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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.

FEATURES

- 3 President's Corner
- 5 Highlights of the April 2010 ASA Board of Directors Meeting
- 7 ASA Releases Statement on Risk-Limiting Audits
- 7 FREE Writing Workshop at JSM
- 8 ASA Endorses Recommendations to Improve Forensic Methods
- 8 SPAIG to Provide List of Advisers
- 9 ASA President Appointed to NSF Directorship

Board Approves Accreditation Guidelines p. 10



- 9 Nominations Sought for JSM Mentoring Program
- 10 Board Approves Accreditation Guidelines
- 12 ASA Offers Free Article Downloads
- 13 Statistics Without Borders to Meet at JSM 2010
- 13 Editor Sought for CHANCE Magazine
- 15 Congress Views Results of NSF-Funded Research Projects
- 17 CoC Sponsors Sessions Featuring Scientific Applications of Statistics
- 17 Members Elected to National Academy of Sciences
- 18 Journal of Nonparametric Statistics Highlights
- 19 Statistical Analysis and Data Mining Highlights
- 20 Significance Highlights
- 21 The American Statistician Highlights
- 22 UMBC Statistics Program Celebrates 25th Anniversary

Column Contributors

Funding Opportunities

Who Wants to Be a Biostatistician (or Environmental Statistician, or Social Science Statistician, or ...)? p. 31

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 as research and graduate education manager, he was a program officer at the National Science Foundation, primarily in the probability program.



Crank

Science Policy News

Members Affect ASA Science Policy

р. 33

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



Contributing Editor

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

Pierson

Master's Notebook Find Your Fit

p. 35

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 ASA Research and Graduate Education Manager Keith Crank at *keith@amstat.org.*

Contributing Editor

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Nyberg

DEPARTMENTS

25 Statistician's View

Feedback: Odds Are, It's Wrong Statisticians Comment on Status of Climate Change Science

37 Meetings

2010 FDA/Industry Statistics Workshop Registration Form



MEMBER NEWS

- 39 People News
- 43 Award Deadlines and Information
- 45 Section News
- 55 Calendar of Events
- 63 Professional Opportunities

cover design by Melissa Muko

Half-Time Report

It is the time of year when proud parents and other family members congratulate their loved ones at graduation ceremonies across the country. It is also the time when graduates receive good advice about how to use the core, computational, and communication skills they acquired in their programs to solve major challenges related to health, energy, and the environment. As President Barack Obama said in one of his addresses, "The United States is still a land of infinite possibilities waiting to be seized, if you are willing to seize them."

Even in the current economic climate, it is good to see that statisticians have options in all three sectors—academia, industry, and government. For those who are looking for jobs, JSM 2010 will provide many opportunities, including a session titled "Recruitment for the Federal Sector." There also will be many mentoring opportunities for our younger statisticians. And I am excited about the President's Invited Speaker, SAS CEO Jim Goodnight, who will give a talk titled "The Forecast for Predictive Analytics: Hot and Getting Hotter." Analytics is an area in which statisticians have a future.

All this talk about talks reminds me I have to get ready for mine! I can't believe how the time is flying by and that I am already halfway through my term as ASA president. Certainly, exciting things are happening within our association—our relationship with RSS through *Significance*, accreditation implementation, social media, electronic publications, and a new winter conference on statistical practice, just to name a few. *Amstat News* issues are full of goodies; there is something of interest to all our members and the public. Also, there has been good progress made on the initiatives related to **G**rowth, **I**mpact, **V**isibility, and **E**ducation. Members of the Membership Growth Working Group, chaired by Jeri Mulrow, have been working hard with various existing committees to propose strategies for enhancing growth. Suggestions so far include the following:

- Strongly encouraging department chairs/ heads to get students in their departments to participate in ASA activities
- Supporting the creation of a mentoring program
- Providing opportunities for communicating and networking among students and recent graduates
- Making use of peers and others to encourage lapsed members and ASA Fellows to renew their memberships
- Strongly encouraging higher-level industry statisticians to support ASA membership and involvement in ASA activities
- Continuing to actively engage the heads of federal statistical agencies by regularly meeting with them and encouraging them to support and promote ASA membership and participation in ASA activities
- Promoting diversity within the ASA
- Attracting new members from quantitative areas such as mathematics, computer science, and the physical and social sciences who have a strong interest in statistics



Sastry Pantula

Ideas aimed at new statisticians include the following:

- Creating a group for new statisticians in research and a group for new applied statisticians
- Promoting forums and publications aimed at new statisticians
- Dedicating a web site to new statisticians that includes information about employment opportunities, awards, and mentoring activities
- Providing more career assistance

I am thrilled with the energy of this working group and their follow-up plans. On a related topic, a couple of member-initiated proposals supported by the board are titled "Connecting the ASA to Young Statisticians Through Outreach to High-School Statistics and Mathematics Teachers: A First Step" and "JSM Conference Mentoring Program."

The Public Awareness and Impact Working Group is chaired by ASA Executive Director Ron Wasserstein. In April, board members discussed ideas for an ASA tagline and two- or three-sentence "elevator pitch" that describes what the ASA does or stands for. As you may know, the American Mathematical Society's tagline is "Maintaining Excellence in Mathematical Sciences Research" and the National Institute of Statistical Science's tagline is "The Statistics Community Serving the Nation."

ASA Public Relations Specialist Rosanne Desmone also has been working to increase public awareness of the ASA by regularly sending out alerts to various news outlets and helping gather Statisticians in the News articles for the ASA's web page.

Another way the ASA has raised public awareness of its activities is by putting *Amstat News* online and making it accessible to the general public. Meanwhile, members of the working group continue to develop other innovative ideas.

One of the initiatives of the ASA's strategic plan is to "promote the need for sound statistical practice to inform decisionmaking in public policy and science policy." The Visibility and Impact in Science Policy Working Group, chaired by Past President Sally Morton, is focusing on standardizing the process for identifying emerging issues and providing a timely response to public and science policy matters in collaboration with ASA Director of Science Policy Steve Pierson and other statistical associations (see Science Policy News on Page 33). The group also is working to identify key issues—climate change, STEM education, election audits—and to issue position statements on them. Informational outreach to the public and stakeholders is another important topic being discussed by the group.

Jessica Utts is leading the Education Working Group, which is organizing a panel at JSM 2010 titled "Statistics Degree Programs in a Data-Centric World: What Needs to Change?" In addition, there will be three P.M. roundtables on preparing statisticians for the needs of industry.

A subgroup of this working group is developing a process to update the undergraduate statistics curriculum guidelines approved by the board in 2000 (see *www.amstat.org/education/curriculumguidelines. cfm*). Other subgroups are looking at professional master's degree programs and a plan to gather information from potential employers regarding educational expectations for PhD, MS, and BS graduates. On a related topic, a member-initiated proposal, titled "Methodology for Measuring the Quality of Graduate Programs: A Workshop Focusing on Programs in the Statistical Sciences," received support by the board recently.

I am absolutely thrilled with the energy of our member volunteers. The ASA thrives on your dedication to the profession and our association. Constructive suggestions are always welcome. Thank you for all you do for the ASA. I look forward to the remaining half of this year.

Sarty &. Pantula

Highlights of the April 2010 ASA Board of Directors Meeting

SA President Sastry Pantula led the board through a full agenda of policy matters during its April 16–17 meeting at the ASA office in Alexandria, Virginia. Following are the highlights:

- The board endorsed an ASA statement on risk-limiting post-election audits and *Strengthening Forensic Science in the United States: A Path Forward*, a report by the National Academies (see Page 7).
- Iain Johnstone presented the report of the Accreditation Committee. The board approved the detailed plan for moving forward with the accreditation program (see Page 10 and *www.amstat.org/accreditation*).
- The board heard reports from the four strategic plan working groups currently at work. In addition, President-elect Nancy Geller presented her ideas for strategic initiatives for next year.
- The board held a creative session with the Public Awareness Workgroup to discuss development of a tagline for the ASA and a brief description (an "elevator pitch") for the association. The session was an important part of the working group's efforts to develop a comprehensive public awareness plan for the association.
- The board heard proposals for developing a statistics portal, a "one-stop shop" for a variety of statistical content. Discussions about the concept continue.
- As always, the board heard a report from ASA Treasurer Keith Ord. He noted that investments are up, but still below their 2007 values; that membership and subscription revenues held steady because of rate increases, but numbers were down; and that the 2009 audit was concluded successfully. He emphasized the importance of paying close attention to revenue sources.

Board of Directors

Sastry Pantula, president Nancy Geller, president-elect Sally Morton, past president Nat Schenker, third-year vice president Christy Chuang-Stein, second-year vice president Rod Little, first-year vice president David Banks, third-year Council of Sections representative Jeri Mulrow, second-year Council of Sections representative Jessica Utts, first-year Council of Sections representative Susan Hilsenbeck, third-year Council of Chapters representative David Marker, second-year Council of Chapters representative Tom Short, first-year Council of Chapters representative Geert Verbeke, international representative Karen Kafadar, publications representative Keith Ord, treasurer Ron Wasserstein, executive director

- The board approved a revised development policy for the ASA. The policy governs aspects of the ASA's fundraising activities.
- Michelle Dunn, a National Cancer Institute program director, discussed the importance of the statistics community's involvement in the Biostatistical Methods and Research Design (BMRD) study section of the National Institutes for Health and ideas for increasing the number of grant applications to the section.

- Vice President Christy Chuang-Stein, chair of the Membership Council, and Holly Shulman, council vice chair, presented the first report of the newly formed council. Chuang-Stein provided an impressive list of the major accomplishments of each committee in 2009, as well as an assessment of the progress of the committees to date. She also noted some issues for the board to consider for some of these committees.
- Geller, also chair of the Leadership Support Council (LSC), presented the council's first report. The LSC, the cornerstone of the committee restructure approved by the ASA Board of Directors last year, is fully under way. The early results of this reorganization are positive. The primary reasons for creating the new structure were to improve the function of committees and the communication between committees and the board. The whole organization is more effective when its committees are operating in concert with the board to implement the strategic plan. The time and effort of volunteers, the lifeblood of the association, is better spent when we operate effectively and efficiently.

Bylaw Change

The Leadership Support Council and ASA Board of Directors recommend the following change to the ASA bylaws, Article IX (Committees), Part 2 (Membership):

From: "All members of Standing Committees, as well as the chairs of Continuing and Ad hoc Committees, shall be full members of the Association."

To: "All members of ASA committees who are appointed by the ASA shall be full members of the association during the term of their appointment. Exceptions for certain committees or committee positions can be granted by the Leadership Support Council when appropriate for the function of the committee."

- The LSC recommended a change to the bylaws (see Bylaw Change), requiring, with certain exceptions, that all members of ASA committees who are appointed by the ASA be full members of the association during the term of their appointments.
- The Advisory Committee on Teacher Enhancement (ACTE) was dissolved at its own request. This request was reviewed by the LSC before being considered by the board. The ACTE felt its functions were being fulfilled by the new Education Council.
- Karen Kafadar, publications representative, presented the annual report of the Committee on Publications (COP). The COP has been active and engaged under the leadership of its chair, David Scott, handling a variety of matters and providing valuable advice and guidance to the board.
- One specific recommendation of the COP was that editors of the ASA's wholly owned journals be required to be members of the ASA during their terms of service. The COP believes these editors serve an important role and occupy a visible place within the association. The board agreed that this requirement should apply to all future editorial appointments, those beginning in 2011 and beyond.
- The board reviewed proposals for the Member Initiative program and selected some of them for funding.
- David Judkins, JSM 2011 program chair, presented the results of the 2009 JSM Presenter Satisfaction Survey. The survey, sent to JSM presenters, addressed the subject of satisfaction with the presentation experience, but had tailored questions for the various session types and presenter roles. This survey was in addition to the standard satisfaction survey sent out to registered JSM attendees.
- The board, as it does at each meeting, heard about issues and concerns related to chapters and sections from the respective council governing boards.

The board next meets on June 18 in Alexandria for its annual budget meeting, then again in late July at JSM in Vancouver. ■

ASA Releases Statement on Risk-Limiting Audits

The ASA Board of Directors recently released a statement recommending that routine risk-limiting audits be conducted and reported in all federal elections, as well as in statewide and other governmental election contests. The statement also urges election officials to seek statistical advice about how to efficiently attain the desired accuracy.

"Risk-limiting audits are designed to limit the risk of certifying incorrect winners," said Sastry Pantula, ASA president. "A well-designed audit often can confirm a correct electoral outcome after examining only a small fraction of the ballots cast. If, however, an outcome is unclear or incorrect, a risk-limiting audit protects against prematurely accepting it. We need laws that call for such audits—laws with teeth."

"Most current laws mandating post-election audits call for looking at a fixed percentage of ballots," continued Pantula. "They may select many more ballots than are needed to do the job or, sometimes, not enough to provide a satisfactory check on the outcome. Good statistical design can efficiently and economically guarantee a large chance of finding and correcting erroneous electoral outcomes. Statisticians can help design risk-limiting audits that make better use of election officials' time and taxpayers' money."

In a risk-limiting audit, ballots are sampled for review in batches (a batch is a group of ballots for which the machine total has been separately tallied). The total number of ballots examined to confirm a correct outcome generally increases with 1) a smaller margin of victory, 2) larger-sized batches of ballots, and 3) more errors in the machine count. Thus, states should seek to buy electoral machinery that makes small-batch reporting easy and minimizes errors in recording voter intent. The audits, themselves, can help identify the kinds of machines and ballot designs that lead to the fewest errors.

The complete two-page statement approved by the

Previous Election Auditing Statements

March 2008, www.amstat.org/about/ pressreleases/asacallsforaudits.pdf

August 2008, www.amstat.org/about/ pressreleases/asaendorsespostelectionaudits.pdf

board may be viewed at www.amstat.org/outreach/pdfs/ Risk-Limiting_Endorsement.pdf. Additional information about election audits can be found at www.amstat.org/outreach/ electionauditingresources.cfm.

FREE Writing Workshop at JSM

free writing workshop for junior researchers will take place during JSM on August 1 and 4. The workshop will provide instruction in how to write journal articles and grant proposals.

As part of their application, participants will be required to submit a recent sample of their writing, which will be reviewed by a senior mentor.

Applications are due by June 1, and successful applicants will be notified by June 30. Applications received after June 1 will be considered if space is available. There is no fee for participation; however, participants must agree to attend both the



session on August 1 and lunch on August 4. Funding is anticipated for partial travel support.

Attendance will be limited and depend on the number of mentors available.

Visit *www.amstat.org/meetings/wwjr/ index.cfm?fuseaction=main* for details. ■

ASA Endorses Recommendations to Improve Forensic Methods

Rosanne Desmone, ASA Public Relations Specialist

The ASA Board of Directors recently voted to endorse recommendations made in *Strengthening Forensic Science in the United States: A Path Forward*, a 2009 National Academies' report. In its statement, the board recognized the pivotal role of forensic science in the U.S. judicial system and cited the value of statistical methods and research to improve forensic methods.

The National Academies' report identified several deficiencies in the nation's forensic science system and called for major reforms and new research. It came after years of critiques of specific forensic science practices and calls for reform, but broke new ground by offering a comprehensive review of the forensic science system.

"Statisticians have played an important role in the constructive criticism of current forensic science practices," said Sastry Pantula, ASA president. "We can continue to play an important role in the reforms urged by the National Academies. Statisticians can make vital contributions toward establishing measurement protocols, quantifying

SPAIG to Provide List of Advisers

Statistics Partnerships among Academe, Industry, and Government (SPAIG) is updating its list of advisory boards and review teams for academic statistics programs, to be posted at *www.svsu.edu/orgs/spaig*. The purpose of this initiative is to provide a list of statisticians working in government or industry who have an interest in serving as advisers to academic statistics programs. To be included in this list, send your name and contact information to Morteza Marzjarani at *marzjara@svsu.edu.*

uncertainty, designing experiments for testing new protocols or methodologies, and analyzing data from such experiments."

One of the recommendations of the report is to establish an institute of forensic science, and the ASA board noted that sound statistical practices are essential for the proposed institute to achieve its mission. Examples of such practices include the following:

- The assessment of current and newly developed forensic practices using properly designed experiments and data analytic methods
- The use of statistical methods based on established principles and procedures for the analysis of data, including estimated error rates
- The review, in mainstream scientific journals, of novel methods (beyond variants of established methods) developed for the analysis of data; reviewers should include statistically qualified experts
- The employment of modern statistical quality control and quality assurance procedures to ensure that measurements, procedures, and testimony are of high quality
- The application of proficiency tests that employ accepted statistical designs and, whenever possible, are double blind to avoid potential biases
- The availability of all expert reports to interested parties and the provision of sufficient supporting data and information to permit independent review

The complete statement approved by the ASA board, including background, may be viewed at *www.amstat.org/outreach/pdfs/Forensic_Science_Endorsement.pdf.*

ASA President Appointed to NSF Directorship

A SA President Sastry Pantula was recently appointed Division Director for Mathematical Sciences in the Mathematical and Physical Sciences Directorate at the National Science Foundation (NSF).

Pantula will join NSF in September from North Carolina State University (NCSU), where he has been a professor and director of graduate programs in the department of statistics since 1994 and department head since 2002. While at NCSU, Pantula has worked with a number of companies-including Becton Dickinson, GlaxoSmithKline, Eli Lilly and Company, SAS Institute, and Merck-to increase the number of graduate industrial traineeships and develop graduate fellowships. During a scholarly leave in 1990-1991, he worked at SEMATECH, where he developed and taught various courses in quality control and experimental design and collaborated with engineers from semiconductor industries in the United States and supplier companies in Mexico.

Under Pantula's leadership, the department of statistics at NCSU received the Departmental Teaching and Learning Excellence Award in 2004–2005. Pantula also became a member of the NCSU Academy of Outstanding Teachers and received an outstanding teacher award, the D.D. Mason Faculty Award in 2001, and SAA-PAMS Department Head Award in 2005 and 2008.

Pantula earned his doctoral degree in 1982 from Iowa State University, while both his bachelor's and master's degrees are in statistics from the Indian Statistical Institute in Kolkata, India. His areas of research include time series analysis and linear and nonlinear models. In addition to a number of publications in various journals, he coauthored the textbook *Applied Regression Analysis: A Research Tool.*

Pantula was elected an ASA Fellow in 2002 for contributions

to research in time series analysis; exemplary service in graduate education as a teacher, researcher, mentor, and recruiter of graduate students and industrial partners; and contributions to the profession. He also received the Young Statistician Award from the International Indian Statistical Association that year.

"I look forward to working with Dr. Pantula in this important leadership role for mathematical sciences," said H. Edward Seidel, acting assistant director for mathematical sciences in the Mathematical and Physical Sciences Directorate at NSF.



Pantula

Nominations Sought for JSM Mentoring Program

Nominations are being accepted for the Cavell Brownie Scholars JSM Mentoring Program, which will be offered during JSM 2010 in Vancouver, British Columbia. This program brings faculty, minority graduate students, and postdoctoral scholars together in a structured mentoring program. It provides graduate students who are preparing for academic careers with information, mentoring, and a peer network; statistics faculty members learn best practices for mentoring graduate students.

For more information, a nomination form, and selection criteria, visit *www.amstat-online.org/2010mentoringprogram/ CavellBrownieScholarsProgram.php.* Nominations are due by June 10. Those received after June 10 will be considered if space is available. Contact Marcia Gumpertz at *gumpertz@ncsu.edu* with questions.

Board Approves Accreditation Guidelines

Committee moves carefully to test procedures

lain Johnstone, ASA Accreditation Committee Chair, and Ron Wasserstein, ASA Executive Director The ASA Board of Directors recently approved a set of guidelines for accreditation developed by the ASA Accreditation Committee. The committee was formed last year, after the board endorsed a recommendation to begin a program of voluntary individual accreditation of statisticians.

What Is Accreditation?

First and foremost, accreditation is a service offered only to members of the ASA. Not all members will want to seek accreditation; however, the experiences of colleagues in Australia, Canada, and the United Kingdom regarding accreditation have been encouraging. Additionally, the results of a member survey (see *http://magazine.amstat.org/2009/09/ accreditationsep09*) indicate many members expect to find value in a credential that provides peer recognition for all of the following:

- Having advanced statistical training and knowledge
- Having experience in applying statistical expertise competently
- Maintaining appropriate professional development
- Agreeing to abide by ethical standards of practice
- Being able to communicate effectively

Accreditation is a portfolio-based—not examination-based—credential that is renewable every five years. Accreditation is also voluntary; applicants seek accreditation because they believe the credential is worthwhile to them, but it is not a requirement for practice.

Accreditation applicants will submit materials to be reviewed by members of the ASA Accreditation Committee, peers who will evaluate submissions based on the ASA's Guidelines for Accreditation.

What Others Are Saying

Colleagues in other countries have warmly welcomed ASA accreditation, expressing the view that ASA participation adds value to accreditation and enhances the perception of the statistics profession worldwide.

Those who meet these guidelines will be awarded the designation "accredited professional statistician."

What's Next?

Because the concept of accreditation has caused concern for some, the ASA will move carefully and deliberately to positively develop the program. Members of the ASA Board and ASA Accreditation Committee invite all members to read the guidelines for accreditation at *www.amstat.org/accreditation* and provide comments, questions, and suggestions.

Those who are considering applying for accreditation should fill out the intent-to-apply form at *www.amstat.org/accreditation*. This does not create any obligation, but will help the committee better estimate the level of interest and manage the initial wave of applications. Also, committee members will communicate regularly with those on the intent-toapply list to keep them abreast of developments in the program.

Between now and JSM, accreditation committee members and ASA staff will be alpha testing basic procedures and reviewing member comments. After JSM, small groups from the intent-to-apply list will be invited to participate in beta testing systems and processes. Over time, as committee members learn and improve, they will move from testing into fullfledged operation.

For more information, visit *www.amstat.org/ accreditation*.

ASA Offers Free Article Downloads



For a limited time, several ASA journals will have featured articles available to download for free. The following articles were chosen by the journal editors as featured articles:

Journal of the American Statistical Association

"Statistics: From Evidence to Policy," ASA Past President Sally Morton's address to the 2009 Joint Statistical Meetings

"A Moving Average Approach for Spatial Statistical Models of Stream Networks" (with discussion), Jay M. Ver Hoef and Erin E. Peterson

"A Statistical Framework for Differential Privacy," Larry Wasserman and Shuheng Zhou

Available at http://pubs.amstat.org/toc/jasa/105/489

The American Statistician

"Passion-Driven Statistics," Robert Easterling

"Desired and Feared—Quo vadis or Quid agis?" David R. Fox

"Moving the Statistics Profession Forward to the Next Level," Roger W. Hoerl and Ronald D. Snee

"Thoughts on the Importance of the Undergraduate Statistics Experience to the Discipline's (and Society's) Future," Brian C. Kotz "Who Is Teaching Introductory Statistics?" Frank P. Soler

"The Business of Desire and Fear," Rick Cleary and Sam Woolford

"Response to 'Desired and Feared—What Do We Do Now and Over the Next 50 Years' by Xiao-Li Meng," Elart von Collani

"Rejoinder: Better Training, Deeper Thinking, and More Policing," Xiao-Li Meng

Available at http://pubs.amstat.org/toc/tas/64/1

Journal of Business & Economic Statistics

"Another Look at the Identification of Dynamic Discrete Decision Processes," Victor Aguirregabiria

Available at http://pubs.amstat.org/toc/jbes/28/2

Technometrics

"Statistical Methods for Fighting Financial Crimes," Agus Sudjianto et al.

"Fraud Detection in Telecommunications: History and Lessons Learned," Richard A. Becker, Chris Volinsky, and Allan R. Wilks

"Fraud Detection in Telecommunications and Banking: Discussion of Becker, Volinsky, and Wilks (2010) and Sudjianto et al. (2010)," David J. Hand

"Statistical Challenges Facing Early Outbreak Detection in Biosurveillance," Galit Shmueli and Howard Burkom

Available at http://pubs.amstat.org/toc/tech/52/1

Journal of Computational and Graphical Statistics

"Rainbow Plots, Bagplots, and Boxplots for Functional Data," Rob J. Hyndman and Han Lin Shang

Available at *http://pubs.amstat.org/toc/jcgs/19/1*

Statistics Without Borders to Meet at JSM 2010

James J. Cochran

Subject the set of the

SWB projects at various stages of completion. All interested individuals are welcome to attend.

Also of interest to SWB volunteers is an invited panel session, titled "Global Statistical Capacity and the Role of Statistical Societies," scheduled on August 1 from 2:00 p.m. – 3:50 p.m. (See Page 48). Additionally, a meeting of the ASA Volunteerism Special Interest Group will follow the SWB meeting.

For more information about SWB, or to volunteer, contact James J. Cochran at *jcochran@cab.latech. edu* or Gary Shapiro at *g.shapiro4@verizon.net.* ■

Editor Sought for CHANCE Magazine

Mominations and applications are being sought for the next editor of *CHANCE* magazine. Working with the editorial board and the ASA's magazine staff, the editor will provide direction and vision for the magazine, which has been published by the ASA for more than 20 years. The editor's term will be from 2011 to 2013.

To submit a nomination, include the name and contact information of the nominee and a brief description of the nominee's qualifications.

To apply, submit a curriculum vitae and the names of two references. Applicants also should provide a vision statement for *CHANCE* that addresses opportunities and



niches for *CHANCE* as a complement to *Significance*, a magazine published jointly by the ASA and Royal Statistical Society.

Nominations and applications should be submitted by June 21

to Megan Murphy, ASA communications manager, at *megan@ amstat.org*. ■

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Congress Views Results of NSF-Funded Research Projects

Steve Pierson, ASA Director of Science Policy

ontserrat Fuentes, a professor in the statistics department at North Carolina State University, represented the ASA at the 16th Annual Coalition for National Science Funding (CNSF) Capitol Hill Exhibition on April 14. The CNSF exhibit highlights to Congress research funded by the National Science Foundation (NSF). Fuentes also made Hill visits on behalf of the ASA Climate Change Policy Advisory Committee (CCPAC).

Fuentes's poster summarized her NSF-funded research projecting the effects of climate change on tropospheric ozone in the eastern United States in the early 2040s. It also highlighted the contributions statisticians bring to climate change and health impacts research, including the quantification of uncertainty, expression of projections in terms of probabilities, and the evaluation the climate models. Because of the policymakers in attendance, Fuentes emphasized the tools statisticians provide to facilitate policymaking and more efficient management of air quality and other environmental agents under limited information and changing climatic conditions.

A number of representatives and their staffs visited with Fuentes at her poster. Overall, 250 people were estimated to have attended the event, including nine members of Congress.

Prior to the evening exhibition, Fuentes participated in seven meetings on Capitol Hill to advocate full funding for President Barack Obama's fiscal year (FY) 2011 budget request for NSF and discussed the work of CCPAC. Accompanied by The Ohio State University professor Mark Berliner and ASA Director of Science Policy Steve Pierson, she met with Rep. David Price (NC-4), staff for North Carolina senators Richard Burr and Kay Hagan, and several congressional committees.

One of the CCPAC documents Fuentes discussed in her Hill meetings was a review of the research on the health impacts of climate research that she co-wrote with five other statisticians. (See *www.amstat.org/committees/ccpac/pdfs/ ClimateChangeHealthImpacts.pdf.*) Her group concluded that the research indicates a significant health impact of climate change is increased mortality from global warming. The group also discussed infectious



From left: Montserrat Fuentes, ASA President Sastry Pantula, Rep. Howard Coble, Rep. Walter Jones, and Matt Peterson stand in front of the poster summarizing Fuentes's NSF-funded research project on the effects of climate change on tropospheric ozone.



Steve Pierson, ASA director of science policy (right), discusses Montserrat Fuentes's climate change poster with Rep. Brad Miller.

disease and pollution impacts. While finding no "consensus among scientists regarding an increase of infectious diseases under climate change," they did find that climate change is expected to result in larger concentrations of tropospheric ozone, which would lead to more ozone-related deaths.

Have You Checked Out *CHANCE* Lately?

Though CHANCE has been around since 1988, the magazine recently unveiled a new online version.

Now, free for student members, CHANCE

features articles for anyone with an interest in the examination of data. *CHANCE* intends to inform and entertain with articles focused on current events and statistical practice.



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CoC Sponsors Sessions Featuring Scientific Applications of Statistics

The Council of Chapters is sponsoring two invited sessions at JSM 2010 that will feature diverse scientific applications of statistics. One session will highlight statistical opportunities in large-scale international science endeavors. The other will showcase the work of several Vancouver statisticians exploring the impact of climate change on British Columbia's forests.

Big Science: Opportunities for Statisticians in the World's Most Massive Projects

Organizer and chair: Kary Myers, Los Alamos National Laboratory

From atom smashes to gene sequences, huge collaborative endeavors generate some of the most exciting scientific data and developments in the world today. Often called "big science," these massive projects combine big machinery, big laboratories, big computing power, and big budgets. In many cases, big science also produces big data sets, offering many opportunities for statistical insights. In this session, scientists will introduce the technical context and statistical challenges of three big science efforts: the hunt for the Higgs boson with the Large Hadron Collider (Isabel Trigger, TRIUMF), the mission of the Mars Science Laboratory Rover to assess whether Mars can support microbial life (Sam Clegg, LANL), and the discovery and characterization of Earth-approaching objects such as asteroids and comets by way of the Pan-STARRS digital sky survey (Alex Szalay, The Johns Hopkins University).

The BC Forest Resource in a Changing Climate

Organizer and chair: Rick Routledge, Simon Fraser University

British Columbia forests are facing unprecedented change. As the last century wound down, the forests were the focus of high-profile protests over forest management practices. Yet as the current



century unfolds, massive new threats are emerging. Mountain pine beetles have devastated vast tracts of lodgepole pine, and wildfires have swept down dry hillsides to threaten valley-bottom communities. Warming temperatures are possible contributing factors. Two of the three speakers in this session will assess scientific evidence for this hypothesized influence. The third will report on investigations on extracting greater benefit from the threatened forest resources.

Visit *www.amstat.org/meetings/jsm/2010* to view the JSM 2010 online program for session times and locations. ■

Members Elected to National Academy of Sciences

The National Academy of Sciences recently announced the election of new members and foreign associates, of which three are ASA members. ASA members elected are **Jerome H. Friedman** of Stanford University, **Michael I. Jordan** of the University of California, Berkeley, and **Donald B. Rubin** of Harvard University.

Election to the academy is considered one of the highest honors that can be accorded a U.S. scientist or engineer. The entire list of new members and foreign associates is available at *www8*. *nationalacademies.org/onpinews/newsitem.aspx?RecordID=04272010*.

Journal of Nonparametric Statistics Highlights May Issue Features Discussion Paper

Suojin Wang, Editor-in-Chief, Journal of Nonparametric Statistics

Special Rate for Members

Journal of Nonparametric Statistics is now a publication of the American Statistical Association. ASA members are entitled to a personal online subscription for \$15 per volume. To order, visit www.tandf.co.uk/journals/offer/gnst-so1.asp.

The May 2010 issue features a discussion paper, "Identification and Estimation of Nonlinear Models Using Two Samples with Nonclassical Measurement Errors," by **Raymond Carroll, Xiaohong Chen**, and **Yingyao Hu**. As the title indicates, this paper considers identification and estimation of a general nonlinear errors-invariables model using two samples.

This statistical problem is especially appealing in current research in econometrics, biology, and medicine. The authors show that the general latent nonlinear model is nonparametrically identified using the two samples when both could have nonclassical errors, without either instrumental variables or independence between the two samples. In addition, the authors propose sieve quasi maximum likelihood estimation for the parameter of interest and investigate its properties when the two samples are independent and the nonlinear regression model is parameterized.

Five experts—Aurore Delaigle, Peter Hall, Han Hong, Marie-Luce Taupin, and Young Truong—contribute interesting discussions from both theoretical and practical viewpoints. They offer additional insight and ideas for further research and development. These discussions are followed by a rejoinder.

The discussion paper, comments, and rejoinder will be freely available online until December 31.

In addition to the discussion and rejoinder papers, seven other papers appear in this issue. These papers cover a range of research interests in nonparametric statistics, from functional estimation to variable selection to goodness-of-fit testing. To view the full table of contents, visit *www. informaworld.com/gnst.*

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Statistical Analysis and Data Mining Highlights Three Interrelated Papers Spotlighted

Joe Verducci, Editor, Statistical Analysis and Data Mining

olume 3, issue 3 features three interrelated papers. The first proposes a new automatic criterion for selecting the bandwidth to be used in Gaussian kernel support vector machines (SVMs). The second proposes a sequential version of SVMs, called twin prototype SVMs (TVMs), which efficiently updates a fixed number of support vectors when training data arrives sequentially and there is limited storage capacity. The third paper also covers processing data streams, but summarization is in terms of hidden factors that link multivariate inputs and responses.

In "A Stable Hyperparameter Selection for the Gaussian RBF Kernel for Discrimination." Jeongyoun Ahn provides a geometrical interpretation of the smoothing parameter in terms of the feature mapping implied by the radial basis function of a Gaussian kernel with bandwidth h. For small values of h, points get mapped to near uniformity on a hypersphere, whereas large values preserve the original distances between data points. Since the SVM is essentially a linear discriminator in the feature space, a natural (geometry-based) criterion is GB(h) = difference of thebetween-versus the within-sums of squares in the feature space, and h is chosen to maximize GB (h). This choice applies to any linear discriminator in the feature space, is computationally very efficient, has low variability under many underlying models, and tends to achieve better tuning than other methods in terms of minimizing the misclassification rate. This latter property is illustrated using nine benchmark data sets.

However, SVMs have some potential shortcomings. They can be overly sensitive to outliers and the number of support vectors needed to determine the classification boundary grows linearly with sample size. This last property is particularly troublesome when large amounts of training data are streaming and there is only a fixed, budgeted amount of storage. Sensitivity to outliers can be fixed by replacing the SVMs's hinge loss function with a ramp loss that ignores all large deviations from boundary, but this comes at a high computational expense.

In "Online Training on a Budget of Support Vector Machines Using Twin Prototypes," Zhuang Wang and Slobodan Vucetic propose using a fixed number of prototypes in place of support vectors. To accommodate a new example arriving near the current boundary, either the prototype farthest from the boundary is removed or two near prototypes are merged and the boundary is updated. In addition to being computationally efficient, this TVM attains comparable accuracy to the unconstrained SVM, as reported for 12 large benchmark data sets.

An interesting extension of learning from streaming data occurs when the response is not just a classification, but a real-valued vector Y, and the objective is to learn a linear regression linking to the input vector X. **Giovanni Montana** and **Brian McWilliams** tackle this problem in "Sparse Partial Least Squares Regression for Online Variable Selection with Multivariate Data Streams."

A motivating problem is tracking multiple financial indexes, such as the S&P 100 and the Nikkei,



using only a minimal number of distinct stocks. Novel techniques include regularizing the crosscovariance matrix M of X and Y to simplify partial least squares (PLS) estimation to ordinary least squares (OLS), which allows for sparse estimation by penalizing the L1 norm of the coefficients. The incremental Sparse PLS (iS-PLS) algorithm is the first to combine tracking of latent factors with variable selection in an adaptive fashion for data streams. The iS-PLS procedure allows the number of important latent factors and their weights to evolve over time; the important variables retained within each latent factor also evolve over time, but their number does not. This method is validated on both simulated and real data, including enhanced index tracking in which individual stocks are selected to outperform the indexes being tracked by a fixed percentage.

As a whole, these papers provide a snapshot of current research in classification and regression, making the procedures more self-adaptive and extending them to streaming data, either from a stable distribution or one subject to local trends, such as a market factor.

Significance Highlights First Joint Issue Offers Fair Bit to Enjoy

Julian Champkin, Significance Editor

A s the result of a partnership between the ASA and Royal Statistical Society, every member of the ASA will receive *Significance* in addition to *Amstat News* starting in September.

The first joint issue will contain a mix of the important, the topical, the scientific, and, occasionally, the whimsical.

Two events that have dominated the news recently are the health care reforms that passed into U.S. law in March and the Icelandic volcano that halted air traffic over Europe in April. The health care changes are the most far-reaching in U.S. history. Is it possible to predict the results of such fundamental reform? **Jasjeet Sekhon** and **Jonathan Gruber** debate the issue.

Meanwhile, **Peter Brooker** looks at the risk analysis behind the decision to ground the planes—and finds that the statistical tests that would have made the analysis meaningful have not been done.

Nobel prizes will be announced in October. Ahead of them, *Significance* looks at just how objective they can really be. The statistics of women laureates over the years show a pattern that not even an all-male conspiracy theory could convincingly explain. Also in this issue are an article about a better, statistically based way of understanding the threats to orangutans and contributing to their conservation; a statistical analysis of carvings on thousandyear-old standing stones that shows they are not random, but form a written language; and an interview with George Box, the "Renaissance Grand Old Man" of statistics.

Add columns, letters, and even a statistical crossword and you get a magazine with something to interest, something to inform, and a fair bit to enjoy.



The American Statistician Highlights Statistics Curricula, March Madness Featured in May Issue

John Stufken, Editor, The American Statistician

The featured article in the May issue is "Computing in the Statistics Curricula," by Deborah Nolan and Duncan Temple Lang. The authors argue that this is an opportune time to make significant changes in statistics curricula and focus their attention on the integration of computational topics with the teaching of modern statistical methods. Nolan and Lang advocate that computing must be central to the statistics curricula at both the undergraduate and graduate levels and that computational topics must be integrated into traditional statistics courses. The article presents a broad set of computational topics with ideas on how to teach them.

In the General section, **Paul Fearnhead** and **Benjamin M. Taylor** extend the madness of the NCAA basketball season in "Calculating Strength of Schedule and Choosing Teams for March Madness." The authors propose a method to select teams for the NCAA tournament based on their win-loss records after accounting for the different opponents they have played.

David H. Annis, Peter C. Kiessler, Robert Lund, and Tara L. Steuber propose a symmetrized moment estimator for estimation of the one-step-ahead transition probabilities in a reversible Markov chain on a countable state space in "Estimation in Reversible Markov Chains." Devan V. Mehrotra, Xiaomin Lu, and Xiaoming Li propose and study two alternatives to the van Elteren test, which uses

Book Reviews

Applied Spatial Data Analysis with R Roger S. Bivand, Edzer J. Pebesma, and Virgilio Gómez-Rubio

The Art of Conjecturing, together with Letter to a Friend on Sets in Court Tennis Jacob Bernoulli, translated by Edith Dudley Sylla

Bioconductor Case Studies Florian Hahne, Wolfgang Huber, Robert Gentleman, and Seth Falcon

Business Statistics Norean R. Sharpe, Richard D. De Veaux, and Paul F. Velleman

Dynamical Processes on Complex Networks Alain Barrat, Marc Barthélemy, and Alessandro Vespignani

Graph Theory: A Problem Oriented Approach Daniel A. Marcus

Introduction to Probability and Statistics for Science, Engineering, and Finance

Walter A. Rosenkrantz

The Monty Hall Problem: The Remarkable Story of Math's Most Contentious Brain Teaser Jason Rosenhouse

New Drug Development: Design, Methodology, and Analysis J. Rick Turner

SAS for Data Analysis: Intermediate Statistical Methods Mervyn G. Marasinghe and William J. Kennedy

The Unfinished Game: Pascal, Fermat, and the Seventeenth-Century Letter That Made the World Modern Keith Devlin

Wavelet Methods in Statistics with R G. P. Nason

Applied Survival Analysis: Regression Modeling of Time-to-Event Data (2nd ed.)

David W. Hosmer, Stanley Lemeshow, and Susanne May

The Little SAS Book: A Primer (4th ed.) Lora D. Delwiche and Susan J. Slaughter

Statistics: Informed Decisions Using Data (3rd ed.) Michael Sullivan III within-stratum ranks, for comparing two treatments in a stratified experiment.

In "Three Examples of Accurate Likelihood Inference," C. Lozada-Can and A. C. Davison demonstrate through illuminating examples that, computationally, it can be relatively straightforward to use higherorder corrections for improving standard likelihood inference. In the final contribution to this section, Gunnar Taraldsen and Bo Henry Lindqvist present an elementary introduction to a theoretical framework for statistics that includes improper priors, considering both Bayesian and non-Bayesian models.

The Statistical Practice section opens with "A Note on Bayesian Inference After Multiple Imputation," by **Xiang Zhou** and **Jerome P. Reiter**, who consider Bayesian inference on multiply imputed data sets in settings in which posterior distributions of the parameters of interest are not approximately Gaussian. **Nicholas T. Longford** follows with "Bayesian Decision Making About Small Binomial Rates with Uncertainty About the Prior."

In "Is the t Confidence Interval: $\pm t((n - 1)s)$ Optimal?", **Yijun Zuo** proposes a new procedure for constructing a confidence interval for an unknown mean parameter that can outperform not only the classical interval in the title but also bootstrap confidence intervals.

In the History Corner section, Michael Friendly, Pedro Valero-Mora, and Joaquín Ibáñez Ulargui take the reader on an interesting journey featuring Michael Florent van Langren and the first (?) instance of data visualization in "The First (Known) Statistical Graph: Michael Florent van Langren and the 'Secret' of Longitude."

UMBC Statistics Program Celebrates 25th Anniversary

Elliot Hirshman, Neerchal Nagaraj, and Bimal Sinha



From left: Elliott Hirshman, UMBC provost; Nagaraj Neerchal, department chair; and Bimal Sinha, founding faculty member

The University of Maryland Baltimore County (UMBC) Department of Mathematics and Statistics celebrated the 25th anniversary of its statistics graduate program April 25 in conjunction with their Fourth Annual Probability and Statistics Day. More than 100 participants attended the silver jubilee, where Ray Carroll, Bruce Lindsey, Ron Butler, and Nancy Geller were the keynote speakers. Many alumni also presented talks.

The program was inaugurated by UMBC's provost, Elliot Hirshman. In addition to plenary and parallel sessions covering a variety of topics, the jubilee featured oral and poster presentations by graduate students and the presentation of awards for best oral and poster presentation. Later, Dean Rous of UMBC's College of Natural and Mathematical Sciences recognized every statistics doctoral student to graduate in the past 25 years.

Rous also recognized the contributions of Bimal Sinha, the program's senior most and founding faculty member, and commended the leadership of Nagaraj Neerchal as department chair and Anindya Roy as graduate program director.

The conference ended with a banquet and speech by ASA President Sastry Pantula, titled "All I Want to Do When I Grow Up ... Be an ASA President."

For more about the celebration, visit www.retrieverweekly. com/?module=displaystory&story_ id=5602&format=html. ■

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Feedback: Odds Are, It's Wrong

Below is a response to the article "Odds Are, It's Wrong," published in the March 27 issue of *Science News*. ASA members wrote the letter to the editor and cited the writer's failure to clearly distinguish between the misuses of statistics and its methodological limitations. The letter, as edited by the magazine, was printed in the May 8 issue of *Science News* (Page 32) and is now online. To view the original article, visit *www.sciencenews.org/view/feature/id/57091/title/Odds_Are,_Its_Wrong*. To view the edited response and other responses to the article, visit *www.sciencenews.org/view/generic/id/58594/title/Feedback*.

Dear Editor,

dds are it's wrong, but the chances that statistics is to blame are slim and fat. Tom Siegfried accurately portrays the importance of statistics in the conduct of science. However, his failure to clearly distinguish between the misuses of statistics and its methodological limitations leads to misleading conclusions about the role of statistics in the proliferation of erroneous scientific results. Furthermore, his characterization of statistics as a mutant form of mathematics rooted in the same principles that guarantee profits for Las Vegas casinos is unscientific at best. It only hinders the realization that statistics is the discipline that is best positioned to contribute to the solution of the problems that he so entertainingly describes.

Statisticians have long recognized the challenges presented by multiple testing, the interpretation of observational data, and, more recently, the analysis of high-dimensional data. Siegfried rightfully acknowledges the many statisticians and biostatisticians who have persistently and repeatedly written eloquently on these issues. He also notes that appropriate methods, such as those for false discovery control, are available to ameliorate the problems. Yet, he curiously persists with the theme that statistics is defective when it is the misuse of statistical methods that is the main culprit in the situations he describes.

Siegfried has fired a shot across the bow of science that, although not perfectly on target, serves as a call for further discussion among statistical scientists and researchers in the relevant disciplines, such as the medical, social, and behavioral sciences. There is a need to educate statistical practitioners at all levels, as gross misuse of statistical methods borders on scientific misconduct. However, it is also important to realize that while statistics usually plays the role of the fall guy in these matters, there are other, more fundamental, factors involved, such as the pressure to publish and obtain funding (positive results sell); the public's, and hence the media's, appetite for palatable findings (chocolate is good for your health); and data hoarding (no one can see how thoroughly I searched my data to find a p = .049).

A chisel in a skillful artist's hand can produce a beautiful sculpture, and a scalpel in an experienced surgeon's hand can save a person's life. Similarly, statistical techniques used properly by an honest and knowledgeable scientist can be equally impressive at illuminating complex phenomena, thus promoting scientific understanding and shortening the time between scientific discovery and its impact on societal problems. If misused, they can produce the counterproductive results that Siegfried describes. Such erroneous results, however, should not be viewed as a failing of statistics.

Sastry G. Pantula President, American Statistical Association

Jef Teugels President, International Statistical Institute

Len Stefanski Editor, *Journal of the American Statistical Association* (Theory and Methods)

Correction

In the May issue of *Amstat News*, the "Treasures from the ASA Archives" mistakenly referred to Frances Perkins as a he. Perkins, the first woman appointed to a presidential cabinet post, served as U.S. Secretary of Labor from 1933 to 1945.

Statisticians Comment on Status of Climate Change Science

The following are letters from ASA members in response to the March *Amstat News* article "Statisticians Comment on Status of Climate Change Science," by Richard L. Smith, L. Mark Berliner, and Peter Guttorp. The authors answered additional questions online on March 31. The transcript of the discussion can be viewed at *http://magazine.amstat.org/2010/03/climatemar10*.

Dear Editor,

Tread the recent article by Smith, Berliner, and Guttorp explaining why the ASA Climate Change Policy Advisory Committee recommended that Sally Morton sign the letter of consensus of climate change science.

I appreciate the hard work the committee obviously put into this and I recognize their sincerity and deep concern about the environment. However, I don't think the article addressed the correct questions.

No one doubts that the climate is changing; it is always changing. No one doubts that there has been a rise in average temperature. No one doubts that carbon dioxide plays a role in average temperature. And no one doubts that humans release carbon dioxide into the atmosphere. Below, I list what I see as the real questions. I would be interested in knowing the committee's view on these questions.

Question 1: The main concern is not that the temperature is increasing. The temperature of the Earth is never constant. The concern is that the rate of increase is possibly much larger than during past increases. In other words, the concern is about the derivative of the current warming period compared to the derivative of past warmings. How certain can we be that the derivative of the current warming is exceptional?

To answer this question, we need to compare the current climate to past climate. And to do this, we need to use climate reconstructions. You acknowledge that some reconstructions have been the object of great skepticism. As you noted, Ed Wegman affirmed, in his testimony before Congress, that the criticisms due to McIntyre and McKitrick are legitimate. Yet, you dismiss the criticisms by merely saying "... the research community has responded successfully to these challenges." I don't feel that you have really addressed this issue. My understanding is that temperature reconstructions are based on combining inverse regressions of various surrogates (such as tree rings). The opportunities for unknown biases and uncertainties entering such a calculation seem endless. It defies statistical intuition that we could accurately reconstruct the average temperature of the Earth hundreds or thousands of years ago from inverse regressions based on nonrandomly sampled surrogates. Imagine the numerous omitted variables, not to mention lack of random sampling. And remember, we need to estimate the derivative, which is difficult even from the best data.

Question 2: Carbon dioxide is a small part of the greenhouse gas in the atmosphere, water vapor being the largest component. Humans account for only part of the carbon dioxide that is in the atmosphere. What fraction of warming is due to human-released carbon dioxide compared to the other greenhouse gases? How accurately can this number be determined? How large are the biases and variance?

Question 3: The climate is always changing. There is nothing optimal about our current climate. A warmer climate will have both positive and negative consequences. (For example, far more people die from cold than from heat.) How strong is the statistical evidence that the negative consequences outweigh the positive consequences?

Let me emphasize that I appreciate the committee's efforts. And I am not suggesting we should be unconcerned about the environment. But, if anyone should hold climate scientists to the highest statistical standards, it should be statisticians. I'd like some assurance that the ASA is doing so.

Larry Wasserman Professor, Department of Statistics Carnegie Mellon University

Dear Editor,

am embarrassed by the "defense" of the anthropogenic global warming (AGW) theory published in the March 2010 issue of *Amstat News*. As an agnostic on the issue, I was excited about the article. I expected an objective, dispassionate analysis—and possibly conclusion—by professional statisticians trained in judging theories based on evidence supported by data. Instead, the authors either tried to cast doubt on any contradictory evidence, or, worse, determined the state of knowledge of alternative theories was not sufficient to overcome the presumption of validity of AGW.

Listen to the tortured denial of solar activity as a cause of global warming: "There is no credible physical theory that would deny the GHG [green house gas] influence." I believe that there is also no credible physical theory that would deny the solar influence.

Or consider this gem: Solar activity theory could make future temperature projections more uncertain, but "there is already plenty of uncertainty about those projections." So, accepting solar influence makes no sense because the projections are so uncertain already that a little more uncertainty wouldn't be noticed?

That's statistics?

I have a simple question: Does anyone have a model, based on GHG readings of a specific location or locations, that successfully predicts any future, observable, measurable temperatures—whether it is a monthly average of satellite readings, a set of specific ground temperature stations for a specific month, or even the thermometer on my deck—for five or 10 years in the future? Given the years of data and analysis thereof we supposedly have, that seems like a pretty low bar. Is anyone so certain of AGW that they would publish such projections?

I don't believe the ASA should have signed onto the letter to lawmakers based on the article I read.

Terry G. Meyer President, TECH Consulting

Dear Editor,

The article "Statisticians Comment on Status of Climate Change Science" in the March 2010 issue of *Amstat News* left me wondering whether the dues I pay to the American Statistical Association are paying for any part of the work by the ASA's Climate Change Policy Advisory Committee. Please know that I do not want my dues funding this committee, and I do not want the ASA making position statements on the status of "climate change science" on its behalf. Additionally, if the ASA makes statements on behalf of its members, which includes me, about the notion of anthropogenic global warming, I will terminate my membership in the association.

I remain a skeptic of the "overwhelming" science of anthropogenic global warming because, as an industrial statistician, model bias from failing to include important factors leads to precarious conclusions, at best. It seems to me that because there is evidence that CO_2 levels were twice as high as they are now millions of years ago, long before humankind walked the Earth, there are surely factors missing from current models, factors that would have caused prior warming periods and periods of elevated CO_2 .

Furthermore, plotting temperature data collected from small patches of the Earth's surface over the past 140 years would have no discernible (hockey stick) trend (i.e., be part of the noise) if plotted over 400,000 years or 4,000,000 years or 4,000,0000,000 years. Don't we teach our statistics students to plot data scaled in context to avoid making false claims?

Linda Trocine

Dear Editor,

In the March 2010 issue of *Amstat News*, Richard Smith, Mark Berliner, and Peter Guttorp discuss various aspects of global warming and conclude that (1) the climate is warming, (2) humans are likely responsible, and (3) mitigation measures are needed. They discuss (1) and (2) at length, but mention (3) only in the last sentence, as if it is selfevident. The whole climate debate in general, in fact, largely ignores this part of the problem. A "second front" is needed in the discussion, one that takes as a given that warming is happening and tackles questions like the following:

- What are the projected effects of global warming, and what is the strength of the evidence that they are happening and caused by global warming?
- How much harm (or benefit) will those consequences bring?
- What are the feasibility and cost of potential remedies?

Peter Bruce President, statistics.com

Authors' Response

s a preface to our response to letters regarding our article, the following points are germane to most of the letters. Please recall that we wrote, "We comment on some of the most common arguments that climate change is not happening, or humans are not responsible." Our article was not intended to be a summary of the basis of any recommendation regarding ASA endorsement of any letter. Any such recommendation would involve much more than brief comments on selected points of controversy. In particular, we did not review the case for anthropogenic climate change. Such review would involve combinations of а statistical and scientific arguments leading to a weight of evidence.

> Responding specifically, now, to each of the four writers, starting with Wasserman's three questions:

Question 1: We do not agree that the main purpose of paleoclimatology is to prove the derivative during the last 25 years is greater than in the past 1,000 years (or the past 100,000) in particular, since the climate response to CO_2 increase is far from instantaneous, nor do we agree that it really matters whether the 1990s were the warmest decade of the last millennium, though this statement is often made. Rather, we believe the main functions of paleoclimatology in the context of projecting future climate change are to learn about feedback mechanisms and gain some indication of the scale of natural variability that has occurred in the past and may be expected to occur in the future.

Recent work on paleoclimatic reconstruction from a statistical point of view includes the forthcoming paper by Li, Nychka, and Ammann in *JASA* and a forthcoming paper by Tingley and Huybers in *Journal of Climate*. Finally, an in-depth discussion of aspects of paleoclimatology can be found in the U.S. Congress–commissioned 2006 National Academy of Sciences report *Surface Temperature Reconstructions for the Last 2,000 Years* (available free as a download from National Academy Press). This report includes various studies confirming the "hockey stick" shape.

Question 2: This point relates to the general area of attribution. Climate models are run with both natural and anthropogenic forcing. These results are a major contributor to the confidence of the Intergovernmental Panel on Climate Change (IPCC) in their Fourth Assessment Report (AR4) that anthropogenic influences explain the observed temperatures.

We each have concerns regarding the quality and uncertainties associated with the inputs and forcings used. Further, interactions and climate feedbacks regarding forcings are subject to uncertainty and substantial continuing research. Indeed, characterizing the response of the hydrological cycle (water vapor, cloud properties, etc.) has been a holy grail in climate science. We note that Solomon et al. (2010) indicates that the post-1998 period of stable temperatures can be explained in terms of changing patterns of water vapor. The paper also indicates that different greenhouse gases can have different effects, so that changes in CO_2 do not necessarily indicate the same changes in other greenhouse gases.

Question 3: There are uncertainties associated with climate-scale projections, with the resulting sea level rise and regional and local weather impacts and with the resulting effects on human outcomes (e.g., health) and human endeavors (e.g., agriculture). We do not believe all these uncertainties have been quantified, nor taken into account. Fortunately, researchers from many disciplines, including ours, are engaged in research in these directions. We also note that statisticians support decisionmaking in the presence of uncertainty.

Finally, we have not seen any clear evidence that "far more people die from cold than from heat." The death rates in Europe and North America are higher during the winter months, but that does not imply that temperatures in winter are the cause of death. Generally speaking, the evidence points to long stretches of extreme temperatures as being most dangerous. For example, stretches of unusually cold weather in Spain (where unusually cold may mean just freezing) is much more harmful than stretches of unusually cold weather in Finland (where it means temperatures below -40° F).

In any case, this query is symptomatic of the difficulty and potential misunderstanding of "climate change" versus "global warming." Regarding the latter, scientists are not concerned that the future climate would be identical to the current one, save a uniform, simple shift of 1° F or 2° F over this century. Rather, climate change represented in sea level rise and changes in the distribution of weather trends and extremes (perhaps both hot and cold) are the keys.

Regarding Meyer's letter, there is credible theory as to the solar influence on climate (which is substantial from a historical perspective and explains much of the observed past climate change). However, there is no theory that both explains past climate change and current observations based on solar forcing alone.

The second-to-last paragraph betrays the writer's misunderstanding of climate and, perhaps, statistics. "Climate" is the *distribution* of weather, and hence predicting the temperature at a particular location at a particular time would have similar uncertainty to predicting a single draw from a probability distribution. The writer's challenge is a bit like asking for

a prediction of the date of death due to lung cancer of a specified cigarette smoker.

Responding to Trocine, the evidence for anthropogenic contribution to global warming is not limited to CO_2 . Current climate models include a variety of greenhouse gases, as well as other forcings of the climate. There is interaction and feedback in the relationship between temperature and CO_2 . While it is correct that the last 140 years are a blip compared to previous changes, what one really needs to look at is a kind of residual plot, namely the difference between what you get without anthropogenic forcing and what you get with all observed forcings. That is the right scale of comparison for the kind of scientific judgment we are talking about here.

Finally, we fully agree that the issues Bruce raised are critical and merit substantial development and participation by statisticians. As mentioned above, we had a limited scope in this article. ■

STATISTICIAN'S **VIEW**

Statistician's View is a place for members to express viewpoints about ASA issues and important topics in statistics. If you have an opinion you would like to present or you want to respond to something you have read in this or other issues of *Amstat News*, please send your letter to:

> Managing Editor—*Amstat News* American Statistical Association 732 North Washington Street Alexandria, VA 22314-1943 or *amstat@amstat.org*

Please indicate that you would like your letter to appear in Statistician's View. *Amstat News* reserves the right to use, refuse, and edit any submission. We will not accept anonymous material.

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Who Wants to Be a Biostatistician (or Environmental Statistician, or Social Science Statistician, or ...)?

Keith Crank, ASA Research and Graduate Education Manager

In April, I visited the National Institutes of Health (NIH) with Sastry Pantula, ASA president; Sally Morton, a past president of the ASA; and Steve Pierson, ASA director of science policy. We met with Jeremy Berg, director of the National Institute of General Medical Sciences (NIGMS), to talk about funding for training biostatisticians.

We are pushing NIGMS to find ways to fund some of our master's students. There is interest, but the current guidelines make it difficult. (Funding is definitely possible to retrain people with an MD, but it isn't clear whether this can be extended to people with a PhD in another discipline.)

We also are pushing for more PhD training grants in biostatistics. NIGMS would like to see more submissions of proposals for biostatistics training grants. They recognize the demand in this area (by the ease of finding jobs without going through multiple postdocs), but they cannot fund proposals they do not receive.

Although our focus was on training, we also raised concerns about the visibility of statistics as a collaborative discipline (not just a consulting or data analysis discipline) and about inappropriate reviews of statistics proposals by reviewers without an appropriate statistical background.

Before our meeting at NIGMS, we met with program directors at the National Institute

for Mental Health. These were primarily people who fund neuroscience research and recognize the need to get more biostatisticians involved. They also realize biostatisticians are in demand and getting them to change their biomedical area of research is a losing battle. So, they are very interested in training new researchers.

Opportunities for students and postdocs are generally provided through the Ruth Kirschstein programs, which include institutional training grants for students and individual grants for postdocs. These are available through all the institutes at NIH. They are restricted to U.S. citizens, noncitizen nationals, and permanent residents. As mentioned previously, NIGMS would like to receive more proposals for training PhD



Funding Resources

Interagency Modeling and Analysis Group

www.nibib.nih.gov/research/multiscalemodeling/imag Includes program directors from many federal agencies (including NIH and NSF)

Biomedical Information Science and Technology Initiative

www.bisti.nih.gov/funding/index.asp

Provides links to funding announcements dealing with bioinformatics and computation

StatFund

http://statfund.cancer.gov

Identifies NIH funding opportunities for statistical methodology and provides a list of grants that have been made in statistical methodology

students in biostatistics (See *www. nigms.nih.gov/Training/InstPredoc/ PredocTrainingDescription.htm*).

For those whose research careers are established, but who may be looking to do something different, NIH provides opportunities for quantitative scientists (including statisticians) to redirect their research toward biomedical issues. This is done through their Mentored Quantitative Research Development Award (K25) (See *http://grants.nih.gov/grants/guide/ pa-files/PA-10-062.html*). These awards offer the opportunity for researchers to spend 3–5 years studying and doing research in a biomedical area and provide funding for both research activities and salary. They are restricted to U.S. citizens, noncitizen nationals, and permanent residents and require a mentor who is willing to assist in the development and execution of the research plan.

The National Science Foundation's (NSF) Division of Mathematical Sciences has a similar, but less generous, program for mathematical scientists who want to learn an area of application. The Interdisciplinary Grants in the Mathematical Sciences program provides up to \$100,000 for training in another scientific discipline. These awards are for just one year, but they are not restricted to biomedical areas and do not have the citizenship restrictions that the NIH awards have (see www.nsf.gov/funding/ pgm_summ.jsp?pims_=5299&org =DMS&from=home).

There are lots of opportunities available for research funding from NIH and NSF. To learn more about the opportunities at NIH, I invite you to attend a session I organized for JSM 2010 in Vancouver, British Columbia. The session will meet at 8:30 a.m. on August 4. The panelists are Michelle Dunn, Shawn Drew, and Denise Wiesch from NIH and Jeremy Taylor from the University of Michigan Biostatistics Department. I hope to see you there.

To contact me, send an email to *keith@amstat.org*. Questions or comments about this article, as well as suggestions for future articles, are always welcome.



Members Affect ASA Science Policy

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

ast spring, I wrote a column titled "State of ASA's Science Policy" (www. amstat.org/outreach/pdfs/SP_ AnApr09.pdf). I think it is important to keep the ASA membership apprised of such activities, but I think it is more important to further engage members in these efforts and the direction they take. As my examples below indicate, member input is essential to ASA science policy success. So, rather than reporting a comprehensive science policy update, I report on activities sparked by members and strongly encourage members to contact me with suggestions or concerns. While I cannot guarantee that the ASA can act on all suggestions, it's important for us to hear from you.

Process

Because I think ASA members should know the process for any ASA science policy action, let me explain it, emphasizing that I do not act alone when deciding how to proceed.

After a topic has been suggested, the first step is to assess its importance and pertinence to the ASA and the value of an ASA action. The level of authorization needed for ASA action is also assessed, taking into account such considerations as accordance with previous ASA Board action, ASA bylaws, and the level of support within the ASA.

The next step is for me, the director of science policy, to identify a panel of ASA member experts by soliciting input from the ASA's leadership, committees, sections, and chapters. This panel then communicates by phone and email to develop a recommendation for the ASA Board.

When developing a recommendation, the panel considers the optimal timing for ASA action and the mode of input (e.g., statement, letter, meeting of ASA leadership with decisionmaker, etc.). The ASA's executive director and director of science policy provide input and inform the ASA Board or Executive Committee of the panel's activities, requesting input as necessary and soliciting outside input to make the ASA's action as constructive as possible.

Once a letter or statement is finalized, I inform interested

parties of the ASA's action, working with the ASA's public relations specialist when appropriate.

ASA Board Statements

The two statements endorsed by the ASA Board at its April meeting (see Page 5) arose from ASA member activity. Knowing that many states would be considering—or reconsidering—election auditing legislation, certain ASA members recognized that the ASA could positively influence this legislation by endorsing the risklimiting election audits (because of their efficiency advantage over

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ASA Science Policy Actions

ASA responds to an NIGMS request for input on training grants.

ASA signs a letter supporting reauthorization of the America COMPETES Act this year.

ASA signs a letter in support of the fiscal year 2011 budget for the Bureau of Economic Analysis.

ASA signs a letter to the President's Council of Advisors on Science and Technology, urging its members to take the lead in affirming the behavioral and social sciences as an important part of science, technology, engineering, and mathematics education.

> so-called fixed-percentage audits and ability to correct an outcome) and urging that principles, rather than details, be legislated. ASA experts devoted many hours to producing a statement to recommend to the ASA Board. They also sought input from participants in an election auditing workshop held at the ASA last fall that included computer scientists, political scientists, and voting advocates.

> The forensic science statement was led by ASA members active in bringing statistical methods to bear on forensic science, including a representative of the ASA Committee on Law and Justice Statistics and people who have served on National Academies panels and/or written extensively on this topic.

Letters from the ASA President

The following three instances from the last year illustrate ASA presidents sending letters as a result of ASA member suggestions.

Hearing that the Department of Health and Human Services (HHS) might soon reconsider its Health Insurance Portability and Accountability Act (HIPAA) privacy rules, Jerry Reiter, chair of the ASA Committee on Privacy and Confidentiality, suggested the ASA send a letter to HHS Secretary Kathleen Sebelius explaining the tools statisticians bring to the table. The letter was written and, as a result, Reiter was invited to participate in a HIPAA Privacy Rule deidentification workshop this year.

Seeing the plans of the Michigan State Board of Education to weaken the statistics component in parts of its curriculum, Detroit Chapter members led by David Fluharty—contacted the ASA. After checking with the ASA president, ASA staff members helped draft a letter, which was revised and sent on December 15, 2009.

After learning a bill before the California legislature would contain a provision to pilot the use of risk-limiting audits, Philip Stark—creator of the methods for conducting such audits and an advocate for their use—contacted the ASA. ASA President Sastry Pantula then wrote a letter of support for the provision. The bill received the unanimous bipartisan support of the California State Assembly Committee on Elections and Redistricting and now awaits further consideration.

NIH and Climate Change Activities

Other ASA action instigated by members involves the National Institutes of Health (NIH) and the ASA's Climate Change Policy Advisory Committee (CCPAC). In NIH's case, there were two primary drivers. One was an email from member Marie Davidian to the electronic mailing list for the ASA Caucus of Academic Representatives about the possible elimination of the Biostatistics Methods and Research Design (BMRD) study section or its merger with another study section. The overwhelming response to Davidian's call for grant submissions to BMRD led to enough of an increase in submissions to

save the section, assuming the numbers are sustained (see *http://magazine.amstat.org/2010/04/ fundingopps_apr10*). It also led to broadening the scope of applications considered by BMRD.

The other driver was the response to a posting by ASA Research and Education Manager Keith Crank to the electronic mailing list for the ASA Caucus of Academic Representatives requesting questions to ask at the town hall meeting held by NIH Director Francis Collins last fall. Ouestions covered meeting the great demand for biostatisticians and mentoring biostatisticians to the review of biostatistics training grant issues and involvement of statisticians as collaborators. That input led to a letter from 2009 ASA President Sally Morton to Collins, an April visit to Jeremy M. Berg, director of the National Institute of General Medical Sciences by Morton and Pantula, and the upcoming JSM session on NIH opportunities discussed in Crank's column on Page 31.

CCPAC is a result of a conversation Amy Braverman had with Executive Director Ron Wasserstein at a recent JSM, in which she lamented the lack of engagement by the ASA in issues of the day. A follow-up conversation led to a group of statisticians discussing how ASA members could inform Congress on climate change issues. As the group became more involved, it was made into an ad hoc ASA committee.

In short, ASA members determine ASA science policy activities. If you have a suggestion for ASA action on a policy matter, please contact me at *pierson@ amstat.org*. And if there is a science policy activity you are interested in working on, let me know. Without member input, little ASA science policy work would get done. Such input includes contacting members of Congress and meeting with them or members or their staffs. ■
Find Your Fit

Jack Nyberg, Senior Manager, Covance

A summer approaches, my thoughts turn toward the coming warm weather. If you're a recent graduate, your thoughts may be turning toward summer fun, but also toward the practical matter of finding your first job as a statistician.

I'm sure most of you have already thought about important factors that will influence your job search. Salary, location, and advancement opportunities are some of what we consider when ranking potential employers, but an easily overlooked consideration is "finding your fit."

Finding your fit means that when you evaluate a job opportunity, you must evaluate whether the work culture fits your personality in addition to the tangible factors of salary, location, title, etc. That is, beyond the technical aspects of statistical work, every job is immersed in the culture of the organization, department, and project team. To find the right job for you, you must consider finding the right work culture for you.

Say you are lucky enough to field two job offers. Both are similar in almost every respect; however, one is with a fast-growing small organization and the other is with an established large organization. The smaller organization embraces a fast-paced and make-it-up-as-you-go-along culture and the other has a deliberate and process-oriented culture. Which job would you take?

To help answer this question, you must evaluate your personality, the potential employer's culture, and how the two fit together.



What Kind of Personality or action of Personality work to work the second secon

Most of you probably have a good idea about your likes and dislikes, but have you ever really tried to identify your personality type? If not, there are a number of wonderful resources (e.g., Myers-Briggs Type Indicator Test, John Holland's Theory of Vocational Choice, etc.) that can profile your personality. Also, talk with your friends, family, or a trusted adviser to determine how other people perceive you. These assessments, combined with an honest self-evaluation, will help you discover your personality type.

What Is the Work Culture?

Once you know your personality type, identify the culture of the job under consideration. Good sources of information are friends or acquaintances who already work there. An Internet search of the organization may also help. Finally, ask questions during the interview process. Ask about the organizational, departmental, and team cultures.

Request to talk with potential coworkers and managers. At first, you may be reticent to ask many questions, but keep in mind that the process is two-way. They're determining if you'd be a good fit there, and you're determining if they'd be a good fit for you. If both of you succeed, then both of you win.

Am I Willing to Work Where My Personality Doesn't Fit?

After you've determined your personality profile and the culture of the jobs under consideration, you might be in the enviable position of evaluating multiple job offers.

Unlike our scenario above, it is unlikely you'll be comparing jobs that are essentially the same. One job may pay substantially more than the others. Or, one job may be in your ideal location. Whatever the mitigating circumstance, you must determine if you're willing to take a job that may not be the best fit for your personality.

It is important to note that anyone can adapt to succeed anywhere. So if a work culture is not a good personality fit, you should not be totally dissuaded from taking the job. But, working in an environment that goes against your personality is like swimming against the incoming tide. You may not notice it at first, but it just makes it more difficult to reach success at that organization.

Will the Work Culture Fit with My Personality?

This question is similar to the previous one, but it powerfully shifts the focus. Instead of pressuring you to adapt to an illfitting culture, it requires the job to fit your needs.

Finding a job that allows you to honestly answer "yes" to this question makes it more likely you will find long-term success at that organization. Finding your fit makes work easier because you're more likely to enjoy coming into work each day, collaborate efficiently with your coworkers, and respect your employer.

Although not easily quantifiable, these factors intuitively combine to make work enjoyable. When work is enjoyable, you are more productive, personable, creative, and energetic. These make you more valuable to your employer, which leads to career advancement opportunities. Although nothing is guaranteed, by taking a job that fits your personality, you are laying the groundwork for long-term success even before you've worked one day.

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www.amstat.org/ meetings/fdaworkshop

REGISTRATION FORM **2010 FDA/Industry Statistics Workshop**

Sponsored by the ASA Biopharmaceutical Section with cooperation from the FDA Statistical Association September 20–22, 2010 • Grand Hyatt Washington–Washington, DC

INSTRUCTIONS

Name

ASA ID # (if known)

Organization

Address

City

Phone

Email

Country (non-U.S.)

Telephone Number

#53-0204661

- 1. Print or type all information and retain a copy for your records.
- 2. Use a separate form for each registrant.
- 3. Mail form with payment to FDA/Industry Statistics Workshop Registration, 732 N. Washington Street Alexandria, VA 22314. Fax form (credit card only) to (703) 684-2037.
- 4. Registration form must be received by August 26, 2010, to be processed at the reduced rate.

Forms Received Without Pay

ATTENDEE INFORMATION

ayment will not be processed.
MEAL PREFERENCE
Lunch on Tuesday, September 21, is included with your workshop registration. To assist in planning, please select the area of discussion that most interests you See Page 2 of this form for the list of topics.
Select one of the following menu options:

	By	August 27–	
	August 26	September 13	
Registrant	\$270	\$295	\$
Academic (nonstudent)	\$230	\$255	\$
Biopharm Section Member	\$230	\$255	\$
Government	\$130	\$155	\$
Student	\$130	\$155	\$

Add-ons to Workshop Fee: \$100 each before Aug. 26; \$105 each Aug. 27-Sept. 13

SC1: Emerging Challenges in Clinical Trial Methodologies—James Hung & Sue Jane Wang	\$
SC2: Beyond Survival Analysis: Recurrent Event Responses in Clinical Trials—Richard Cook & Jerry Lawless	\$
SC3: Interpreting Change and Responder Analysis for Patient-Reported Outcomes—Joseph Cappelleri, Lisa Kammerman, & Kathleen Wyrwich	\$
1:30 p.m5:00 p.m.	
SC4: Hot Topics: Recent Development in Clinical Trial Methodologies – Scott Evans & Jim Ware	\$
SC5: Good Statistical Practice and Common Subtle Statistical Mistakes—Frank Harrell	\$

Tuesday, September 21 Preferred Name for Badge Topic:_ □ Not attending lunch Regular Vegetarian **REGISTRATION FEES Workshop Fee (required)** State/Province ZIP/Postal Code Short Courses-Monday, September 20 8:30 a.m.-12:00 p.m. In case of emergency, list the name and phone number of the person we should contact (remains confidential). **Emergency Contact's Name** SC6: Quantitative Pharmacovigilance: Statistical Approaches to Medical Product Safety Surveillance— Jie Chen & Yi Tsong Check here if you would like your ASA customer contact \$ information updated with your meeting contact information. This meeting is ADA accessible. **TOTAL FEES:** Ś Please check here if you need special services due to a disability and attach a statement regarding your needs. PAYMENT Check/money order payable to the American Statistical Association (in U.S. dollars on U.S. bank) **CANCELLATION POLICY** Credit Card □ MasterCard Cancellations received by August 26, 2010, will be refunded, less a \$25 pro-American Express cessing fee and less a \$10 processing fee for each short course. Cancellations received by September 13, 2010, will be refunded, less a \$50 processing fee Card Number and less a \$15 processing fee for each short course. Requests for refunds received after September 13 will not be honored. All cancellations must be made in writing to *meetings@amstat.org*, via fax to (703) 684-2037, or mailed to FDA/Industry Statistics Workshop Registration, 732 N. Washington Street Alexandria, VA 22314. Exp. Date CVS# (3-digit number on back of card) *Purchase orders will not be accepted. No exceptions. ASA Federal ID Name of Cardholder

Authorizing Signature

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REGISTRATION FORM 2010 FDA/Industry Statistics Workshop

Sponsored by the ASA Biopharmaceutical Section with cooperation from the FDA Statistical Association September 20–22, 2010 • Grand Hyatt Washington–Washington, DC

Roundtable Luncheon Topics Tuesday, September 21, 12:00 p.m. – 1:15 p.m.

To aid productive discussion, roundtables will take place in a number of rooms, organized by general theme/topic.

Plated lunches will be available for all attendees. Participants will select a discussion table of interest and will then be served their lunch. Tables, which will accommodate 10 people each, will be available on a first-come, first-served basis.

Following are the available broad topics, with possible specific areas of discussion listed below:

1) Design and Implementation of Clinical Studies

Adaptive Design Decision PROs (Patient Reported Outcomes) Interim/Futility Quality Assessment Randomization Study Design Multi-Regional Clinical Trials Statistical Issues in Global Harmonization Regulatory Issues in Global Harmonization Multiplicity Adjustments Noninferiority

2) Analysis of Clinical Trials (Safety and Efficacy)

ISS/ISE (Integrated Summary of Safety/ Integrated Summary of Efficacy) Longitudinal/Repeated Measures Subgroup Analysis DMC (Data Monitoring Committees) Risk/Benefit Safety Assessment Survival Analysis Meta-Analysis Therapeutic Specific (Oncology/CNS/ Diabetes/Etc.)

3) Center-Specific Topics Biologics-Vaccines

Food Devices Diagnostics Veterinary Products

4) CMC/Early Phase/Preclinical

Biomarkers Genomics PK-PD

5) Other Technical/Statistical

Open Source Code Software Health Care Utilization Data Quality

6) Professional/Personal Development

Professional Development Work/Life Balance Knitting Adventure

7) Communication

For additional information about roundtable luncheons, please visit www.amstat.org/meetings/fdaworkshop/roundtables

Editors Appointed for JEBS





Sinharay

Johnson

S andip Sinharay and Matthew Johnson were recently appointed to three-year terms as coeditors of the *Journal* of *Educational and Behavioral Statistics (JEBS)*. *JEBS* is owned by the American Educational Research Association (AERA) and sponsored by the ASA. Sinharay and Johnson will serve for the 2011 to 2013 volume years.

Editors are selected on the basis of recognized scholarship with background and interests appropriate for *JEBS*. The new editors have extensive experience in researching and publishing in statistics and educational testing, and both are current members of the *JEBS* editorial board.

Sinharay is senior research scientist at Educational Testing Service (ETS) in the Center for Statistical Theory and Practice, where he has held several positions since 2001. He is a recipient of several awards from ETS and the National Council on Measurement in Education. He has served on other journal editorial boards, including those of the Journal of Educational Measurement (JEM) and Educational and Psychological Measurement (EPM). He coedited Handbook of Statistics, Volume 26: Psychometrics and is editing the statistics section of the upcoming third edition of the International Encyclopedia of Education. He has published in numerous statistics and measurement journals-including JEBS, JEM, EPM, and Psychometrika-and has contributed chapters to numerous books. Sinharay holds an MStat from the Indian Statistical Institute and an MS and PhD in statistics from Iowa State University.

Johnson is associate professor of statistics and education at Teachers College, Columbia University. Previously, he held positions at ETS and in the department of statistics and computer information systems at Baruch College, City University of New York (CUNY). He has received awards from ETS and CUNY and served as an associate editor for *Psychometrika* for more than five years. Johnson has published numerous journal articles—including in *JEBS* and *Psychometrika*—and several book chapters. He holds a PhD and MS in statistics from Carnegie Mellon University.

JEBS Increases to Six Issues per Year

With the 2010 volume year, the *Journal of Educational and Behavioral Statistics (JEBS*) went from a quarterly to a bimonthly journal. The frequency change was implemented along with an increase in published pages. The American Educational Research Association (AERA) undertook these changes because of substantial increases in its manuscript submission rate in 2008 and 2009.

JEBS has been published since 1976 in collaboration with the ASA. In 1994, it changed its name from Journal of Educational Statistics to incorporate a broader scope that includes behavioral statistics. The journal began online publication in 2007, including the ability to publish accepted manuscripts digitally before they appear in print. In 2008, manuscript submissions increased by nearly 20% from the previous year; in 2009, the rate increased by 60%. With an acceptance rate of only 10%, JEBS's upcoming changes ensure its ability to publish research of merit for the benefit of its readership.

Subscription costs will not increase for AERA or ASA members, but will increase modestly for institutional subscribers.

Sinharay and Johnson will begin to receive manuscripts on July 1 and become editors of record in January of 2011, succeeding editor David Rindskopf of CUNY. Manuscript submissions should continue to go to *http://mc.manuscriptcentral. com/jebstats*.

JEBS publishes papers that develop original statistical methods applicable to educational or behavioral research. Typical papers present new methods of analysis. In addition, critical reviews of current practice, tutorial presentations of less wellknown methods, and novel applications of already-known methods may appear.

Now published bimonthly (see "*JEBS* Increases to Six Issues per Year"), *JEBS* is a premier journal in the field, with its articles widely read and cited. In 2008, Journal Citation Reports ranked *JEBS's* scholarly impact as seventh out of 112 education and education research journals. *JEBS* also was ranked eighth out of 37 social science mathematical methods journals and fourth out of 11 mathematical psychology journals.

Michael Elliott

Michael Elliott, a professor in the department of biostatistics at the University of Michigan School of Public Health, was recently chosen as this year's recipient of the Gertrude M. Cox Award.

Since earning his PhD from the University of Michigan in 1999, Elliott has made noteworthy contributions to the fields of survey methods (smoothing survey weights) and biostatistics (causal inference and repeated measures). He will receive the award at the Washington Statistical Society's (WSS) annual dinner meeting, where he will also give the keynote address, "Probability Sampling in the 21st Century: Obsolescent or Cutting-Edge?" The award consists of a plaque and \$1,000 honorarium. The Gertrude M. Cox Award was established in 2003 through a joint agreement between WSS and RTI International to recognize statisticians in early to mid-career who have made significant contributions to statistical practice. The award is in memory of Gertrude M. Cox (1900–1978), who played a key role in establishing mathematical statistics and biostatistics departments at The University of North Carolina at Chapel Hill and a statistical division at RTI. She served as president of the ASA in 1957.

C. R. Rao



Rao

C. R. Rao was recently named the recipient of the India Science Award, one of the highest honors given by the Indian government to a distinguished scientist. It includes a prize of \$56,300, a gold medal, and a plaque.

Rao, who is 90, also received the award in 2006.

The award is given to those who have demonstrated excellence in science and opened a window of opportunity in the field.

To read more about Rao's life and the award, visit www.newkerala.com/news/ fullnews-23481.html.

A. K. Md. Ehsanes Saleh

The International Journal of Statistical Sciences (IJSS) recently published a special volume in honor of **A. K. Md. Ehsanes Saleh**, professor emeritus at Carleton University in Ottawa, Canada, for his contributions to statistical science.

Saleh is a Fellow of the ASA, Institute of Mathematical Statistics, Royal Statistical Society, and Academy of Sciences of Bangladesh. He is an honorary member of the

ASA Members Participate in Mu Sigma Rho Induction Ceremony



From left: John Sall, cofounder of SAS Institute, with Stu Hunter, a past president of the ASA, and Sastry Pantula, current ASA president

Eight undergraduate and 37 graduate students were inducted into the Alpha Chapter of Mu Sigma Rho, the honor society for statistics, during a banquet at North Carolina State University (NCSU) on April 8.

Following ice-breakers, prizes, and dinner, **John Sall**—cofounder and executive vice president of SAS Institute—provided a picturesque history of the company, from initially having six employees to currently having more than 11,000 and being voted the Number 1 place to work in the United States by *Fortune* magazine. He also demonstrated how to solve an optimization problem using JMP and was made an honorary member of the NCSU chapter of Mu Sigma Rho.

ASA President **Sastry Pantula** provided closing remarks, congratulating the inductees and wishing them successes similar to SAS's. He also reminded everyone to vote in the ASA elections and to complete their census forms.

Stu Hunter, a past ASA president and distinguished NCSU alumnus, also participated in the ceremony.

Statistical Society of Canada and a member of the International Statistical Institute.

Saleh has published more than 200 articles and is editor-in-chief of the *Journal of Statistical Research*. He also has served on the editorial boards of a number of international journals and as Eugene Lukacs Distinguished Professor at Bowling Green State University.

Among the many awards and honors Saleh has received are the Ogawa Award; the Q. M. Hosain Gold Medal; two ISSOS gold medals; the Institute of Statistical Research and Training, University of Dhaka, Gold Medal; Pride of Bangladesh Award; and a citation by the Natural Sciences and Engineering Research Council of Canada.

Obituary Nathan Keyfitz

Nathan Keyfitz, an innovative statistician and professor emeritus who broke ground applying math to human populations, passed away on April 6 at a health care facility in Lexington, Massachusetts. He was 96 years old.

Keyfitz was the Andelot Professor of Sociology in the faculty of arts and sciences and of demography at the Harvard School of Public Health. He was a Fellow of the ASA and Royal Statistical Society and the recipient of multiple honorary degrees. In 1977, he was elected to the National Academy of Sciences.

For more information about Keyfitz's life, visit *http:// media-newswire.com/ release_1116572.html*.

Obituary Robert Lerner

Robert Lerner, an ASA member and one of the first members of the National Association of Scholars, passed away on April 30.

A survey research and data analysis statistician, Lerner was a partner with Lerner and Nagai Quantitative Consulting, a social science research firm. In 2003, President George W. Bush nominated him to be the next Commissioner of Education Statistics; however, the Senate did not confirm his permanent appointment.

Lerner has published several books, including American Elites Molding the Good Citizen: A Study of High-School Textbooks and Giving for Social Change: Foundations, Public Policy, and the American Political Agenda. He earned his bachelor's degree from Oberlin College and his master's and doctorate degrees in sociology from The University of Chicago.

Obituary Timothy Joel Robertson

Timothy Joel Robertson, 72, passed away at University of Iowa Hospital on April 5.

Robertson was born October 4, 1937, in Denver, Colorado, and married Joan Robertson on August 18, 1959, in Chillicothe, Missouri. He was a professor emeritus of the University of Iowa Statistics and Actuary Department and a Fellow of the ASA.

Robertson enjoyed spending time in the outdoors, camping and canoeing. His greatest joy was spending time with his wife, family, and animals on their farm outside of West Branch, Iowa. He was a man of great intellect, passion, laughter, and strength who will be deeply missed by all who knew him.

Obituary Moti Lal Tiku

Moti Lal Tiku, professor emeritus at McMaster University in Canada and visiting professor of statistics at Middle East Technical University in Turkey, passed away on March 25 at the age of 74.

Tiku was recognized for his work on what he called "modified maximum likelihood estimation." He published more than 120 papers in prominent journals and authored several books. His work also was cited in a number of journals and books.

Tiku earned his master's degree in mathematics from Punjab University, India, in 1957 and his MSc degree in statistics in 1960. In 1964, he earned his PhD in statistics from Aberdeen University, United Kingdom. He was awarded the DSc degree by Aberdeen University in 1984 in recognition of "original contributions in the areas of distribution theory, robust inference, goodness-of-fit, and outlier detection."

Tiku served as director of the statistics division and professor of statistics at the National Institute of Hygiene and Public Health in Kolkata, India. He was also senior professor at the Institute of Agricultural Research Statistics in New Delhi, India, and an adjunct professor at Wilfrid Laurier University in Canada.

Tiku was an accomplished statistician and an inspiration to his young colleagues and students. He became a role model for the way he approached scientific problems and life in general. His life as a humanist and high-quality academician will remain an inspiration to many.



The ASA is looking for champions to expand the Census at School program across the United States. Teachers and users and producers of statistics at all levels are encouraged to get involved, both to promote the good practice of statistics in schools and to encourage more students to eventually join the statistics profession.

This is a wonderful opportunity for ASA chapters to perform outreach in their communities. For more information about how you can get involved, email ASA Director of Education Martha Aliaga at *martha@amstat.org.*

ASA CONNUNTY FIND OUT WHAT'S IN IT FOR YOU!

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Calendar

Access calendars for specific groups and the master calendar for all ASA Community events.

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ASA Community

Deming Lecturer



Nominations for the 2011 Deming Lecturer Award are due July 15. The awardee will give the Deming Lecture (an invited paper) at the Joint Statistical Meetings and receive a \$1,000 honorarium, award plaque, and travel expenses.

To be considered for the award, an individual must have made significant contributions in fields related to those in which Deming devoted his career (e.g., survey sampling, statistics in the transportation industry, quality management, and quality improvement), or more broadly, have made significant contributions through effective promotion of statistics and statistical thinking in business or industry.

For more information, visit *www.amstat.org/careers/ deminglectureraward.cfm* or email A. Blanton Godfrey, selection committee chair, at *abgodfre@ncsu.edu*.

Nominations can be sent by email to ASA Executive Secretary Pam Craven at *pamela@amstat.org* or by mail to the ASA office, ATTN: Award Nominations, 732 North Washington St., Alexandria, VA 22314–1943.

JPBM Communications

Nominations are due July 15 for the Joint Policy Board for Mathematics (JPBM) Communications Award, given annually since 1988. The \$1,000 prize is awarded to communicators who, on a sustained basis, bring mathematical ideas and information to nonmathematical audiences. Both mathematicians and nonmathematicians are eligible.

In addition to the professional address and phone number of the nominator, nominations should include the nominee's name, institution, position, CV, professional address, email address, professional phone and fax numbers, home address, and home phone number. Also, at least one sample illustrating the nominee's contribution to mathematics (e.g., books, videotapes, brochures, magazine articles) should be included.

Award nominations should be sent to Sastry Pantula, ASA president and selection committee chair, at *pantula@ stat.ncsu.edu*. The award will be presented at the Joint Mathematics Meetings in New Orleans, Louisiana, in January of 2011.

For more information about JPBM or the award, selection criteria, and nomination procedure, visit *www. ams.org/prizes/jpbm-commaward.html.*

Student Merit

The Society for Risk Analysis (SRA) Dose-Response Specialty Group will offer a merit award to a student conducting graduate research in dose-response assessment. The award includes a registration fee waiver to the 2010 SRA Annual Meeting, an engraved plaque, and a \$500 honorarium. The winner will present his/her results and receive his/her award at the annual meeting.

The research may be on any topic broadly related to dose-response assessment, including laboratory investigation, methods development, comparative analyses, novel applications, studies on strengthening the role of dose-response assessment in risk assessment, uncertainty analysis, harmonization, dosimetry, genetics, and molecular biology.

All abstracts must be submitted for presentation at the 2010 SRA Annual Meeting, to take place December 5–8 in Salt Lake City, Utah. Guidelines for abstract submission can be found at www.sra.org/events_2010_ meeting.php.

Further information and a link to examples of winners' abstracts from previous years is available for download at www.sra.org/drsg/DRSG_ Student_Award_2010.pdf. Questions should be

addressed to Paul Schlosser at (919) 541-4130 or schlosser. paul@epa.gov.

William G. Hunter



Hunter

Nominations for the American Society for Quality's William G. Hunter Award are due July 15. The award will be presented at the 2010 Fall Technical Conference. Hunter was the first chair of the Statistics Division of the American Society for Quality Control (now American Society for Quality). His leadership as a communicator, consultant, educator, and innovator and his ability to integrate statistical thinking into many disciplines serve as exemplary models for statisticians and researchers everywhere.

The award was established in 1987 to encourage and promote outstanding accomplishments during a career in applied statistics and to recognize an implementer who has achieved results. Any outstanding leader in the field of applied statistics, regardless of ASQ Statistics Division membership status, is qualified. Candidates must have demonstrated a high level of professionalism, provided significant contributions to the field, and built a history of inspirational leadership and application. A person may be nominated many times, but may win the award only once.

The nominator must have the permission of the person being nominated and letters from at least two other people supporting the nomination. Claims of accomplishments must be supported with objective evidence (e.g., publication lists and letters from peers).

Award criteria and nomination forms can be downloaded from *www.asqstatdiv.org/ awards.htm* or obtained from Robert H. Mitchell, Bldg. 225-04-S-18, 3M Center, 3M Company, Maplewood, MN 55144-1000; (651) 736-8684; *rhmitchell@ mmm.com.* ■



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Biometrics Section Offers Exciting JSM 2010 Program

Edited by Page Moore, Biometrics Section Publications Officer

The theme of this year's Joint Statistical Meetings, to take place July 31–August 5 in Vancouver, British Columbia, is "Statistics: A Key to Innovation in a Data-Centric World." The Biometrics Section will sponsor invited sessions spanning a range of topics in biostatistics, including the following:

- Statistical Evaluation of Markers Used to Select Treatment, organized by Margaret Pepe of the University of Washington
- Study Design and Statistical Analysis Challenges in Women's Health Studies, organized by Marcia Ciol of the University of Washington
- Evaluation of Risk Prediction, organized by Shulamith Gross of Baruch College
- Getting More from Genome-Wide Association Studies, organized by Mitchell Gail of the National Cancer Institute

The section also will cosponsor a short course, "Regression Modeling Strategies," presented by Frank Harrell Jr., on August 1.

Check the online program at *www. amstat.org/meetings/jsm/2010* for locations and times.

Mixer and Business Meeting

The section mixer and business meeting, which will be held at JSM on August 2, is an excellent networking opportunity. The 2010 David P. Byar Young Investigator Award and travel awards will be presented, and Jim Cochran will take a few minutes to talk about Statisticians Without Borders, a group that does pro bono statistical work related to international health issues, particularly in the developing world. The mixer is open to all JSM attendees.

ENAR 2011

It's time to think about invited sessions for ENAR 2011, which will be held March 20–23 in Miami Beach, Florida. Anyone interested in organizing an invited session or who has ideas for one should contact Jason Fine, 2011 program chair, at *jfine@bios.unc.edu*.

A typical session consists of three 30-minute talks and a 15-minute discussion or four 25-minute talks and a five-minute floor discussion. June 11 is the deadline for proposals, which should be detailed to compete in this highly competitive process.

JSM 2011

Next year's Joint Statistical Meetings will be held July 30–August 4 in Miami Beach, Florida. Anyone interested in organizing an invited session or who has ideas for one should contact Tianxi Cai, 2011 program chair, at *tcai@hsph. harvard.edu*.

A typical invited session consists of three 30-minute talks, a 10-minute discussion, and 10 minutes of floor discussion; however, other formats are possible. The 2010 program is a good source for examples.

The most mature ideas will have the advantage when competing for the limited number of slots, so it's best to have ideas in final form by the middle of June. The Biometrics Section will have at least four invited sessions, but will be able to compete for additional slots.

Additionally, ideas for short courses should be sent to Annie Qu, 2011–2012 continuing education chair, at *anniequ@ illinois.edu*. ■



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Statistics and the Environment Section Readies for JSM, Workshop

Jun Zhu, ENVR Publications Chair

The Statistics and the Environment Section's annual open business meeting/mixer is tentatively scheduled for the evening of August 2, during the Joint Statistical Meetings in Vancouver, British Columbia. There will be appetizers, drinks, and mingling during this networking opportunity. In addition, several awards will be presented and members will have the opportunity to voice their opinions about the section's activities. ENVR also will sponsor the following:

Roundtable

Comparing Climate Models to Weather Data, organized by Peter Guttorp of the University of Washington/Norwegian Computing Center

Invited and Topic-Contributed Sessions

Environmental Statistics in the Real World: Research from Scientists at Government Agencies, organized by Veronica J. Berrocal of SAMSI

Spatial Statistical Methods for Environmental Extremes, organized by Catherine Calder of The Ohio State University

Statistics and Public Policy: Some Case Studies, organized by James R. Thompson of Rice University

Advances in the Theory and Methodology of Spatial Point Processes, organized by Jun Zhu of Colorado State University

Student Paper Competition Winners

First Place: David Dail of Oregon State University for "Models for Estimating Population Size from Repeated Counts of an Open Population"

Runner-Up: Ying Sun of Texas A&M University for "Functional Boxplots for Complex Space-Time Data Visualization"

Environmental Statistics, organized by Yasmin H. Said of George Mason University

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2010 SUDAAN Training Schedule

Computing Weight Adjustments & Deriving Imputations

April 7-8, 2010 July 22-23, 2010 October 21-22, 2010 Atlanta, GA Research Triangle Park, NC Washington, DC

Descriptive Procedures Course

April 21-23, 2010 July 19-21, 2010 September 22-24, 2010 Washington, DC Research Triangle Park, NC Washington, DC

Modeling Procedures Course

May 26-28, 2010 October 13-15, 2010 Washington, DC Washington, DC

For more information on SUDAAN:

www.rti.org/sudaan

SUDAAN Statistical Software Center Phone: 919-541-6602 Email: sudaan@rti.org Statistical Methods for Multivariate Spatial and Spatial-Temporal Processes, organized by Mikyoung Jun of Texas A&M University

Statistical Complexities Arising from Ecological Simplifications: Possible Solutions or Further Complications?, organized by Megan Higgs of Montana State University and chaired by Mark Delorey of the Centers for Disease Control and Prevention

Climate Extremes and Paleoclimate, organized by Richard Smith of The University of North Carolina

Geostatistical Modeling for Environmental Data, organized by Brian Reich of The North Carolina State University and chaired by Michele Guindani of the University of New Mexico

Sampling, Estimation, and Inference for Natural Resource Problems, organized by Ronald E. McRoberts of the U.S. Forest Service and chaired by Lance Waller of Emory University

Distance Sampling: Advances and Applications, organized by Joel Howard Reynolds of the U.S. Fish and Wildlife Service and chaired by Daniel Cooley of Colorado State University

Challenges in Interdisciplinary Spatial and Spatiotemporal Analysis, organized by Alexander Kolovos of SAS Institute

For details, visit *www.amstat.org/ meetings/jsm/2010*.

Upcoming Workshop

Space-Time Statistics to Evaluate the Impacts of Climate on Health and Renewable Energy will take place October 14–16 at the National Center for Atmospheric Research in Boulder, Colorado. This workshop will cover state-of-the-art applications and statistical methods needed to assess the impacts of climate change on health and renewable energy. Sessions on applications include recent advances in climate change research, impacts on human health, and challenges in development and penetration of renewable energy. The spatio-temporal data collected in health and energy applications present interesting and challenging statistical problems, such as modeling of space-time correlation, synthesis of data from multiple sources, and assessment of uncertainties. Technical sessions will cover recent developments in space-time statistical methods, Bayesian methodology, and extreme value analysis. Additionally, there will be a poster session, and a one-day short course will be offered on October 14.

JSM 2011

JSM 2011 will be held July 30–August 4 in Miami Beach, Florida. Ideas for invited sessions should be sent to Devin Johnson, ENVR program chair, at *Devin. Johnson@noaa.gov.*

For more information, visit *www.stat. purdue.edu/envr2010* or contact Amanda S. Hering at *ahering@mines.edu* or Bo Li at *boli@purdue.edu*. ■

Biopharmaceutical JSM 2010 Offers Learning Opportunities

The Biopharmaceutical Section will sponsor or cosponsor the following invited sessions in Vancouver, British Columbia:

August 1

Statistical Issues in Approval of Follow-On Biologics

August 2

Clinical Trials and Informative Decisionmaking

Doing Better Than Average: Tailored Therapeutics in Drug Development

August 3

Future Directions in Biopharmaceutical Statistics CDISC: Standards vs. Operational Challenges

August 4

Handling of Missing Data in Clinical Trials: Findings of a National Research Council Study

Bayesian Methods in Pharmaceutical Development and Clinical Research

August 5

Adaptive Design: Balancing Between Hype and Hope

Key Multiplicity Issues in Clinical Trials

The section also will sponsor the following short courses:

August 1

Analysis of Clinical Trials: Theory and Applications, presented by Devan Mehrotra, Alexei Dmitrienko, and Keaven Anderson

August 3

Design and Analysis of Count and Zero-Inflated Data, presented by Mani Lakshminarayanan and Madhuja Mallick

For details, visit www.amstat.org/meetings/jsm/2010. ■

Government Statistics and Social Statistics Roundtables: Dialogue in Casual Setting

Iris Shimizu, National Center for Health Statistics, and Nancy Clusen, Mathematica Policy Research

A.M. or P.M. roundtable at this year's JSM in Vancouver? Roundtables are 75–80 minutes long and offer an opportunity to explore a topic of interest with a discussion leader in an informal setting. GSS and SSS will

sponsor nine that explore substantive and methodological topics central to those who produce or use official statistics. Because participation is limited, it is a good idea to sign up for roundtables when you register and plan your schedule.

Panel to Discuss Role of Statistical Societies in Global Capacity Building

Nilupa S. Gunaratna and Juanita Tamayo Lott

During this year's Joint Statistical Meetings in Vancouver, British Columbia, GSS and SSS will cosponsor an invited panel featuring leaders from various statistical societies discussing the need and efforts to build statistical capacity globally.

Statistical capacity has many dimensions. Capacity building is the development and strengthening of knowledge, skills, resources, infrastructure, institutional structures and processes, and policy and legal frameworks. It occurs at many levels: individual, institutional, subnational, national, and international—all with the goal of empowering individuals and institutions to achieve their potential and meet the needs of the communities they serve in a sustainable way.

The panel will expand on an invited panel session, "Building Statistical Capacity Globally," that was held during JSM 2009 in Washington, DC. A key point of that discussion was that capacity building is not a one-way transfer. It is a participatory process in which individuals or institutions identify needs based on their priorities and action is taken to improve the individual's or institution's capacity to meet those needs.

This year's panel will focus on the specific role statistical societies can play in building statistical capacity, both within their geographical region and globally. Panelists include Sally Morton, past-president of the ASA; Bovas Abraham, president of the Statistical Society of Canada; Denise Lievesley, past-president of the International Statistical Institute; and Jim Cochran, co-chair of Statistics Without Borders. Nilupa Gunaratna is the organizer; Juanita Tamayo Lott is the chair.

Each panelist will discuss current and planned capacity-building efforts within his or her society. As a group, the panelists will discuss how capacity-building efforts can be better coordinated and more effective in meeting global needs. The session, titled "Global Statistical Capacity and the Role of Statistical Societies," is open to all and will take place August 1 in the Vancouver Convention Centre. Check the JSM program online at *www.amstat.org/ meetings/jsm/2010* for up-to-date time and location information.

August 2

Weights in Survey Data, 7:00 a.m. – 8:15 a.m., led by Katie Genadek of the University of Minnesota

This roundtable will consider issues related to weighting and use of survey weights included in the public use files.

Measurement Issues and the Gay/ Lesbian/Bisexual/Transgender Population, 12:30 p.m. – 1:50 p.m., led by Diane Herz of Mathematica Policy Research

This roundtable will focus on how to measure relationship status, family status, and health issues of GLBT individuals. These measurement issues are of concern because the legal landscape around same-sex marriage has been changing rapidly. Furthermore, reliable data on marriage, divorce, and family composition are essential for measuring poverty and the employment and earnings situations of families; developing and evaluating health care, tax, and other policies; and addressing other issues of national and local concern.

The Role of Statistics and the Statistician in Public Health Surveillance, 12:30 p.m. – 1:50 p.m., led by Steve Thacker and Myron Katzoff of the Centers for Disease Control and Prevention

This roundtable will consider the roll of statistical computing and the analytic tools and professionals needed to provide timely and accurate interpretation of surveillance results.

August 3

The 2010 Census Coverage Measurement Survey, 7:00 a.m. – 8:15 a.m., led by Vincent Thomas Mule Jr. of the U.S. Census Bureau

This roundtable will focus on procedures the U.S. Census Bureau plans to use for measuring coverage in the 2010 Census. Social Network Analysis: Statistical Issues, Models, and Applications, 12:30 p.m. – 1:50 p.m., led by Mark Stephen Handcock of the University of California, Los Angeles

This roundtable will explore networks widely used to represent relational information among interacting units and the implications of these relations. It will give an overview of social network analysis from the perspective and experiences of a social statistician and include discussion of applications, statistical issues encountered, software, and the possible futures of social network analysis.

Are Official Statistics at Risk of Losing Their Preeminent Status with Governments and Society?, 12:30 p.m. – 1:50 p.m., led by Brian Pink of the Australian Bureau of Statistics

This roundtable will consider the standards for the quality, objectivity, and accessibility that are basic in the collection and dissemination of official statistics.

August 4

Nonresponse Adjustment Using a Response Propensity Model, 7:00 a.m. – 8:15 a.m., led by Donsig Jang of Mathematica Policy Research

The roundtable will focus on issues that may be encountered when using propensity models to adjust for nonresponse.

Microdata Access and Dissemination in a Digital World, 12:30 p.m. – 1:50 p.m., led by Timothy Michael Mulcahy of NORC at the University of Chicago This roundtable will focus on lessons learned about microdata dissemination through a data enclave and emerging technologies to expand user access to sensitive data.

Planning for Nonresponse Bias Analyses, 12:30 p.m. – 1:50 p.m., led by Jill Montaquila of Westat

This roundtable will focus on nonresponse bias analysis methods and considerations in planning for these analyses.

For a complete description of these roundtables and up-to-date session information, visit *www.amstat.org/ meetings/jsm/2010*. ■

Statistical Programmers and Analysts

Programming Advice Booth to Be Piloted at JSM



The Section for Statistical Programmers and Analysts (SSPA) will pilot test a new idea at JSM 2010—a programming advice booth (PAB). Well, it's not exactly a booth; it will be more like a table. Members of SSPA will staff the table throughout JSM, offering participants advice about statistical programming, data coding, data collection, and other tasks related to statistical programming.

The PAB is a strong resource for students, statistical programmers and analysts, applied statisticians, and researchers and investigators who are managing their first study. Let the PAB staff:

- Address your general or specific programming or data management questions
- Advise you on beginner to advanced programming or data management challenges
- Assist in debugging your coding snarls
- Give you insight on data collection options
- Address your data platform challenges

Bring a printed copy of your program, code, or compilation log, since **What?** Programming advice booth, where JSM attendees can get advice on data collection, coding, statistical programming, and debugging

Where? Adjacent to registration area

When? August 1–4

Who? Staffed by SSPA members

the PAB staff may not have access to the specific software you are using. Also, outline your questions to the extent possible prior to visiting the PAB.

The PAB will be adjacent to the JSM registration area. Check the table for specific hours.

The idea for the PAB was initiated at JSM 2009 in Washington, DC—SSPA's first official JSM—by Steve Yao, SSPA's first chair, and Monica Johnston, section representative to the Council of Sections. Although an actual booth was not feasible this year, the name stuck. If the PAB is successful, we plan to explore making it a regular fixture at future JSMs. Perhaps we'll even have a real booth!

For more information, contact Johnston at *MJStatConsultant@ aol.com.* ■

Health Policy Statistics Range of Topics to Be Covered at JSM

The Section on Health Policy Statistics (HPSS) has included a range of topics associated with health policy research and its applications in its JSM 2010 program. Included are two invited sessions, eight topiccontributed sessions, six contributed sessions, a poster session, three roundtables, and a speaker luncheon. These can be identified on the online JSM program by selecting "Section on Health Policy Statistics" as the sponsor.

Invited Sessions

August 2

Statistical Methods for Assessing Generalizability, 2:00 p.m., organized by Elizabeth Stuart of The Johns Hopkins University

Program Highlights

The section's business meeting and mixer will take place August 2 from 5:30 p.m. to 8:30 p.m. at Steamworks Brewing Company (a short stroll from the convention center). The student awards will be presented at the mixer. HPSS members, organizers, speakers, discussants, and friends are invited.

The poster session is scheduled for August 2 at 2:00 p.m.

The HPSS student awards session will be held August 3 at 2:00 p.m.

The speaker luncheon will take place August 4 from 12:30 p.m. to 1:50 p.m. It will feature Ruth Etzioni, biostatistics and health services professor at the Fred Hutchinson Cancer Research Center and University of Washington.

August 4

Room at the Health Care Policy Table: A Case for the Inclusion of Statisticians in These Data-Centric Decisions, 8:30 a.m., organized by Brenda Crowe and Matt Rotelli of Eli Lilly and Company

Topic-Contributed Sessions

August 1

Social Network Analysis: Methods and Examples, 4:00 p.m., organized by Sowmya Rao of MGH Biostatistics Center

August 2

New Ideas for Matched Analysis in Observational Studies, 10:30 a.m., organized by Bo Lu of The Ohio State University

Innovative Methods for Cost and Cost-Effectiveness Analysis, 2:00 p.m., organized by Douglas Schaubel of the University of Michigan

August 3

Methodological Issues in Measuring and Estimating Health Care Use, 8:30 a.m., organized by Steven Machlin of the Agency for Healthcare Research and Quality

Innovations in Substance Use Data Analysis: Marginal Structural Models, Multilevel Models, and Latent Class Analysis, 8:30 a.m., organized by Susan Paddock of RAND Corporation

HPSS Student Paper Awards, 2:00 p.m.

August 4

Issues in Measuring Health Disparities, 10:30 a.m., organized by Makram Talih of CUNY School of Public Health at Hunter College

August 5

Biomarker Evaluation and ROC Analysis, 8:30 a.m., organized by Nan Hu of the University of Utah

Contributed Sessions

August 1

Applications in Health Policy: Substance Abuse, Nutrition, and Employment, 2:00 p.m.

August 3

Risk Adjustment and Causal Inference for Randomized and Nonrandomized Studies in Health Policy, 10:30 a.m.

Survey Methodology and Latent Variable Modeling, with Application to Health Policy, 10:30 a.m.

August 4

Random Effects Modeling in Health Policy Research: Methods and Applications, 8:30 a.m.

Modeling Health Care Costs and Survival Outcomes: Methods and Applications, 2:00 p.m.

August 5

Quality of Life Measurement and Categorical Modeling of Health Policy Outcomes, 10:30 a.m.

Speaker Luncheon and Roundtables

A large part of our program takes place over food. Our speaker luncheon is the social high point for HPSS. A.M. and P.M. roundtables are a great way to learn about new topics while meeting other section members with similar interests. Be sure to register before JSM or soon after arrival. Luncheon and roundtable tickets must be purchased at least 24 hours in advance, and they do sell out.

The speaker luncheon, which costs \$40, will take place August 4 from 12:30 p.m. to 1:50 p.m. The title of the talk is "A Statistician at the Policy Table: Integrating Modeling in the Development of Public Health Guidelines." It will be given by Ruth Etzioni, biostatistics and health services professor at the Fred Hutchinson Cancer Research Center and University of Washington.

"Issues of Data Capacity and Statistical Quality to Support Health Care Modeling and Microsimulation Efforts," a P.M. roundtable scheduled for August 2 from 12:30 p.m. to 1:50 p.m., will be led by Steve Cohen of the Agency for Healthcare Research and Quality.

There will be two A.M. roundtables on August 3 from 7:00 a.m. to 8:15 a.m. "Development and Psychometric Evaluation of the PROMIS Item Banks and Short-Form Instruments" will be led by Laura Lee Johnson of the National Institutes for Health, and "Reliability and Misclassification in Physician Profiling" will be led by John L. Adams of RAND Corporation. ■

Business and Economic Statistics Using X-13ARIMA-SEATS

A short course on seasonal time series

Instructors:	William Bell, David Findley, Tucker McElroy, and Brian Monsell of the U.S. Census Bureau
Dates:	September 7–10
Location:	Bureau of Labor Statistics, 2 Massachusetts Ave., NE, Washington, DC 20212
Registration:	Online at www.amstat.org/sections/bus_econ/index.html
Payment:	Online by credit card or mail by check, \$275 or less

With the release of X-13ARIMA-SEATS scheduled for the end of 2010, it is important for practitioners of seasonal adjustment to have a basic understanding of the process for both model-based and X-11–based seasonal adjustment, as well as regARIMA modeling.

X-13ARIMA-SEATS is a collaboration between the U.S. Census Bureau and Bank of Spain. It combines the X-12-ARIMA package, developed at the bureau, with an implementation of the SEATS package for model-based seasonal adjustment, developed under the guidance of Agustin Maravall at the Bank of Spain.

The course will provide users with a sound methodological background for using the X-13ARIMA-SEATS program. It will alternate between theory and practice and include time for participants to use and explore the software with guidance from the instructors. Some of the topics to be covered include the following:

- ARIMA modeling and forecasting
- regARIMA modeling: adding regression terms to detect outliers and model calendar effects (such as trading-day and Easter) and intervention effects
- Underlying X-11 and SEATS processes
- Use and interpretation of seasonal adjustment and modeling diagnostics
- Using the U.S. Census Bureau's Win X-12 interface to X-13-ARIMA-SEATS

Coursework in mathematical statistics is recommended, but anyone who currently uses X-12-ARIMA will benefit from taking this class, which is aimed at those who perform seasonal adjustment in their organizations.

Participants will receive a copy of all the slides, a set of notes on regARIMA modeling, and handouts on how to obtain the software and utilities used in the class.

For more information, contact Brian Monsell at *brian.c.monsell@census.gov*. For administrative questions, contact Stuart Scott at *scott.stuart@bls.gov*.

The currently distributed versions of X-12-ARIMA, Win X-12, and X-12-Graph, as well as resources for new users, are available at *www.census.gov/srd/www/x12a*.

Quality and Productivity 'Quality' Programs on Tap for JSM 2010

Dana C. Krueger, Section Program Chair

The Section on Quality and Productivity (Q&P) has an exciting lineup of contributed and topic-contributed sessions scheduled for the 2010 Joint Statistical Meetings in Vancouver, British Columbia.

Will Guthrie of the National Institute of Standards and Technology organized a topic-contributed session, titled "metRology: A New R Package for Applications in Measurement Science," that will be held August 1. Another topic-contributed session, organized by Samiran Ghosh of Indiana University Purdue University and titled "From

Regression Estimators

A Comparative Study • SECOND EDITION MARVIN H. J. GRUBER

In this updated and expanded edition of his 1990 treatise on the subject, Gruber presents, compares, and contrasts the development and properties of ridge-type estimators from both Bayesian



and frequentist points of view.

"A comprehensive treatment ... valuable to statisticians who would like to know more about the analytical properties of ridge-type estimators."

—Journal of the American Statistical Association, reviewing the first edition \$110.00 hardcover



THE JOHNS HOPKINS UNIVERSITY PRESS I-800-537-5487 • press.jhu.edu the Parameter Estimation to Reliability Specification in Some Nonstandard Situations Related to Time-to-Event Modeling," will be held August 2.

Contributed paper sessions include the following:

- Productivity, Capability, and Tolerance Intervals, August 1
- Statistical Process Control I, August 2
- Statistical Process Control II, August 4
- Experimental Design: Applications and Advances, August 5
- Reliability Analysis and Yield Modeling, August 5

Q&P also is cosponsoring a number of sessions, including the following:

- Statistics in the Community: Present and Future, August 1
- Reliability Modeling and Design, August 1
- Recent Development in Mixture Models and Applications, August 4
- Computer Experiments: Design and Analysis, August 4
- High-Dimensional Data Analysis and Visualization, August 4
- High-Dimensional Regression, August 4
- Measurement Issues in Counting Workplace Injuries and Illnesses, August 5
- New Developments in Classical and Optimal Design of Experiments, August 5

Check the JSM program online at *www.amstat.org/meetings/jsm/2010* to view abstracts and up-to-date times and locations.

William G. Hunter Award Nominations Sought

July 15 is the deadline for nominating a section member for the American Society for Quality William G. Hunter Award. This is a great opportunity to recognize the contributions and leadership of your colleagues in applied statistics. The award will be presented at the 2010 Fall Technical Conference, which is cosponsored by Q&P.

Hunter was the first chair of the Statistics Division of the American Society for Quality Control (now American Society for Quality). His leadership as a communicator, consultant, educator, and innovator and his ability to integrate statistical thinking into many disciplines serve as exemplary models for statisticians and researchers everywhere.

The award was established in 1987 to encourage and promote outstanding accomplishments during a career in applied statistics and to recognize an implementer who has achieved results. Any outstanding leader in the field of applied statistics, regardless of ASQ Statistics Division membership status, is qualified. Candidates must have demonstrated a high level of professionalism, provided significant contributions to the field, and built a history of inspirational leadership and application. A person may be nominated many times, but may win the award only once.

Award criteria and nomination forms can be downloaded from *www. asqstatdiv.org/awards.htm* or obtained from Robert H. Mitchell, Bldg. 225-04-S-18, 3M Center, 3M Company, Maplewood, MN 55144-1000; (651) 736-8684; *rhmitchell@mmm.com.* ■

Physical and Engineering Sciences JSM Invited Program Outlined

George Ostrouchov of Oak Ridge National Laboratory, Section JSM Program Chair

Invited Posters

Parallel Statistical Computing: Are We Embracing the Scalable Concurrency Revolution?

Generic Framework for Parallel Statistical Computing

Parallel Implementation of Response Surface Regression in R

This year, the Section on Physical and Engineering Sciences will sponsor three invited sessions, three invited posters, and seven contributed sessions. The invited sessions are described briefly below.

August 1

Modern-Day Design and Analysis of Experiments, organized by Peter Z. G. Qian of the University of Wisconsin-Madison

Modern-day experiments pose new challenges, such as including a large number of factors and involving all sorts of uncertainty. The purpose of this session is to present recent methodological advances in experimental design and showcase their applications in cuttingedge problems.

August 2

Design and Analysis of Computer Experiments, organized by Boxin Tang of Simon Fraser University

The design and analysis of computer experiments deals with efficient methods for collecting and analyzing data from computer models of scientific and technological problems. This is an area of statistics that has already had a strong effect on the general scientific community and will continue to grow as computational experiments become a major component of scientific discovery.

August 3

Recent Developments in Functional Data Analysis, organized by Surajit Ray of Boston University

This session will include talks on functional embedding techniques to reduce problem dimensionality and joint estimation of functions and model-based clustering/classification. Each talk will be motivated by a unique set of applications, data observed from a well-studied dynamical system, data in high dimensions, data displaying strong autoregressive framework, sparseness of observation, and non-normality.

Bayesian Statistical Science Invited Session, Short Course Proposals Wanted

The Section on Bayesian Statistical Science plans to sponsor a number of invited sessions and short courses during JSM 2011 and is seeking proposals.

For proposed invited sessions, provide the following:

- Session title
- Brief description
- Speaker list
- Tentative talk titles list

For proposed short courses, provide the following:

- Course title
- Course abstract (200-word maximum)
- Course learning objectives
- Course outline
- Proposed course length
- Name and contact information for each instructor
- Paragraph on presenter(s) background
- Possible course cosponsorship with other ASA sections

Email ideas before August 20 to Vanja M. Dukic, 2011 SBSS program chair, at *vanja@uchicago.edu*.

JSM 2011 will be held in Miami Beach, Florida, July 30–August 4, at the Miami Beach Convention Center. ■

Are You Seeking > a Statistician

Reserve an Executive Suite at the 2010 Joint Statistical Meetings and **let us help you!**

Contact Amy Farris at amy@amstat.org for more information.

A PRIVATE, FURNISHED BOOTH for your exclusive use throughout the meeting. Use it as an office, interview booth, or meeting space. It will give you the freedom to schedule interviews with potential employees whenever you like, without the need to reserve space on an hourly basis.

Each Executive Suite employer receives:

Registration will remain open through July 13.

Onsite registration opens July 31.

REGISTRATION FOR THE JSM PLACEMENT SERVICE, which includes up to 10 position listings. Also, up to five representatives and three guests from your organization will have access for conducting onsite interviews.

ONLINE ACCESS TO APPLICANT DATA AND RÉSUMÉS IN ADVANCE. Beginning June 1 and continuing through September 30, search our online service for qualified candidates based on specific criteria. Print résumés and pursue contacts before JSM starts, and continue to access this resource after the meeting for those last-minute openings.

AN ONSITE COMPUTER AND PRINTER IN YOUR SUITE. Eliminate waiting in line at the message center. Research and communicate with new applicants as they register.

SPECIAL RECOGNITION ONLINE AND ONSITE. Executive Suites are designated in the online listing of employers and noticed by candidates. Leave your prospective employees with a lasting impression of your company's commitment to hiring talented statisticians. You also will receive JSM Sponsorship Program credit for your purchase!

PERSONALIZED SERVICE from JSM Career Placement staff members, who will answer your questions and help with your interview traffic.

To reserve your Executive Suite, register online as soon as possible. Executive Suites are limited and have sold out in each of the last four years! www.amstat.org/meetings/jsm/2010/placement



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

June

>>15–18—MMDS 2010: Workshop on Algorithms for Modern Massive Data Sets, Stanford, California

This workshop will bring together computer scientists, statisticians, mathematicians, and data analysis practitioners to explore novel techniques for modeling and analyzing massive, high-dimensional, and nonlinearly structured scientific and Internet data sets. Talks will address fundamental questions underlying recent work on algorithmic, statistical, and computational aspects of large-scale data set analysis and provide a range of modern applications. For more information, visit *mmds. stanford.edu* or contact Alex Shkolnik, 441 Addison Ave., Palo Alto, CA 94301; *mmds-organizers@math.stanford.edu*.

>>16–18—Summer Institute of Applied Statistics, Provo, Utah

This course, led by C. Shane Reese, presents methods and techniques for analyzing reliability data from a Bayesian perspective. Special attention will be paid to Bayesian goodness-of-fit testing, model validation, reliability test design, and assurance test planning. Markov chain Monte Carlo algorithms will be used for implementing Bayesian analyses. For more information, visit *http://statistics.byu.edu/summer_____institute* or contact Kathi Carter, 223 TMCB, Provo, UT 84602; (801) 422-4506; *kathi_carter@stat.byu.edu*.

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*.

17–19—Classification Society Annual Meeting, St. Louis, Missouri

This conference aims to bring together researchers working in classification and cluster analysis on methods development and applications for an informal meeting on the best use of cluster/classification tools. For more information, visit *www. classification-society.org/csna/csna.html* or contact Bill Shannon, 660 S. Euclid Ave., Box 8005, St. Louis, MO 63110; (314) 454-8356; *wshannon@wustl.edu.*

>>20–23—Western North American Region of the International Biometric Society (WNAR) Annual Meeting, Seattle, Washington

Invited presentations will focus on current statistical challenges—dynamic modeling, analysis of forestry and spatially correlated ecological data, comparative effectiveness research, and analysis of high-throughput sequencing—and developments in measurement error, missing data, survival analysis, smoothing splines, methods for estimating the accuracy of biomarkers, and methods for early phase clinical trials. For more information, visit *www.biostat. washington.edu/wnar2010* or contact Brenda Kurland, 1100 Fairview Ave., N, D5-360, Seattle, WA 98109; *bkurland@ fhcrc.org.*

20–23— ICSA 2010 Applied Statistics Symposium, Indianapolis, Indiana

Short courses will be offered on June 20, and approximately 50 scientific sessions will take place from June 21–23. Keynote speakers include Donald Rubin (Harvard University), Ji Zhang (sanofiaventis), Xihong Lin (Harvard University), ShaAvhrée Buckman (FDA), and Gregory Campbell (FDA). For more information, visit *www.icsa.org/2010* or contact Wei Shen at *shen@lilly.com* or Yongming Qu at *quyo@lilly.com* or Lilly Corporation Center, Indianapolis, IN 46285; (317) 571-0764; *www.icsa.org/2010*.

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*.

>>20–23—30th International Symposium on Forecasting, San Diego, California

This premier forecasting conference attracts the world's leading forecasting researchers, practitioners, and students. Through a combination of keynote speaker presentations, academic sessions, workshops, and social programs, the ISF provides excellent opportunities for networking, learning, and fun. For more information, visit *www.forecasters.org/isfl index.html* or contact Pamela Stroud, 53 Tesla Ave., Medford, MA 02155; (781) 234-4077; *isf@forecasters.org*.

>>21–22—8th International Workshop on Rare Event Simulation (RESIM), Cambridge, United Kingdom

RESIM 2010 will cover all aspects of rare event simulation, ranging from purely theoretical developments to practical applications. The objective is to provide a forum for researchers and practitioners working in different locations and on different applications to present recent results, exchange ideas, and discuss open problems and new directions. For more information, visit *www.newton. ac.uk/programmes/SCS/resim.html* or contact Mohammad Mousavi, Terman Engineering Center, 3rd Floor, 380 Panama Way, Stanford, CA 94305-4026; *mousavi@stanford.edu*.

>>21–23—Simulation of Networks Workshop, Cambridge, United Kingdom

This workshop is part of the Stochastic Processes in Communications Sciences program taking place from January 11 to July 2. The first two days are being offered in conjunction with the 8th RESIM conference, while the third day will focus on a broader set of simulation-based algorithms that touch on the state of the art in simulation. Participants are encouraged to also attend "Statistics of Networks," taking place June 24–25. For more information, visit *www.newton.ac.uk/programmes/ SCS/scsw05.html* or contact Peter Glynn, Terman Engineering Center, Room 313, 3rd Floor, 380 Panama Way, Stanford, CA 94305-4026; (650) 725-0554; *glynn@stanford.edu*.

>>24–25—Statistics of Networks Workshop, Cambridge, United Kingdom

This workshop is part of the Stochastic Processes in Communications Sciences program taking place from January 11 to July 2. It is intended to bring together researchers to communicate the state of the art and identify important new problems and possible methods of statistical analysis. Participants are encouraged to also attend "Simulation of Networks," taking place June 21–23. For more information, visit *www.newton.ac.uk/programmes/SCS/scsw08. html* or contact Peter Glynn, Terman Engineering Center, Room 313, 3rd Floor, 380 Panama Way, Stanford, CA 94305-4026; *glynn@stanford.edu.*

>>25–26—Probability Approximations and Beyond: A Conference in Honor of Louis Chen on His 70th Birthday, Singapore

This conference will cover a range of topics related to Louis Chen's work in Stein's method, probability theory, computational biology, and beyond. The scientific program consists of invited talks presented by distinguished statisticians and probabilists. Participation is open to all, but participants must register. For more information, visit *www.stat.nus.edu.sg/ Web/events/louischenconference.html* or contact Irene Tan, National University of Singapore, Singapore, International 117546, Singapore; 6565168050; *irene_tsl@nus.edu.sg.*

>>27-29—AcademyHealth Annual Research Meeting, Boston, Massachusetts

This meeting is designed for health services researchers, statisticians, research analysts, and students who want to explore the impact of health services research and health data on improving access and quality of care; examine emerging research issues critical to the organization, financing, and management of health services; and enhance research methods. For more information, visit *www.academyhealth. org/arm* or contact Anna LaFayette, 1150 17th St. NW, Suite 600, Washington, DC 20036; (202) 292-6700; *arm@academyhealth.org.*

28–7/1—Statistical Modeling and Inference for Networks (Statworks), Bristol, United Kingdom

This workshop will gather statisticians, mathematical modelers, and applicationoriented researchers. Invited speakers include David Barber, Sanjeev Goyal, Eric Kolaczyk, Sean Meyn, Brendan Murphy, Stephane Robin, Michael Stumpf, Stanley Wasserman, Geoffrey West, and Eddie Wilson. The number of participants is limited. Abstracts must be submitted for talks and posters. Noncontributing attendees also are welcome. Apply to attend or contribute a talk or poster at www. sustain.bris.ac.uk/ws-statworks/participation. html. For details, contact Azita Ghassemi, Department of Mathematics, University Walk, Bristol, International BS8 1TW, UK; +441173317188, stat-works@ bristol.ac.uk.

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 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, Ontario, 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. 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 will be hosted by the University of Glasgow in Scotland. For more information, contact Claire Ferguson, Department of Statistics, 15 University Gardens, Glasgow, International G12 8QW, Scotland; +0141 330 5023; c.ferguson@stats.gla.ac.uk.

5–8—International Workshop in Applied Probability 2010 – IWAP 2010, Madrid, Spain

This workshop will bring together scientists to discuss the applications of probability in any field. Participants are encouraged to submit their contributions to the Journal of Methodology and Computing in Applied Probability. Plenary speakers include Paul Embrechts, Ricardo Fraiman, Montse Fuentes, Robin Pemantle, Víctor de la Peña, Michael Steele, and Mihail Zervos. Young scientists, women, and minorities are encouraged to participate. For more information, visit *www.fundacion.uc3m.es/IWAP2010/ Index.html* or contact Joseph Glaz, Department of Statistics, U-4120, 215 Glenbrook Road, Storrs, CT 06269-4120; (860)874-1677; *joseph.glaz@uconn.edu*.

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 presenting and discussing 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.edul ~ hnn/osda2010.html or contact Haikady Nagaraja, 402 Cockins Hall, 1958 Neil Ave., Statistics Department, The Ohio State University, Columbus,

OH 43210; (614) 292-6072; hnn@stat.osu.edu.

12–16—11th International Meeting on Statistical Climatology, Edinburgh, Scotland

This meeting is 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. Themes include analysis techniques for multimodel 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, Research Triangle Park, NC 27709; (919) 685-9350; *nunnelly@niss.org.*

>>17–18—Joint Biostatistics Symposium, Beijing, China

This symposium will focus on statistical methods and their applications in basic medicine, clinical medicine, public health and preventive medicine, traditional

Fourth International Conference on Establishment Surveys (ICES IV)

ICES IV will take place June 11–14, 2012, at the Sheraton Centre Montréal in Québec, Canada.

Online solicitation of invited papers will occur December 1, 2010–March 1, 2011. Dates for online solicitation of contributed papers are forthcoming.

Examples of potential topics include the following:

- Efficient use of administrative data in business surveys
- Advances in disclosure protection
- Usage of linearization variance estimators for survey estimates
- The new direction of business surveys
- Collecting data electronically from businesses
- Updating business registers
- Sample design challenges
- Factors that affect establishment survey participation
- Generalized survey processing systems an update
- Measuring nonresponse bias
- Issues of multimode data collection

The conference will include short courses, a keynote speaker, poster sessions, software demonstrations, and invited and contributed paper sessions. The official language of the conference is English; translators will not be provided.

For further information, visit *www.amstat.org/meetings/ices/2012* or send an email to *ices4@amstat.org*.

Chinese medicine, health economics, and statistical methods in bioinformatics. The participation of scholars and experts in related fields is encouraged. To register, visit *www.regonline.com/first_joint_ biostatistics_symposium* by June 30. For more information, contact Chang Liu, 59 Zhongguancun St., Haidian District, People's University of China, School of Statistics, Beijing, International 100872, China; (010) 82500131; *liuchang@ ruc.edu.cn.*

20–23—The R User Conference, use R! 2010, Gaithersburg, Maryland

This conference will focus on R as the lingua franca of data analysis and statistical computing, provide a platform for R users to discuss and exchange ideas, and give an overview of the new features of the rapidly evolving R project. The program will consist of two parts: invited lectures and user-contributed sessions. Prior to the conference, there will be tutorials on R, descriptions of which are available at www.R-project.org/useR-2010/tutorials. For more information, visit www.r-project.org/ useR-2010 or contact Katharine Mullen, 503 Palmtree Drive, Unit 2, Gaithersburg, MD 20878; (301) 975-6890; katharine. mullen@nist.gov.

22–24—AERA Statistics Institute for Faculty, Stanford, California

This institute is for faculty members at U.S. postsecondary institutions who teach quantitative research methods courses at the graduate level and seek to integrate the analysis of large-scale federal education data sets into the curriculum. Instruction will be provided in current statistical methods, information on the data sets, and complex issues of modeling and design. Topics such as weights, missing data, the pitfalls of using large-scale data sets, selection bias, and causality will be included. Those selected for participation will receive support covering the institute's fees, housing, transportation to Stanford, and per diem. For details, visit *www.aera. net/grantsprogram/res_training/stat_institute/ SIFacFly.html* or contact Jeanie Murdock, 5662 Calle Real, #254, Goleta, CA 93117; (805) 964-5264; *jmurdock@aera.net.*

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 is the largest gathering of statisticians held in North America. Attended by more than 5,500 people, activities include oral presentations, panel sessions, poster presentations, continuing education courses, an exhibit hall, a career placement service, society and section business meetings, committee meetings, social activities, and

International Conference on Theory and Applications of Statistics

This conference, to take place at the University of Dhaka in Bangladesh December 26–28, is the first attempt to bring statisticians together from all over the world to explore new developments of statistical theory and applications in teaching and research. They also will discuss the use of statistics in government and nongovernment policymaking, focusing on developing countries such as Bangladesh.

Reputed statisticians from home and abroad are invited to enjoy keynote speeches, plenary sessions, invited paper sessions, and contributed paper sessions. Abstracts are due by July 15.

For more information, visit *www.dusdaa.org/conference2010* or contact M. Ataharul Islam at *mataharul@yahoo.com*, Jafar A. Khan at *jkhan66@gmail.com*, or Mir Masoom Ali at *mali@bsu.edu*.

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*.

>>16–18—Measurement, Design, and Analysis Methods for Health Outcomes Research, Boston, Massachusetts

Participants will learn to design, implement, and analyze health outcomes studies and critically review and use outcomes research data for clinical decisionmaking, healthcare planning, and technology development. This program is geared toward introductory to intermediate outcomes research professionals. For more information, contact Rachel Werkman, CCPE Dept. A, 677 Huntington Ave., Boston, MA 02115; (617) 384.8692; *ccpemarketing@hsph.harvard.edu* and mention reference code MDA10-CAL02.

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 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, Research Triangle Park, 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 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, Research Triangle Park, 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.*

13–17—RSS 2010 International Conference, Brighton & Hove, United Kingdom

The annual conference of the Royal Statistical Society seeks to bring together statisticians, researchers, analysts, and other users of statistics to hear, digest, and discuss the latest research and developments in statistics. The conference will feature leading international speakers on highly topical subjects. For more information, visit *www.rss.org.uk/rss2010* or contact Paul Gentry, 12 Errol St., London EC1Y 8LX, London, International EC1Y 8LX, UK; +020 7614 3918, *conference@ rss.org.uk*.

19–22 — Applied Statistics 2010 (AS2010), Ribno (Bled), Ljubljana, Slovenia

This conference will provide an opportunity for researchers, data analysts, and other professionals to exchange their knowledge. Cross-discipline and applied paper submissions are welcome. For more information, visit *http://conferences.nib.si/AS2010* or contact Andrej Blejec, Vecna pot 111, Ljubljana, International SI-1000, Slovenia; +386 59 232 789; *info.as@nib.si.*

24–26—Info-Metrics: Theory and Application, Washington, DC

Discuss and study the latest developments of info-metrics across the sciences. Conference topics include theory and methods and applications across the sciences. Examples include economics/econometrics (theory and applications), finance and risk management, philosophy of science, predictive games, natural sciences, and social sciences. For more information, visit *www.american.edu/cas/economics/ info-metrics/conference/index.cfm* or contact Amos Golan, 4400 Massachusetts Ave., NW, Washington, DC 20016; (202) 885-3783; *info-metrics@american.edu.*

October

>>8—Second HEC Finance and Statistics Conference, Paris, France

This conference will gather experts in financial economics, econometrics, and statistics to discuss volatility modeling, simulation-based estimation, and asset pricing under incomplete information. Invited speakers include Yacine Aït-Sahalia, Jianqing Fan, Peter C. B. Phillips, Nick Polson, and Pietro Veronesi. Contributed posters may be submitted until July 31. For more information, visit *www.hec. frlfinanceandstatistics2010* or contact Veronika Czellar, 1, rue de la Liberation, Jouy en Josas, International 78351, France; +33139677364; *czellarv@hec.fr.*

>>10–12—MidWest SAS Users Group Conference, Milwaukee, Wisconsin

This conference will offer presentations, workshops, and tutorials to enhance attendees' SAS skills, as well as opportunities to network with other SAS users. Staff from SAS Institute will be available to provide expertise and insight. Conference attendees are encouraged to present papers on a variety of topics, including statistics, modeling, data mining, forecasting, pharmaceutical applications, health care, health insurance, and life sciences applications. For more information, visit www. mwsug.org/mil2010/index.htm or contact Doug Thompson, 501 West Michigan, Milwaukee, WI 53201; (414) 299-7998; Doug. Thompson@Assurant.com.

≫*14–16—Space-Time Statistics to Evaluate the Impacts of Climate on Health and Renewable Energy, Boulder, Colorado

This workshop will include sessions on recent advances in climate change research, impacts on human health, and challenges in development and penetration of renewable energy. Technical sessions will cover recent developments in space-time statistical methods, Bayesian methodology, and extreme value analysis. A one-day short course will be offered on October 14, and there will be a poster session. For more information, visit *www.stat.purdue. edu/envr2010* or contact Amanda Hering, Mathematical and Computer Sciences Department, Golden, CO 80401; *ahering@mines.edu.*

>>19–22—IX CLATSE (Latin American Congress of Statistical Societies), Viña del Mar, Chile

This meeting is for specialists and users of statistics to exchange results of scientific research, teaching experiences, and applications. For more information, visit *www.clatse.org* or contact Departamento Estadística, Universidad Valparaíso, Avenida Gran Bretaña 1901, Valparaíso, International 2350026, Chile; 56-32-2508320; *info@clatse.org*.

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.*

November

8–12—17th Annual Biopharmaceutical Applied Statistics Symposium, Hilton Head Island, South Carolina

This symposium will provide a forum for pharmaceutical, medical, and regulatory science professionals to share timely and pertinent information concerning the application of biostatistics in biopharmaceutical environments. For more information, contact Ruth Whitworth, P.O. Box 8015, Statesboro, GA 30460; (912) 478-7904; bass@georgiasouthern.edu.

10–13—2010 American Evaluation Association (AEA) Annual Conference, San Antonio, Texas

This meeting is expected to bring together about 2,500 evaluation practitioners, academics, and students in a collaborative, thought-provoking, and fun atmosphere. The conference will be broken down into 44 topical strands that examine the field from a particular methodology, context, or issue of interest to the field and the presidential strand, highlighting this year's presidential theme of evaluation quality. For more information, contact Heidi Nye, 16 Sconticut Neck Road, #290, Fairhaven, MA 02719; (888) 232-2275; *info@eval. org; www.eval.org/eval2010/default.asp.*

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.rbnas.org. br/~ibcfloripa2010* or contact Dee Ann Walker, 1444 I St. NW, Washington, DC 20005; (202) 712-9049; *info@tibs.org.*

>>*5–10—66th Annual Deming Conference on Applied Statistics, Atlantic City, New Jersey

This conference will focus on recent developments in statistical methodologies in 12 three-hour tutorials. Attendees will receive bound proceedings of the presentations. The conference will be followed by two parallel short courses: Bayesian Adaptive Clinical Trials and SAS for Mixed Models. For more information, contact Walter Young, 16 Harrow Circle, Wayne, PA 19087-3852; (610) 989-1622; *demingchair@gmail.com*.

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 *uww.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

>>3–5—International Conference on Mathematical Sciences in Honor of A. M. Mathai, Pala, Kerala, India

This conference will celebrate the 75th birthday of A. M. Mathai and mark the golden jubilee of the department of statistics at St. Thomas College. Topics to be covered include integral transforms and special functions, differential equations and applications, functional equations and fractional calculus, real and complex analysis, applied problems of analysis, theoretical and applied problems of mechanics, astrophysics, distribution theory, stochastic processes, statistical inference, multivariate analysis, mathematical and stochastic modeling, computation, and simulation. For more information, visit www.stcp. ac.in/seminar/ICMS/ICMS.htm or contact Thomas Mathew, Department of Mathematics and Statistics, Baltimore, MD 21044; (410) 455-2418; mathew@ umbc.edu.

*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, Québec

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, Québec 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, Department of Statistics, 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 5,500 people, activities include oral presentations, panel sessions, poster presentations, 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 Department, 732 North Washington St., Alexandria, VA 22314; (888) 231-3473; *jsm@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*.

December

28–31—International Conference on Advances in Probability and Statistics – Theory and Applications: A Celebration of N. Balakrishnan's 30 Years of Contributions to Statistics, Hong Kong, China

This conference will be held as a tribute to N. Balakrishnan for his 30 years of contributions to statistics. It will feature topics in distribution theory, reliability and lifetime data analysis, censoring methodology, and ordered data analysis. The conference aims to bring together researchers interested in theory and applications of probability and statistics to discuss recent developments and suggest future research directions. For more information, visit *http://faculty.smu.edu/ngh/icaps2011.html* or contact Hon Keung Tony Ng at *ngh@mail.smu.edu.*.

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Meeting Within a Meeting (MWM)

Statistics Workshop for Mathematics and Science Teachers

(www.amstat.org/education/mwm)

Sponsored by the American Statistical Association (ASA) and the Statistical Society of Canada (SSC) 2010 Joint Statistical Meetings (JSM)*

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Based on the Guidelines for Assessment and Instruction of Statistics Education (GAISE) Report: A Pre-K–12 Curriculum Framework (www.amstat.org/education/gaise)

Dates:	Wednesday, August 4, 2010, 7:45 a.m. to 5:15 p.m., with JSM activities Thursday, August 5, 2010
Place:	Vancouver Convention Centre, located at 1055 Canada Place, Vancouver, BC, V6C 0C3, Canada, and neighboring hotels (workshop meeting room location to be announced)
Audience:	Middle and high school mathematics and science teachers. Multiple mathematics/science teachers from the same school are especially encouraged to attend.
Objectives:	Enhance understanding and teaching of statistics within the mathematics/science curriculum through conceptual understanding, active learning, real-world data applications, and appropriate technology
Content:	Teachers will explore problems that require them to formulate questions; collect, organize, analyze, and draw conclusions from data; and apply basic concepts of probability. The MWM program will include examining what students can be expected to do at the most basic level of understanding and what can be expected of them as their skills develop and their experience broadens. Content is consistent with <i>GAISE</i> recommendations, <i>NCTM Principles and Standards for School Mathematics</i> , and Canadian standards.
Presenters:	GAISE Report authors and prominent statistics educators
Format:	Wednesday: MWM workshop sessions and pass to the JSM Exhibit Hall
	Thursday: Activities at JSM (statistics education sessions)
	Activity-based sessions, including lesson plan development
Provided:	Refreshments on Wednesday, August 4
	Complimentary pass to attend the Joint Statistical Meetings on Thursday, August 5
	Lodging reimbursement (up to a specified amount) for U.S. teachers from outside the Vancouver area
	Handouts
	Certificate of participation from the ASA certifying professional development hours
	Optional graduate credit available
Cost:	The course fee for the full day is \$35. Please note: Course attendees do not have to register for the Joint Statistical Meetings to participate in this workshop.
Follow up:	Follow-up activities and webinars (www.amstat.org/education/k12webinars)
	Network with local teachers to organize learning communities
Registration:	Online registration available at <i>www.amstat.org/education/mwm</i> . Space is limited. If interested in attending, please register as soon as possible.
Contact:	Rebecca Nichols, rebecca@amstat.org; (703) 684-1221, ext. 1877

*The Joint Statistical Meetings are the largest annual gathering of statisticians, where thousands from around the world meet to share advances in statistical knowledge. The JSM activities include statistics education sessions, posters sessions, and the exhibit hall.

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; *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

■ W. L. Gore & Associates is seeking an industrial statistician to support its medical device business in Arizona. Position involves consulting with small teams and statistical training of engineers and scientists. Candidates must have advanced degree in statistics with at least 4 years industrial experience strongly preferred. Background in basic and advanced statistical methods and expertise in DOE. Familiarity with JMP. Visit *www.gore. com/careers.* EOE.

Arkansas

■ Postdoctoral opportunity at University of Arkansas for Medical Sciences to develop statistical algorithms for individualized cancer predictions from highdimensional data. Primary responsibility: to implement novel classification methods in the open-source R software. Requires PhD in statistics, biostatistics, bioinformatics, or closely related discipline. Includes fringe benefits. Three-year

Faculty Position – Biostatistician working in Infectious Disease

The Vaccine and Infectious Disease Institute (VIDI) of the Fred Hutchinson Cancer Research Center (FHCRC) is seeking a member-track faculty in Biostatistics/Biomathematics at the level of Assistant or Associate DOE.

Applications are invited from outstanding biostatisticians with expertise in various aspects of infectious disease epidemiology including basic infectious disease epidemiology, biology of infectious diseases, vaccine design and evaluation, epidemiologic study design and data analytic methodologies. Direct research experience in one or more globally important infectious diseases including HIV, influenza, TB, malaria, HSV2, dengue, and cholera, or the relationship between infectious agents and cancer, will be particularly welcomed. A doctoral degree in Biostatistics or Statistics is required.

This position will involve development of a collaborative research program in infectious disease epidemiology with colleagues at FHCRC and the University of Washington as well as development of a strong independent program of methodologic research that is complementary to the collaborative research.

VIDI was established in 2007 to address the growing need for treatment and prevention strategies for infectious diseases worldwide. By integrating biometric, laboratory, and clinical science, researchers at VIDI aim to develop novel vaccines for infectious diseases that threaten global health, to shed light on the workings of the human immune system, and to develop novel treatment and prevention strategies to lessen the burden of infectious diseases and cancers caused by infection, particularly in the immuno-compromised host.

The FHCRC is an equal opportunity employer. The Center has a culturally diverse faculty and strongly encourages applications from female and minority candidates.

Review of applications will continue until the position is filled. Salary DOE + excellent benefits. Interested candidates may email a CV, a concise statement of their research plan, and three (3) letters of reference (in application, please refer to Job ID 23055) to: Dr. Ying Qing Chen c/o Helen Pagal, helen@scharp.org

Application deadline is May 31, 2010; however, applications will be accepted after the deadline if the position is still open.

Assistant or Associate Professor Biostatistics or Epidemiology

The George Washington University School of Public Health and Health Services

The Department of Epidemiology and Biostatistics of the GWU School of Public Health and Health Services is recruiting for dynamic, full-time faculty members in biostatistics or epidemiology at the rank of Assistant or Associate Professor. The successful applicant will be involved with research, teaching graduate courses and mentoring activities in the Department of Epidemiology and Biostatistics. Rank, salary and employment in either a tenure or non-tenure track position will be commensurate with experience.

The Department of Epidemiology and Biostatistics has expertise in HIV/AIDS, cancer, cardiovascular, behavioral, and aging epidemiology; racial disparities, public health laboratory science, geographical health information systems, spatial analysis and biostatistical methods. The Department also has a strong affiliation with the GWU Biostatistics Center renowned for its leadership in the design and coordination of large multi-center clinical trials in cardiovascular disease, diabetes, and maternal/fetal medicine.

Basic Qualifications: Qualified applicants must have either a doctoral degree or ABD in biostatistics or in epidemiology and evidence of teaching and mentoring experience in graduate-level programs in biostatistics or epidemiology. ABD applicants will be considered for a conditional appointment at the rank of instructor and must have their degrees conferred by December 31, 2010.

Preferred Qualifications: Demonstrated success for securing externally-funded research grants; a record of peer-reviewed publications in biostatistics or epidemiology; and strong verbal and written communication skills are preferred.

Responsibilities will include maintaining an active research program in biostatistics or epidemiology teaching and developing graduate-level courses in biostatistical and epidemiologic methods; and advising masters and doctoral-level students. Review of applications will begin on **July 1, 2010** and will continue until the positions are filled. Applications from women and people of color are strongly encouraged.

Application Procedure: To be considered, interested applicants should submit the following documents electronically: 1) a curriculum vitae; 2) a statement of research interests and accomplishments and plans; and 3) a statement of teaching and mentoring experience, to:

Search Committee, Epidemiology and Biostatistics c/o Stephanie Panichello, Department Manager Department of Epidemiology and Biostatistics School of Public Health and Health Services The George Washington University epibiojobs@gwumc.edu (please submit all materials electronically to this e-mail address) Please include Position Tracking Number **EPI 10-01** in email subject line.

Only complete applications will be considered.

Additional information about the SPHHS can be found at http://www.gwumc.edu/sphhs/.

The George Washington University is an Equal Opportunity/Affirmative Action Employer.

funding anticipated July 1, 2010. Email cover letter, CV, names of three references to Ralph Kodell, PhD, at *rlkodell@uams.edu*. EOE.

California

■ Experienced principal biostatistician with experience in oncology clinical trials. MS or PhD in biostatistics; experience with design and analysis of clinical trials with biopharmaceutical industry experience preferred. If interested, please send resumes to *mmwong@genomichealth. com* or apply at our website. Genomic Health is an Equal Opportunity Employer.

■ Biostatistics Senior Manager. Amgen invites candidates to apply for biostatistics senior manager at Amgen's Thousand Oaks or San Francisco, California, locations. The senior manager is responsible for ensuring that all statistical aspects of documentation pertaining to clinical activities meet required standards and are statistically correct, contributing to the development strategy, and defending statistical approaches internally and externally. To apply online, visit *www. amgen.com/careers* (search job #3697BR). Amgen is an AA/EOE.

■ Biostatistics Sr. Manager-Biometric Solutions. Amgen invites candidates to apply for biostatistics senior manager at Amgen's Thousand Oaks, California, headquarters. This individual will serve as an expert statistical consultant to a team of statisticians in medical sciences biostatistics, particularly with respect to exposure-response (PK/PD) and modeling of PK, biomarker, and clinical outcomes. To learn more and apply online, visit *www.amgen.com/careers* (search job #3485BR). Amgen is an AA/EOE.

Florida

■ University of Florida, IFAS - statistics, opening for lecturer, starting as early as July 1, 2010. PhD in statistics or related field with teaching and applied collaborative research interests required. Review begins May 24, 2010, and continues

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To find out more, visit www.ge.com/research, and search for job #1089028 in the careers section. For further information, you can confidentially contact Roger Hoerl, Manager, Applied Statistics Lab, at roger.hoerl@ge.com or (518) 387-5991.



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Assistant Director of the Biostatistics Center

The Connecticut Institute for Clinical and Translational Science (CICATS) at the University of Connecticut Health Center (UCHC) invites nominations and applications for a full-time position as Assistant Director of the Biostatistics Center.

The Assistant Director will be a full-time faculty member at the School of Medicine in Farmington, CT with the potential for an appointment in the Department of Statistics at the UCONN Storrs Campus. The Assistant Director will assist the Director to develop the CICATS Biostatistics Center that will facilitate and support the proposed growth of Clinical and Translational Science across CICATS, which includes the university's Schools of Medicine and Dentistry, the Storrs campus, and local area hospitals. In addition to original research and research collaborations, the Assistant Director will be responsible for assisting with the operations of the CICATS Research Design, Epidemiology and Biostatistics cores. CICATS investigators will include trainees and both junior and senior faculty members from multiple disciplines. The Biostatistics faculty, in collaboration with a team of epidemiologists and master's level staff, will provide guidance to transdisciplinary teams for the development of clinical and translational research studies. He/she will also be responsible for biostatistics teaching in the new Master of Science in Clinical and Translational Research, with teaching opportunities available in other university health-related degree programs.

The successful candidate must hold a doctorate in biostatistics or a closely related discipline and have demonstrated success with self-initiated research, extramural funding and published scholarship and have the ability to work in collaboration with clinical, translational and/or basic scientists, and to lead a biostatistics academic unit including students, postdoctoral fellows, master-level staff, and other faculty.

This position is available in the 2010-2011 academic year. Applicants should apply using the Health Center's applicant tracking system at https://jobs.uchc.edu, Search No. 2010-1076. A curriculum vitae and a cover letter should be uploaded through this site. Questions regarding this search should be addressed to Ms. Stacey Anderson, CICATS, at Sanderson@uchc.edu.

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until filled. Apply online at *https://jobs. ufl.edu*, requisition: 0804793 and submit application, cover letter, and vita. Send transcript and three recommendation letters to Box 110339, Gainesville, FL 32611-0339. EOE.

■ Statistician I. Mayo Clinic's hospital in Jacksonville, Florida, combines the best of high technology with the highest level of patient care and attention. We are seeking a statistician with a master's degree in statistics/biostatistics. Experience in carrying out most phases of statistical analysis, interpretation and report-writing while utilizing statistical computing and data management packages preferred. Apply at: www.mayoclinic. orgljobs-jax, referencing job #8229. Mayo Clinic is an AA/EOE.

Massachusetts

■ MS biostatistician. Collaborate with medical and scientific researchers in design, analysis, and publication of

continued on page 69

FRED HUTCHINSON CANCER RESEARCH CENTER

The Microbicide Trials Network (MTN, www.mtnstopshiv.org), in partnership with the Fred Hutchinson Cancer Research Center (FHCRC, www. fhcrc.org), is searching for a Faculty Statistician to direct the MTN Statistical and Data Management Center (SDMC) within the Statistical Center for HIV/AIDS Research & Prevention (SCHARP) in Seattle, Washington. The Faculty Statistician would be the Principal Investigator of the MTN SDMC grant at the FHCRC, and maintain an independent research program. The position will be at the rank of Associate Member or Full Member (equivalent to Associate Professor or Professor at a university).

The MTN is a U.S. National Institutes of Health-funded worldwide collaborative clinical trials network focused on preventing the sexual transmission of HIV. Based at the University of Pittsburgh and Magee-Womens Research Institute in Pittsburgh, Pennsylvania, U.S., MTN's core operations are supported by a network laboratory at the University of Pittsburgh, the SDMC housed within SCHARP at FHCRC, and Family Health International, a global organization with expertise conducting clinical protocols. In addition, MTN comprises 13 clinical trial units with 20 clinical research sites located in seven countries. MTN receives its funding from three NIH institutes: NIAID, NIMH, and NICHD. The Faculty Statistician directs the MTN SDMC within SCHARP. SCHARP has nearly 200 employees, including close to 50 PhD and MS statisticians, and is responsible for managing the statistical and data management resources of several HIV research networks, including the MTN. The MTN is governed by the Executive Committee (EC) which is responsible for the overall scientific direction, development, and implementation of policy, procedural decisions, and resource allocation. In addition to the responsibilities related to the SDMC activities, the SDMC PI is an active voting member in the MTN EC.

The Fred Hutchinson Cancer Research Center is a world-renowned research institution with large and active efforts in basic biological sciences, human biology, clinical research, epidemiology, biostatistics, cancer prevention research, and vaccine and infectious disease research. Its interdisciplinary teams work together to conduct research of the highest standards to prevent, diagnose, and treat cancer, HIV/AIDS, and other diseases.

The MTN and FHCRC are seeking a senior biostatistician with extensive experience in the design and conduct of HIV prevention trials. The successful applicant will have a PhD or equivalent degree in statistics or biostatistics with an outstanding research record and extensive management and administrative experience.

The FHCRC is an equal opportunity employer. The institution is building culturally diverse faculty and strongly encourages applications from female and minority candidates.

Review of applications will begin July 1, 2010, and will continue until the position is filled.

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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

■ Biostatistician faculty position UR School of Nursing. Seeking experienced researcher and biostatistician to collaborate with and provide biostatistical support to academic faculty conducting clinical, behavioral, systems, and population health research. Strong ability to integrate and problem-solve a range of research designs, methods and statistical analyses. Exceptional verbal and written communication skills required. Must have expertise in grant and manuscript writing. Competitive salary. More information: *www.son.rochester.edu*. University of Rochester is an AA/EOE.

Ohio

CWRU School of Medicine invites applications for assistant or associate professor (non-tenure track). Must have PhD in biostatistics, epidemiology, or related field. Associate rank requires sustained contributions and national reputation. For more information, go to http:// cci.case.edu/cci/employment. To apply, email a letter of application, CV, and contact information for three references to cci-careers@case.edu; specify Search #206 in the subject line. In employment, as in education, Case Western Reserve University is committed to Equal Opportunity and Diversity. Hiring is contingent upon eligibility to work in the United States. Women and minorities are encouraged to apply.

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Pennsylvania

■ Postdoctoral fellow in statistical genetics within biostatistics division at University of Pennsylvania. The candidate will develop and implement statistical and computational methods for genetic studies. PhD degree in statistics, biostatistics, bioinformatics, computer sciences, or other quantitative fields and programming skills in C/C++/Perl and at least one statistical package are required. To apply, send CV, publication reprints, 3 references to ruifeng@upenn.edu. www. med.upenn.edu/apps/my/bpp_postings/ index.php?pid=12031. University of Pennsylvania is an AA/EOE.

■ Statistician. Western Psychiatric Institute & Clinic of UPMC seeks a statistician to assist a principal investigator in completing statistical analyses for funded initiatives. Needs are varied including statistical tests and sophisticated techniques for testing longitudinal data (M-Plus, SAS Proc Traj). One focus of the research program requires use of sophisticated genetic programs (SOLAR, FBAT). To learn more about this opportunity, contact Lance Maloney at *maloneylp@upmc.edu. www.UPMC. com.* EOE.

South Carolina

■ The Hollings Cancer Center-Division of Biostatistics and Epidemiology at the Medical University of South Carolina invite applications for a research associate biostatistician. This position requires a master's degree in biostatistics or related field. The position will involve highly collaborative interactions with Hollings Cancer Center faculty with an emphasis on grant proposals and the design and analysis of laboratory, clinical, and epidemiologic studies. Apply: www.jobs. musc.edu, position #046407. MUSC is a drug-free workplace. We are an equal opportunity employer promoting diversity. m/f/v/d.

Tennessee

■ Department of Preventive Medicine, University Tennessee Health Science Center, is accepting applications for
assistant/associate professor level in biostatistics. Requires doctorate biostatistics/ statistics or medical degree with epidemiology/biostatistics training. Send CV, cover letter describing research interests, experience, three references to Betsy Tolley, PhD, UTHSC, Department PrevMed, 66 N. Pauline, Suite 633, Memphis, TN 38163, email *btolley@ uthsc.edu*. University of Tennessee Health Science Center is an equal opportunity/ affirmative action employer.

International

■ The Institute of Statistics at the National Chiao Tung University invites applications for a faculty position beginning February 2011. The rank will be determined by the qualifications of candidates. Please send a statement of research interests, a CV, and three letters of recommendation to Institute of Statistics, National Chiao Tung University, Hsinchu 30010, Taiwan. Applications completed by July 31, 2010, will receive full consideration. ■

Research Professionals

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

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To apply for this position, please visit: http://www.novartisoncology.com/careers

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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*

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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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Fred Hutchinson Cancer Research Center p. 63, 66
GE Global Research
The George Washington University
NORCp. 70
Novartis
Novartis Oncologyp. 71
Pioneer
Smith Hanleyp. 68
U.S. Census Bureaup. 69
University of Connecticutp. 66
Westat

SOFTWARE

Cytelp. 20
JMP, a business unit of SAS cover 3
Minitab, Inc
NCSSp. 31
RTI International/SUDAAN 10p. 46
Salford Systemsp. 24
SAS cover 4
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