

DANA-FARBER CANCER INSTITUTE

HARVARD School of Public Health

Research Scientists/Associates in Biostatistics

The Department of Biostatistics & Computational Biology at the Dana-Farber Cancer Institute is looking for research scientists/associates to collaborate in cancer research with an emphasis on clinical trials and laboratory correlative science.

Areas of collaborations include: i) prostate and renal cancer, brain imaging and HIV with DF/HCC investigators, ii) HIV with Ragon Institute investigators, iii) cancer clinical trials with the International Breast Cancer Study Group and the Eastern Cooperative Oncology Group, iv) risk prediction algorithms for familial cancer syndromes within the BayesMendel group.

We require a Ph.D. in Biostatistics/Statistics, exceptional skills in data analysis and SAS/S/R, and excellent written and oral communication skills.

Please email your CV and the names of three references to: Research Scientist Job Search, Dana-Farber Cancer Institute, biostatistics.job-search@jimmy.harvard.edu.

Dana-Farber Cancer Institute is an AA/EOE.

UAMS

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

The Department of Biostatistics at University of Arkansas for Medical Sciences (UAMS) invites applications to fill a tenure-track faculty position at the rank of Assistant or Associate Professor. As the statistical collaborator with various multi-disciplinary research programs across campus, this individual will provide expertise in study design and data analysis. The successful applicant will be expected to teach and to maintain a productive research record through active collaborative research and/or grant-supported methodological research.

Qualifications include earned doctorate in biostatistics, statistics, or related field; strong commitment to collaborative and methodological research and statistics education, as well as excellent written and oral communication skills.

Arkansas, "The Natural State," has a moderate, four-season climate, and outstanding outdoor recreational opportunities, including camping, hiking/climbing, canoeing and other water sports, fishing and hunting. Little Rock, Arkansas' capital and largest city, is in the geographic center of the state. It offers the relaxed lifestyle of a small town with the cultural, entertainment, and dining amenities of a larger city.

To apply, send cover letter, C.V., and the names/contact information for three references to:

Faculty Search
Department of Biostatistics
University of Arkansas for Medical Sciences
4301 W. Markham, Slot 781
Little Rock, AR 72205
or
BiostatSearch@uams.edu

UAMS is an Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.
http://www.uams.edu/biostat/

SAS), and experience working with large longitudinal data sets. 5+ years experience preferred. Send CV/cover letter to the Center for Biostatistics, 2012 Kenny Road, Columbus, OH 43221 or email *biostatistics@osumc.edu*. AA/EOE.

■ Lubrizol's R&D Statistical Sciences Department is seeking applications for a statistician with interest and skills in predictive analytics. Requirements include a master's degree in statistics or closely related field, strong interest and skills in modeling, statistical programming, and problemsolving, and good oral and written communication skills. For further information, and to apply, please visit *www.lubrizol.jobs* and apply for the statistician position. EOE.

■ Case Western Reserve University, Cleveland, Ohio, seeks assistant professor to develop, teach statistical methods courses. Direct Statistical Sciences Core & supervise MS statisticians. Direct CWRU/UH Biostatistics, Epidemiology & Research Design Core. Develop seminar series for junior clinical investigators. PhD (or For. Equivalent) Statistics/Biostatistics; 2 years experience as collaborating biostatistician in academic medical environment; R, SAS, SPSS, JMP required. Resume: *Melissa.Giglio@case.edu*, Job No. 2010-01. AA/EOE.

Oklahoma

■ Department of Biostatistics and Epidemiology, College of Public Health, University of Oklahoma Health Sciences Center, is recruiting a tenure-track assistant professor of biostatistics. PhD in biostatistics or related field and collaborative research experience required. Graduate teaching experience desired. Expertise preferred in survey-sampling methodology, statistical genetics/bioinformatics, Bayesian statistics, or network analysis. Attach letter of interest, CV, names of three references: Sara K. Vesely, PhD (*sara-vesely@ouhsc.edu*). The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

Assistant Professor of Research in Statistical Genetics

The Department of Preventive Medicine of the University of Southern California is seeking to recruit an Assistant Professor on the Research Track for their Divisions of Biostatistics and Bioinformatics. Candidates should have a Ph.D. in biostatistics, genetics, epidemiology, bioinformatics, computational biology, or a related field and a demonstrated interest in applications in molecular and genetic epidemiology.

Our department is one of the leading research departments in cancer and environmental epidemiology, with a large base of studies in the area of genetic epidemiology, including the Multiethnic Cohort Study, the Colorectal Cancer Family Registries, the International Schizophrenia and Bipolar Consortia, the Children's Health Study of the chronic effects of air pollution, and numerous population-based and family-based studies of other conditions.

The successful candidate will be collaborating on applications of cutting-edge statistical techniques to these studies and will have the opportunity to collaborate on methodological research in statistical genetics with a large group of internationally recognized leaders in the field. There are opportunities to teach and guide doctoral students. CV, personal statement of research interests, and contact information for three references to Duncan Thomas at dthomas@usc.edu.

USC values diversity and is committed to equal opportunity in employment. Women and men, and members of all racial and ethnic groups are encouraged to apply.

NORC at the UNIVERSITY OF CHICAGO
Innovative solutions in research and technology

NORC conducts high quality social science research in the public interest from its headquarters at the University of Chicago and from its offices in Chicago, IL, Washington, DC, Bethesda, MD, and Berkeley, CA.

We conduct research in economics, demographics, education and child development, health, substance abuse, mental health, justice, and survey quality both in the U.S. and internationally. We offer full-service survey design and operations as well as strengths in analysis, information technology, and technical assistance. NORC supports the research needs of government in the U.S. and abroad, international donor agencies, foundations, academic researchers, and private organizations.

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NORC is an affirmative action, equal opportunity employer that values and actively seeks diversity in the workforce.

FACULTY SEARCH ANNOUNCEMENT
Assistant Professor -- Division of Biostatistics

The Ohio State University College of Public Health invites applications for a tenure-track faculty positions in Biostatistics.

All applicants must have a PhD in Biostatistics or Statistics. All new faculty will be involved in teaching and methodological research, collaboration with OSU investigators, and mentoring of graduate students.
Candidates for the Assistant Professor position should have an interest in collaborative and methodological research and interest in and demonstrated record of teaching. Candidates for Associate Professor should have a bibliography of peer-reviewed publications, a record of funded research, and a record of excellence in teaching.

Rank and salary will be determined by the candidate's credentials. Applications will be considered as they arrive and the date of appointment is open to negotiation. Women and other under represented groups are especially encouraged to apply.

The College is part of the country's most comprehensive health sciences center -- the Colleges of Medicine, Pharmacy, Nursing, and Dentistry, as well as the James Comprehensive Cancer Center and the Ross Heart Hospital, are adjacent to the College of Public Health.

Located in the state capital and a metropolitan area of more than 1.5 million, Ohio State offers excellent opportunities for interaction with practitioners, policymakers, and academic colleagues. Successful candidates will be able to help shape the direction of the College of Public Health as it expands.

Please send a letter of application, CV, and three letters of reference to:

Thomas Santner, Ph.D.
Chair, Division of Biostatistics
College of Public Health
The Ohio State University
B-122 Starling-Loving Hall
320 West 10th Avenue
Columbus, Ohio 43210
tsantner@cph.osu.edu

THE OHIO STATE UNIVERSITY COLLEGE OF PUBLIC HEALTH

An EEO/AA employer. To build a diverse workforce, The Ohio State University encourages applications from individuals with disabilities, minorities, veterans, and women.

Pennsylvania

■ Possible tenure-track, lecturer, visiting positions. Collegial environment emphasizing disciplinary and cross-disciplinary research and teaching. All areas of statistics welcome. Joint appointments possible with other units in the Pittsburgh area. See *www.stat.cmu.edu* (email: *hiring@stat.cmu.edu*). Send CV, research papers, relevant transcripts, and three recommendation letters to: Faculty Search Committee, Statistics, Carnegie Mellon University, Pittsburgh, PA 15213, USA. Application screening begins immediately, continues until positions closed. Women and minorities are encouraged to apply. AA/EOE.

Tennessee

■ East Tennessee State University Department of Mathematics—tenure-track assistant professor position, August 2010. PhD in statistics, mathematical biology, applied mathematics, or related field required by August 2010. To teach undergraduate/graduate courses, direct masters' theses, do research, and participate in symbiosis. Computational, bioinformatics, biostatistics background preferred. Apply to this position at *https://jobs.etsu.edu/applicants/jsp/shared/position/JobDetails_css.jsp?postingId=138577*. AA/EOE.

Washington

■ Chief Scientific Officer: Outstanding opportunity to guide the scientific direction while helping expand current and future collaborations of Cancer Research and Biostatistics (CRAB), an internationally recognized biostatistical oncology research organization in Seattle. CRAB provides a complete suite of clinical trial services with over 80 employees including 10 PhD and MS biostatisticians. Learn more about this new, exciting position at CRAB by visiting *www.crab.org.* EOE.

■ MS Biostatistican: Excellent opportunity to join Cancer Research and Biostatistics (CRAB), an internationally recognized biostatistical oncology

research organization located in Seattle. Join our group of PhD and MS biostatisticians and collaborate with staff and clinical investigators to design, evaluate, and interpret clinical trials and associated laboratory data. MS in biostatistics, statistics, or related field required. For more information visit *www.crab.org.* EOE.

International

■ Tenure-track Assistant Professorship in Statistics, effective August 1, 2010. PhD in statistics/related field and research/teaching experience required. More details: *www.mat.puc.cl.* Application deadline: April 30, 2010. Email application letter, statement of research interests, and CV to *stats2010@mat.puc.cl*. Send at least three reference letters, preprints/reprints, and transcripts to this email address or to Director, Departamento de Estadística, Pontificia Universidad Católica de Chile, Casilla 306, Santiago 22, Chile. *www.mat.puc.cl.* EOE. ■

Contacts

Main

American Statistical Association
732 North Washington Street
Alexandria, VA 22314-1943
Phone: (703) 684-1221
Toll-free: (888) 231-3473
Fax: (703) 684-2037
Email: *asainfo@amstat.org*

ASA Departments

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Do you have an address change, membership question, claim, or general inquiry? Please call the ASA Member Service's toll-free direct line, (888) 231-3473, for all your ASA needs. If you prefer, email Member Services at *asainfo@amstat.org* or fax to (703) 684-2037.

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Host a membership social and the ASA will reimburse up to $100 to cover the cost of pizza, sandwiches, snacks, and soft drinks. Visit *www.amstat.org/membership/pdfs/ChapterSchoolSocials.pdf* to participate.

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The ASA collects demographics data to create summary reports of the ASA membership and develop services. All individual demographic information remains confidential. Visit *www.amstat.org/membersonly* and click "My Demographic Profile" under "My Account" to participate.

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Recruit your colleagues for ASA membership! You depend on the ASA, and we count on you, too. We know our current members are the best possible sources for new members who could benefit from all the ASA has to offer. Visit *www.amstat.org/membership/mgm*.

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■ ***The ASA-SIAM Series on Statistics and Applied Probability*** provides works of general interest to statisticians, applied mathematicians, engineers, and scientists. The series is jointly published by the ASA and the Society for Industrial and Applied Mathematics. Visit *www.amstat.org/publications/booksandcds.cfm*.

■ ***Teaching Statistics: Resources for Undergraduate Instructors*** is a publication of the ASA and the Mathematical Association of America. For more information, visit *www.amstat.org/publications/booksandcds.cfm*.

■ ***Guidelines for Assessment and Instruction in Statistics Education (GAISE) Report: A Pre-K–12 Curriculum Framework*** provides a conceptual framework for K–12 statistics education and a coherent picture of the overall curriculum. For more information, visit *www.amstat.org/education/gaise*.

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Joint Statistical Meetings

JSM is the largest annual gathering of statisticians in North America. Sponsored by the ASA, International Biometric Society (ENAR and WNAR), Institute of Mathematical Statistics, Statistical Society of Canada, International Chinese Statistical Association, and International Indian Association, JSM is attended by more than 5,000 people each year. Visit *www.amstat.org/meetings* or email *JSM@amstat.org*.

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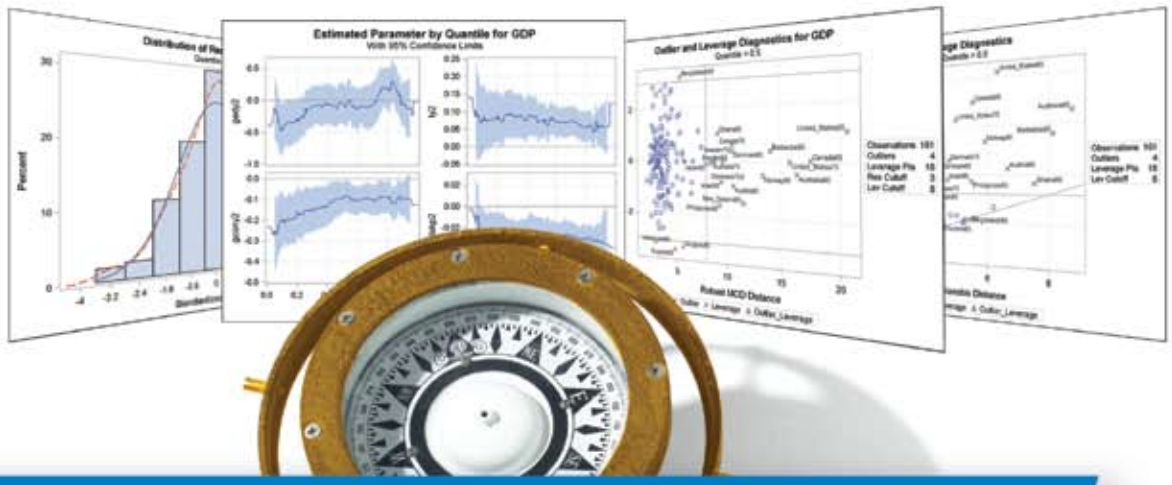

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