

January 2012 • Issue #415

# AMSTATNEWS





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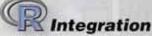
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The American Statistical Association is the world's largest community of statisticians. The ASA supports excellence in the development, application, and dissemination of statistical science through meetings, publications, membership services, education,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

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# columns

#### 16 **175**

#### Steering Committee Invites Involvement in Anniversary Planning

The ASA will celebrate its 175th anniversary in 2014. In preparation, column "175"—written by members of the ASA's 175th Anniversary Steering Committee and other ASA members—will chronicle the theme chosen for the celebration, status of preparations, activities to take place, and, best yet, how you can get involved in propelling the ASA toward its bicentennial.



#### Contributing Editor

Christy Chuang-Stein is the chair of the 175th Anniversary Steering Committee and head of the Statistical Research and Consulting Center at Pfizer. She served as an ASA vice president from 2009–2011.

Chuang-Stein

# 19 MASTER'S NOTEBOOK Getting Graphic with Biostatistics

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 Megan Murphy, *Amstat News* managing editor, at *megan@amstat.org*.



Contributing Editor

Susan Duke is manager of benefit risk evaluation at GlaxoSmithKline (GSK). She has worked at GSK for slightly more than half of her career, initially as a respiratory project statistician and later as co-lead of GSK's statistical graphics initiative. Previously, she worked in biotech, devices, and drug delivery at companies in the Bay Area; Seattle, Washington; and Ft. Collins, Colorado. She lives in Chapel Hill and is involved in local community efforts in her free time.

Duke



Did you know the Council of Chapters
Governing Board (COCGB) publishes a
biannual newsletter called Chapter Chatter
every spring and fall? It features chapter
activities and other news of interest to ASA chapter
members. Read the current or a previous issue at
www.amstat.org/chapters/index.cfm. Also, contact
Jim Cochran, COCGB communications officer and
Chapter Chatter editor, at jcochran@latech.edu with
news items and suggestions.

Lamar University's department of mathematics will host the Conference of Texas Statisticians from March 2–3 in Beaumont, Texas. The yearly conference for academic and applied statisticians will include plenary talks by well-known statisticians, sessions for young researchers, and poster sessions for undergraduate and graduate students. The registration deadline is February 17. For more information, contact Kumer Pial Das at kumer.das@lamar.edu or visit the conference website at www.math.lamar.edu/activities/COTS.

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

membersonly.

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

Many of the **sections and committees** sponsor events and host workshops and meetings. For details about these events and other news, make sure you visit our section, chapter, and committee pages online at <a href="http://magazine.amstat.org">http://magazine.amstat.org</a>.

# columns

# 21 STAT*tr@k*Statistics, Thy Name Is Flexibility

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



Contributing Editor

Meena Doshi is a statistical analyst in the Tufts University Department of Civil and Environmental Engineering. She earned her master's in applied statistics from The Ohio State University and a master's in public health (concentration in epidemiology and biostatistics) from the Tufts University School of Medicine.

Doshi

# 24 SCIENCE POLICY Science Advocacy: What Is It and What Is the Role of Professional Societies?

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 before becoming head of government relations at the American Physical Society.

Pierson

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# A New Year and New Initiatives

ur association has entered its 173rd "new year," a time of unprecedented opportunity for statisticians, and we are moving in new directions to promote the profession of statistics.

In this month's column, I discuss four presidential initiatives for 2012: planning for the ASA's 175th anniversary, formulating guidelines for master's degree programs, training in career success factors, and communicating about major ASA activities.

These initiatives are based on our Strategic Plan, which was adopted in 2008. After discussions with the ASA Board of Directors in April 2011, I appointed a workgroup for each initiative. All four workgroups began meeting at JSM 2011 and reported substantial progress at the November board meeting.

### 175th Anniversary **Planning**

A steering committee chaired by Christy Chuang-Stein is providing high-level direction for the ASA's 175th anniversary in 2014. This committee is generating and implementing activities that will propel us into the next quarter century. It also will be working with chapters, sections, committees, and outreach groups to coordinate their activities and make the celebration an associationwide event.

A new column, titled "175," debuts in this issue to keep you informed about the planning. This month's "175" explains the theme, "Celebrate Our Past, Energize Our Future," for the celebration and announces a website, www.amstat.org/ASA175, where you can submit ideas and reach out to members of the steering committee.

I also encourage you to contribute to the ASA's Reverse Time Capsule at www.amstat. org/membersonly with forecasts and essays imagining what our association will be like in 2039. How many members, chapters, and sections will we have by our 200th birthday? The most accurate forecasts—to be determined in 2039—will be rewarded with lifetime ASA memberships!

## **Guidelines for Master's Degree Programs**

A workgroup chaired by John Bailer is developing guidelines, framed as learning outcomes, for master's degree programs in statistics and biostatistics. The workgroup is surveying managers in business and government who hire statisticians with master's degrees in order to identify knowledge and skills that most benefit their employees. In addition, the workgroup is surveying recent graduates to learn about training that has enabled them to succeed in their first job.

With guidelines that anticipate these needs, university departments offering master's degrees can consider how their curricula address desired outcomes and better prepare

students for future success. To learn more about this initiative, contact John at baileraj@ muohio.edu.

### **Training in Career Success Factors**

A workgroup chaired by Bob Starbuck is proposing ways in which we can provide careerbuilding courses on topics such as presentation skills and influence skills that will enable statisticians to flourish in the workplace. This training is especially critical for younger statisticians entering emerging areas of practice such as business analytics and "big data" companies, where communication and teamwork are essential.

Last spring, a group of executives who hire statistics graduates for business analytics met at ASA headquarters to discuss the professional development needs of their employees and how we might meet them. The executives expressed interest in different types of continuing education for their employees. Above all, they asked us to provide training in "soft skills"—for example, the ability to explain the relevance of a statistical analysis to others in their organization.

Employers in other sectors and many ASA members have expressed strong interest in success factors training tailored for statisticians. This is a service we should provide. Not only will it help members in every sector become more effective, but it



Robert Rodriguez

will also ultimately increase the viability of our profession. For more information about this initiative, contact Bob at *RRS49@nc.rr.com*.

# In-Reach Communication About Major ASA Activities

A workgroup chaired by Jeri Mulrow is developing presentation materials for use by members who would like to communicate the most important activities of our association *within* their local statistical communities. I describe this as "in-reach communication" because the audiences for these

messages are our own members, colleagues, and students. All of us should be aware of ASA activities that add value to membership, benefit underserved groups, and improve the visibility of our profession.

This initiative grew from conversations with members who have said, "We'd like to give talks about these exciting developments to our departments and chapters." With the building blocks that the workgroup is developing, it will be easy to assemble such a presentation that meets the interests of your particular audience.

Potential topics for in-reach presentations are Significance

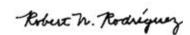
magazine, our professional accreditation program, the STATtr@k website for students and younger members, and the Conference on Statistical Practice that we are inaugurating next month. (The deadline for registering is January 31; see www. amstat.org/meetings/csp/2012/index.cfm.)

Of course, the primary channels for informing our membership are *Amstat News* and the ASA website, but presentations by members have the advantage of personal connection. And, by equipping members to give these presentations, we will create champions for our association. If you are interested in this initiative, contact Jeri at *jmulrow@nsf.gov*.

I want to close by thanking the members who are serving on these workgroups. While planning these initiatives, I benefited from discussions with ASA Executive Director Ron Wasserstein and wise advice from past presidents Nancy Geller, Sastry Pantula, and Sally Morton. I am also grateful for the enthusiastic feedback I received last year when I presented my initiatives to members in locations ranging from Juneau, Alaska, to Boston, Massachusetts.

I am deeply honored to serve as the 107th president of our association, and I look forward to meeting many more members in 2012.

May you and your family have a healthy and successful New Year.





# a website geared toward young statistics professionals



## STATtr@k offers tips on:

- $\rightarrow$  how to apply for a job
- → how to be a successful graduate student
- → how to make the transition from coursework to research

STAT*tr@k* also offers information about career and mentorship sites, upcoming conferences, and awards and competitions. New articles will appear monthly.

http://stattrak.amstat.org

# **Highlights of the November 2011 ASA Board of Directors Meeting**

ancy Geller, 2011 ASA president, led the board through a rich agenda that reflected the membership's diversity of areas of statistical practice during its final meeting of 2011 at the ASA office in Alexandria, Virginia. Current board members (see sidebar) were joined by incoming members for 2012 as part of the annual transition and orientation process for the board. Here are the highlights:

- · The board endorsed a document, titled "Avoiding Implicit Bias: Guidelines for ASA Awards Committees." The document will be used by committees to improve the ASA's awards processes.
- Speaking of awards, the board approved a proposal to create the Karl E. Peace Award for Outstanding Statistical Contributions to the Betterment of Society. The award is being endowed by a gift from Karl Peace's family.
- The board also agreed to the formation of an exploratory committee to consider the feasibility of establishing a prestigious international prize for statistics. The committee is to report its findings to the board in March.
- As always, the board heard reports from the Council of Sections Governing Board and the Council of Chapters Governing Board. The number of sections has been growing in recent years, reflecting the diverse areas in which statisticians practice their profession. Several chapters have been involved in a pilot project to develop chapter websites on the ASA Community site.
- The board had the honor of hosting John Brewster, president of the Statistical Society of Canada, who shared with the board the latest activities of the SSC, including issues of mutual interest and concern to our respective societies.
- The board conducted its annual walkthrough of the ASA financial statements. This discussion, led by the ASA's auditors, helps current and incoming board members

### 2011 ASA Board of Directors

Nancy Geller (President)

Bob Rodriguez (President-elect)

Sastry Pantula (Past President)

Christy Chuang-Stein (3rd-Year Vice President)

Rod Little (2nd-Year Vice President)

Mary Mulry (1st-Year Vice President)

Jeri Mulrow (3rd-Year Council of Sections Representative)

Jessica Utts (2nd-Year Council of Sections Representative)

John Bailer (1st-Year Council of Sections Representative)

David Marker (3rd-Year Council of Chapters Representative)

Tom Short (2nd-Year Council of Chapters Representative)

Bonnie LaFleur (1st-Year Council of Chapters Representative)

Ray Chambers (International Representative)

Karen Kafadar (Publications Representative)

Keith Ord (Treasurer)

Ron Wasserstein (Executive Director)

better understand not only the ASA's financial situation, but also risk and interpreting a financial statement from a nonprofit entity in general.

- Then, the board heard a report on the status of the ASA's investment portfolio, as well as a report on the financial status of the ASA through the first three quarters of 2011.
- The board received the annual reports of the Leadership Support Council and Education Council. These annual reports provide a key mechanism for the board and the many ASA committees to stay in touch with each other. Reporting for the Leadership Support Council, 2012 ASA President Bob Rodriguez noted

### 2012 ASA Board of Directors

Bob Rodriguez (President)

Marie Davidian (President-elect)

Nancy Geller (Past President)

Rod Little (3rd-Year Vice President)

Mary Mulry (2nd-Year Vice President)

David Morganstein (1st-Year Vice President)

Jessica Utts (3rd-Year Council of Sections Representative)

John Bailer (2nd-Year Council of Sections Representative)

Janet Buckingham (1st-Year Council of Sections Representative)

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Bonnie LaFleur (2nd-Year Council of Chapters Representative)

Nick Horton (1st-Year Council of Chapters Representative)

Ray Chambers (International Representative)

David Banks (Publications Representative)

Keith Ord (Treasurer)

Ron Wasserstein (Executive Director)

- that the committee reorganization—started in 2010—has been successfully implemented, leading to better organizational communication. Rod Little, chair of the Education Council, summarized a variety of educational undertakings supported by ASA committees and sections.
- The board continued its "big tent for statistics" discussion, regarding the development of a better understanding of the diversity of statisticians in the ASA and how to meet their needs, which started at ISM. The board met with members of the Advisory Committee on Continuing Education to ask about the purposes of continuing education (CE) in the life of a statistician and what role the ASA should play in meeting these purposes. Feedback from this discussion will inform the next round of meetings regarding the important role of CE in improving statistical practice.

- In another facet of the "big tent" discussion, the board considered a variety of matters and issues related to the Joint Statistical Meetings:
  - ASA Executive Director Ron Wasserstein provided the board with an overview of the agreement that governs JSM.
  - The board reviewed and approved a new site selection and rotation plan for JSM 2019-2026.
  - The board approved two possible sites for JSM 2018 and asked staff to negotiate the best pricing. The Executive Committee of the board will then make the final decision on the site.
  - Xiao-Li Meng, chair of the Committee on Meetings, presented a summary of issues at JSM resulting from the growth in the number of concurrent sessions. The committee has given much thought to the issue over the years, and solutions are not simple. Meng said the committee is committed to keeping JSM as an inclusive meeting by not reducing the number of presenters (though the means of presentation may need to change) and making sure JSM welcomes the "younger generation" to participate.
  - The board approved in principle the addition of two new partners to JSM, subject to approval by the other ISM partners.
- Christy Chuang-Stein, chair of the 175th Anniversary Steering Committee, reported on the committee's progress and led a board discussion of possible initiatives to coincide with the anniversary.
- Geller thanked all board members for their service and contributions during the year and gave special thanks to outgoing board members Sastry Pantula, Christy Chuang-Stein, David Marker, Jeri Mulrow, and Karen Kafadar.

The board next meets March 30-31 in Alexandria, Virginia. ■

# Will Your 2012 JSM Poster **Have Statistical Significance?**

Announcing the SPA poster competition

The Scientific and Public Affairs (SPA) Committee invites all 2012 JSM poster contributors to compete for a policy applications prize in its third Statistical Significance competition. A \$250 prize will be awarded to the ISM poster that includes a Statistical Significance piece the judges deem describes the best contribution of statistics to society.

What constitutes a Statistical Significance piece? Statistical Significance is a short one-page illustration of the value of statistics to society within the context of the research problem dealt with in the poster submitted for JSM presentation. The objective is to illustrate to a lay person how the statistical solution to the problem presented in the poster would help form decisions that improve our society in specific areas such as health, agriculture, economy, education, manufacturing, medicine, etc.

This specific piece should be clearly written to convey the beneficial role of statistics in a concise and unambiguous manner. The most effective Statistical Significance pieces are easy to develop, simple in exposition, enlightening, and fun to read. See www.amstat.org/outreach/ statsig.cfm for examples.

Contest participants must include a one-page Statistical Significance piece with their poster presentation at JSM. Both the scientific merit of the poster and the Statistical Significance piece will be judged; however, posters without the separate Statistical Significance page will be ineligible to win the competition.

A panel of judges appointed by the SPA committee will visit the posters at JSM and determine a winner on the morning of July 30 or 31. The winner will be notified immediately thereafter.

To enter, email your intention to compete to SPA member Dan McCaffrey at danielm@rand.org (including your abstract number) when you submit the poster abstract. Feel free to contact McCaffrey with questions. ■

Editor's Note: Participation in this competition is only available to poster authors who submit their abstract by the ISM deadline of February 1.



# First eConference on Teaching Statistics in May

The first electronic Conference on Teaching Statistics (eCOTS) will take place from May 14–18 through the Consortium for the Advancement of Undergraduate Statistics Education (CAUSE: www.causeweb.org). eCOTS will center on the following three themes:

- Teaching Statistics: Debating Some of the Big Ideas
- Statistics for the Modern Student
- Reaching Out and Building Relationships Beyond the College Statistics Classroom

Included in the conference will be interactive virtual sessions from leaders in the statistics education community, a virtual poster session, demonstrations from exhibitors, and virtual workshops. The conference will culminate in keynote presentations by technology innovators Hans Rosling and Webster West.

For the complete call for proposals, including the submission form for proposing conference sessions and posters, visit www.causeweb.org/ecots.

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Also available as an eBook

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#### **Biostatistics**

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# NISS Receives Five-**Year Grant for Census Research Network**

The National Institute of Statistical Sciences (NISS) and Duke University received a grant from the National Science Foundation (NSF) and the U.S. Census Bureau for the Triangle Census Research Network (TCRN). The award, one of eight nationwide under the NSF-Census Research Nodes program, is for nearly \$3 million and covers a five-year period. Jerome Reiter, principal investigator (PI) and Alexander Hehmeyer Associate Professor of Statistical Science at Duke, and Alan Karr, director of NISS and co-PI, will head the project.

The grant will be used to improve how federal statistical ("FedStats") agencies disseminate data to the public and researchers. Specifically, the TCRN will enhance FedStats agencies' capabilities by developing broadly applicable methodologies in three inter-related areas:

- 1. Disseminating public use data with high utility and acceptable disclosure risk
- 2. Handling missing data and correcting faulty data in large complex surveys
- 3. Integrating information from multiple data sources

The TCRN also will offer educational opportunities to postdoctoral fellows, graduate students, and statisticians at federal agencies.

The FedStats agencies collect diverse data that affect many people, including the decennial census, unemployment numbers, and the Consumer Price Index. NISS collaborates with many of these agencies, including (in addition to the Census Bureau) the Bureau of Labor Statistics, Bureau of Transportation Statistics, Energy Information Administration. National Agricultural Statistics Service, National Center for Education Statistics, and National Center for Health Statistics. Among NISS' achievements are methods used nationally to produce high-school graduation rates and crop forecasts and a plethora of techniques and tools that support dissemination of high-quality information derived from confidential data.

By building on these achievements and creating new theory and methodology applicable to major Census Bureau data products, the TCRN's research will improve the hundreds of secondary analyses of these data sets. The interdisciplinary team of the TCRN—consisting of statisticians, economists, political scientists, and operations researchers-will use these data products to answer questions in aging, economics, and social welfare that have important implications for policymaking.

"The TCRN will improve the way we handle missing and faulty data by integrating paradigms from statistics and operations research," explained Karr, "The team will also develop nonparametric Bayesian approaches for multiple imputation of missing data in high dimensions with longitudinal and multi-level aspects, as well as address central issues in data integration."

For information about FedStats, visit www.fedstats.gov. Information regarding NISS can be found at www.niss.org. ■

# Biostatistics Salary Survey Keith Crank, ASA Manager of Research and Graduate Education

**Table 1**—Results from the Fall 2011 Salary Survey of Biostatistics and Other Biomedical Statistics Departments and Units

		Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011
Rank/Years in Rank	Percentile	(Sample Size)						
Assistant 1–3	25th	\$79,560	\$82,400	\$86,000	\$89,200	\$89,100	\$89,500	\$91,900
	50th	83,000	85,000	88,452	93,600	93,500	93,600	97,400
	75th	88,000	90,000	92,869	98,300	99,100	102,600	104,300
	90th				104,900	103,300	111,300	111,500
		(149)	(112)	(106)	(69)	(82)	(78)	(83)
Assistant	25th	\$81,588	\$84,476	\$87,400	\$90,500	\$89,400	\$91,000	\$93,000
4 or more	50th	87,000	88,471	92,000	95,500	95,500	97,300	97,200
	75th	94,039	94,819	98,220	106,200	100,700	103,000	104,600
	90th				118,000	110,500	116,400	113,800
		(55)	(48)	(65)	(62)	(87)	(101)	(97)
Associate	25th	\$ 94,255	\$ 89,937	\$102,525	\$102,500	\$102,400	\$103,000	\$109,600
0–2	50th	100,215	100,441	110,493	110,800	114,000	110,100	118,000
	75th	103,378	113,000	118,900	127,000	129,200	122,400	130,600
	90th				140,000	139,000	140,000	143,800
		(40)	(46)	(50)	(36)	(62)	(46)	(56)
Associate	25th	\$ 95,634	\$101,384	\$105,000	\$109,300	\$108,100	\$110,100	\$112,800
3 or more	50th	103,334	107,981	109,350	118,000	116,800	123,800	125,000
	75th	117,747	120,000	124,924	130,000	130,000	141,000	140,500
	90th			•	155,000	155,800	153,900	155,900
		(53)	(65)	(66)	(69)	(69)	(94)	(101)
Full 0–6	25th	\$122,095	\$127,893	\$137,991	\$130,200	\$127,100	\$138,500	\$141,900
	50th	147,988	147,488	163,870	145,200	152,300	159,100	157,300
	75th	172,664	177,840	180,365	174,600	181,100	185,000	185,400
	90th				205,500	208,100	208,500	203,000
		(47)	(54)	(60)	(65)	(84)	(66)	(79)
Full	25th	\$127,630	\$139,959	\$147,575	\$156,200	\$145,600	\$163,300	\$166,900
7 or more	50th	151,410	172,523	180,760	187,000	178,600	194,200	191,500
	75th	171,303	197,277	209,147	215,500	203,200	222,600	234,500
	90th				246,700	224,400	251,800	259,300
		(87)	(84)	(71)	(77)	(92)	(97)	(109)
Starting	25th	\$81,600	\$77,500	\$84,000	\$87,500	\$103,200	\$85,000	\$92,500
Assistant	50th	84,000	82,400	85,000	91,500	107,000	90,000	95,700
Professors	75th	95,833	85,279	93,150	98,500	110,600	104,100	113,300
	90th			•	NA	NA	NA	120,000
		(22)	(27)	(13)	(09)	(12)	(11)	(19)

**Table 2**—2011 Percentiles for the Groups in Table 1 Separated by Gender

Title	Years in Rank	Gender	Count	1st Quartile	Median	3rd Quartile	90th Percentile
Assistant Professor	0	Male	9	\$ 92,500	\$ 95,700	\$ 113,300	NA
		Female	10	\$ 95,000	\$ 96,900	\$ 110,000	NA
	1–3	Male	50	\$ 92,000	\$ 97,900	\$ 104,300	\$ 112,000
		Female	33	\$ 91,900	\$ 97,400	\$ 103,700	\$ 111,500
	1	Mala	AF	¢ 02 200	¢ 06 300	¢ 102 000	¢ 107.600
	4 or more	Male Female	45 52	\$ 92,300 \$ 94,900	\$ 96,300 \$ 100,000	\$ 102,000 \$ 107,400	\$ 107,600 \$ 119,000
Associate Professor	0–2	Male	30	\$ 108,500	\$ 118,400	\$ 130,800	\$ 144,000
		Female	26	\$ 113,300	\$ 117,500	\$ 130,400	\$ 141,800
		-		-	7	7	7
	3 or more	Male	68	\$ 112,200	\$ 123,800	\$ 140,000	\$ 158,600
		Female	33	\$ 115,000	\$ 125,900	\$ 144,200	\$ 154,900
Full Professor	0–6	Male	60	\$ 146,400	\$ 165,300	\$ 185,400	\$ 204,800
		Female	18	\$ 135,400	\$ 138,700	\$ 156,600	NA
			-			-	
	7 or more	Male	77	\$ 167,800	\$ 195,200	\$ 239,700	\$ 266,500
		Female	32	\$ 159,900	\$ 180,200	\$ 215,500	\$ 239,200

Table 3—Salaries for Full-Time, Non-Faculty, Academic Biostatisticians

Highest Degree	Years Since Highest Degree	Count	1st Quartile	Median	3rd Quartile	90th Percentile
Master's	0–2	20	\$ 59,100	\$ 63,000	\$ 68,400	\$ 71,200
	3–5	19	\$ 55,000	\$ 71,000	\$ 75,500	\$ 77,100
	6–10	28	\$ 61,800	\$ 75,600	\$ 82,100	\$ 92,900
	11–15	15	\$ 71,400	\$ 85,300	\$105,500	NA
	16 or more	13	\$ 84,400	\$ 89,500	\$109,800	NA
	All	97	\$ 62,200	\$ 72,800	\$ 84,400	\$101,000
PhD	All	13	\$ 70,400	\$ 88,100	\$102,900	NA

able 1 includes results from the fall 2011 Salary Survey of Biostatistics and Other Biomedical Statistics Departments and Units, conducted by the ASA. All salary figures are for a 12-month period. As in the past, previous salary survey data have been included for comparative purposes. (This year, we have included the 90th percentiles and the quartiles.) The estimates are based on responses from 35 departments, plus a few individuals who responded to the survey.

Beginning with the 2009 survey, gender data were collected along with the salary information. Table 2 provides the 2011 percentiles for the groups in Table 1 separated by gender.

In 2011, we continued to collect data on nonfaculty, academic statisticians, and biostatisticians. Table 3 provides information about the salaries for full-time, nonfaculty, academic biostatisticians. (There were not enough responses for nonfaculty, academic statisticians to provide summary statistics.) Quartiles are provided for categories with nine or more respondents. The 90th percentile is provided for any category with 19 or more respondents. All percentiles are rounded to the nearest \$100. (The information for two people with master's degrees did not include years since highest degree. They are included in the row marked "All.") ■

# **Director of Programs Wanted**

The American Statistical Association is seeking a director of programs to report to and work closely with the executive director to execute the ASA's strategic and shortrange plans. Examples of important activities under way include the International Year of Statistics, 175th anniversary of the ASA, accreditation, advocacy, and education. Other initiatives will arise as the association continues to grow and the profession continues to advance. As a member of the ASA's leadership team, this individual will help advance the ASA's efforts to promote the practice and profession of statistics.

Responsibilities include:

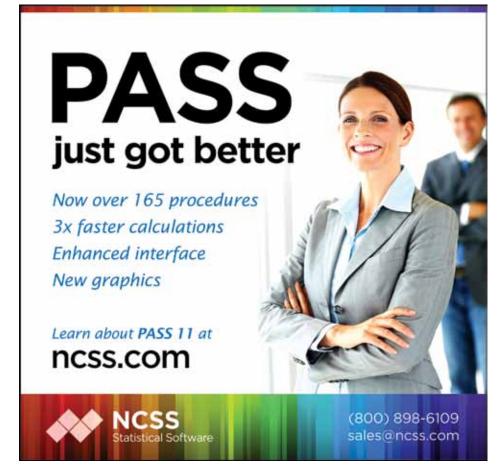
- Design, develop, and implement new programs, initiatives, services, and products to help advance the ASA's efforts to grow and advance the statistics profession and meet member and user needs in the profession
- Implement approved strategies for new program developments and improving existing programs
- Liaise with all relevant committees, chapters, sections, and volunteer leaders in planning, oversight,

- coordination, and execution of all projects, programs, products, and services in these areas of responsibility
- Write proposals and reports for general and specific program support
- Serve as a key resource person to members, staff, various audiences, and the public

We seek an individual with at least six years of experience as a statistician beyond the individual's highest degree (with a preference for individuals holding a PhD in statistics, biostatistics, or a closely related quantitative field); experience with multidisciplinary teams, volunteers, and committees; demonstrated ability to effectively manage multiple processes and projects; excellent interpersonal and oral and written communication skills. This individual should share the staff's passion for promoting the practice and profession of statistics.

Excellent benefits include health, dental, and vision insurance; 401(k); tuition reimbursement; and subsidized public transportation. Candidates should submit a letter of application, including salary history and résumé. All materials should be emailed to lynn@amstat.org or mailed to Human Resources-Surveys/Director of Programs, American Statistical Association, 732 North Washington Street, Alexandria, VA 22314. Review of applications will begin January 15, 2012, and continue until the position is filled.

The American Statistical Association is an Equal Opportunity Employer.



# **NSF Offers Funding Opportunities** for Statistics Community

Gabor Szekely and Nandini Kannan, NSF Statistics Program Directors

The Division of Mathematical Sciences (DMS) at the National Science Foundation (NSF) has announced several funding opportunities directly relevant to the statistics community. In addition to the core statistics program, there are programs that involve big data, modeling, and sustainability issues. Members of the statistics community are encouraged to submit innovative proposals that address some of these critical challenges.

One opportunity is a new program called Computational and Data-Enabled Science and Engineering in Mathematical and Statistical Sciences (CDS&E-MSS). Proposals focusing on the development of mathematical and statistical tools to address the challenges of large-scale data are of interest to this program. Potential principal investigators (PIs) should go through the program synopsis and contact the program officers for details. The proposal submission window is January 9-23.

Those interested in multidisciplinary research also may be interested in Secure and Trustworthy Computing (SaTC) or a software institute. Visit the CREATIVE site at www.nsf.gov/pubs/2012/ nsf12012/nsf12012.jsp for more information.

DMS also provides support for several institutes (http://mathinstitutes.org), including Statistical and Applied Mathematical Sciences Institute (SAMSI) and the Institute for Computational and Experimental Research in Mathematics (ICERM). These institutes offer a variety of research programs, including short courses and workshops. In 2011-2012, SAMSI (www.samsi.info) has a program on uncertainty quantification and is organizing workshops in January and February. ICERM (http:// icerm.brown.edu/sp-f12) will offer a workshop on Bayesian nonparametrics in September. The institutes offer programs for graduate students, postdoctoral associates, and junior and senior faculty.

In addition to these funding opportunities, DMS is investing in several work force programs. The long-range goal of the DMS work force program is to increase the number of well-prepared U.S. citizens, nationals, and permanent residents who successfully pursue careers in the mathematical sciences and other NSF-supported disciplines. The workforce program in the mathematical sciences has several solicitations such as Research Training Groups (RTG), Research Experiences for Undergraduate Sites (REU), and Mentoring through Critical

Transition Points in the Mathematical Sciences (MCTP). In particular, proposals that seek to broaden participation in the mathematical sciences are of interest. Many of the programs provide funding for undergraduate and graduate students. Unsolicited proposals with novel ideas for work force development also are welcomed. REU sites in statistics can not only enhance an interest in graduate education, but also strengthen applications to graduate research fellowships.

The NSF also supports students through graduate research fellowships (GRFs) and mathematical sciences postdoctoral research fellowships (MSPRFs). Fields of study for the GRFs include biostatistics, computational and data-enabled science, computational statistics, probability, and statistics.

The focused research groups in the mathematical sciences (FRG) provide an opportunity for a team of researchers to submit a proposal that addresses current scientific opportunities. The CAREER awards are NSF's most prestigious awards in support of junior faculty. Even though the deadlines for these programs have passed, it is never too early to start planning for next year.

Faculty and graduate students are encouraged to visit the NSF DMS website or one of the links below for details. Some of the upcoming solicitations include the following:

Computational and Data-Enabled Science and Engineering in Mathematical and Statistical Sciences (CDS&E-MSS) www.nsf.gov/funding/pgm\_summ.jsp?pims\_ id=504687&org=NSF&sel\_org=NSF&from=fund

Science, Engineering, and Education for Sustainability NSF-Wide Investment (SEES) www.nsf.gov/funding/pgm\_summ.jsp?pims\_ id=504707

Integrative Graduate Education and Research Traineeship Program (IGERT) www.nsf.gov/funding/pgm\_summ.jsp?pims\_ id=12759

The statistics program within DMS has four program officers who are available by email or phone to answer questions about specific solicitations or more general questions related to research and education. For more information, contact Gabor Szekely at gszekely@nsf.gov or Haiyan Cai at hcai@nsf.gov.





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# Statistics in Sports Symposium **Draws Enthusiasm**

Submitted by Scott Evans and Mark Glickman

√he 2011 New England Symposium on Statistics in Sports (NESSIS) was held on September 24, 2011, at the Harvard University Science Center. It drew an international crowd of approximately 150, including attendees from The Australia, England, Netherlands, Spain, Brazil, Canada, and Iran. Additionally, there was a representative from a third of NBA teams.

The symposium format was a mixture of invited talks, a poster session, and a panel discussion. The highlight was a talk by J.P. Ricciardi, special assistant to the New York Mets and former general manager of the Toronto Blue Jays. NESSIS also featured a panel consisting of Sam Hinkie, executive vice-president of basketball operations for the Houston Rockets; Roland Beech, director of basketball analytics for the NBA Champion Dallas Mavericks; Kenny Atkinson, assistant coach of the New York Knicks; and Zach Lowe, moderator and NBA writer for SI.com. Other featured talks included a presentation by Sarah Rudd of On Football Research and Consulting, who was the recipient of the StatDNA Soccer Analytics Research Competition.

NESSIS was established by Mark Glickman and Scott Evans to enhance the communication and collaboration between statisticians and quantitative analysts connected with sports teams, sports media, and universities. The first NESSIS was held in 2007 and drew more than 100 registrants. Enthusiasm for the 2007 NESSIS inspired a second NESSIS that was held in 2009. Continued

enthusiasm inspired the 2011 NESSIS, and the symposium is intended to be held biannually.

The reasons for running a sports statistics symposium are predicated on the need for advanced analytic methods in games and sports. The use of statistical methods in sports applications is growing rapidly. Sports teams use statistical analyses to evaluate players and game strategies, and sports associations develop ranking and ratings systems of players and teams. The evolution of the application of statistics to sports continues to be enhanced with extensive collaboration and interaction between sports analysts and professional statisticians.

Unfortunately, opportunities for this collaboration are still relatively uncommon, as academic statisticians often work in isolation to develop statistical methods for sports applications and sports organizations often do not have access to well-trained statistical expertise and cuttingedge statistical tools for analyzing sports data. The main goal of NESSIS is to bridge this gap.

NESSIS was sponsored by the Statistics in Sports Section of the American Statistical Association (ASA), Boston Chapter of the ASA, the Harvard University Department of Statistics, ESPN, StatDNA, SmartOdds, Salford Systems, and Sports Data Hub. Sony/Columbia Pictures also provided movie passes for an advance screening of Moneyball to local NESSIS participants.

Proceedings of NESSIS will be published in a special issue of the Journal of Quantitative Analysis in Sports. Technical talk videos, photographs, and presentation slides from the event are posted at www. nessis.org.

# Join the Conversation

It is now easier than ever to become engaged in the ASA and its members through social media.



ASA Community—Join this online setting for ASA members to communicate, collaborate, and share.



**Twitter**—Follow Amstat News on Twitter @AmstatNews and keep up to date on the profession.



**Facebook**—Check out the ASA's page on Facebook to keep up with the latest deadlines, news, and activities and to share your tips and comments with colleagues worldwide.

Engage your fellow statisticians and enhance your mind, education, and career at www.amstat.org.



Christy Chuang-Stein



he American Statistical Association, the nation's second-oldest learned society, will celebrate its 175th anniversary in 2014. The celebration is for everyone and with everyone. We hope it will be by everyone, as well.

As stated by ASA President Bob Rodriguez in the President's Corner on Page 3, the theme for the 175th anniversary celebration is "Celebrate Our Past, Energize Our Future." An eight-member steering committee, appointed by Rodriguez and representing academe, government, and industry will stimulate ideas, encourage involvement, and coordinate and communicate activities associated

with the anniversary. Committee members will be reaching out to you to solicit your thoughts and engage your participation. Together, we will plan activities that highlight our rich heritage and launch initiatives that will help ensure a bright future for the ASA and the statistics profession.

Planning has already begun. Over the past several months, members of the committee have received offers to help from some of you, and we were thrilled to hear about early-stage planning of activities by chapters. We will use this column to share information, stories, plans, and dreams associated with this landmark in the life of our association. Each

# Our Founding Fathers



These five men were present at the meeting on November 27, 1839, during which it was decided to organize the American Statistical Association.

month through the end of 2014, we will hear from members of the steering committee and other ASA members.

Anniversaries provide a time of celebration and reflection on the important moments in a life, relationship, or organization. For the ASA, which as a society is only younger than the American Philosophical Society (founded by Benjamin Franklin), there is much history to celebrate, and we are fortunate that statistician and statistical historian Stephen Stigler has agreed to be part of the 175th Anniversary Steering Committee. You will hear from him in February.

But think for just a moment. How much has statistical science changed since the founding of this association in 1839, and how much has changed since our last landmark—the 150th anniversary? In this sense, we celebrate a relatively young, excitingly vibrant discipline that finds its

place in every scientific pursuit and all evidence-based decisions and policies.

The 150th anniversary celebration, which culminated at the Joint Statistical Meetings in Washington, DC, in 1989, focused a great deal on the history of statistics and the association. We will draw energy and wisdom from that celebration when we gather in Boston, chosen because the ASA was founded in Boston.

We invite you to visit www. amstat.org/ASA175 and offer your insight about some of the initiatives the ASA and steering committee are considering. We are bold in our ideas and ambitious in our goals. We would like to have your comments about them, as well as your ideas for other initiatives.

We will be getting in touch with chapters, sections, outreach groups, committees, and others to encourage involvement

# **Steering Committee**

Christy Chuang-Stein

Narayanaswamy Balakrishnan

Amy H. Herring

Fred L. Hulting

Dionne L. Price

Stephen M. Stigler

Ronald L. Wasserstein

George W. Williams

in this celebration. We ask you to start thinking about how you can be involved personally. Also, visit the reverse time capsule at www.amstat.org/membersonly for a fun way to begin celebrating. We look forward to planning this special event with you! ■

# **ASA** Reverse Time Capsule

**Numeric Forecasts** 

Non-Numeric Forecasts

Messages to People in the Future

# What Do You Predict?

Help kick off the celebration of the ASA's 175th anniversary by participating in the "reverse" time capsule project and entering your forecasts of or comments about the future as viewed from the present.

**Numeric forecasts** are predictions about specific items. When the reverse time capsule is opened in 2039, members with the best guesses will be rewarded with a lifetime membership in the ASA.

**Non-numeric forecasts** are written or video predictions about the future of the statistics profession, the future of the ASA, or any other aspect of the future.

**Messages** are written or video messages to be read in 2039 by the membership of the ASA. What would you like future statisticians to know about the status of statistics, or about you, as of the present day?

To place your entries into the reverse time capsule, log in to ASA Members Only at www.amstat.org/membersonly and click on Reverse Time Capsule.

### MASTER'S NOTEBOOK

# **Getting Graphic with Biostatistics**

Susan Duke

hen I think about where my journey with statistical graphics began, I remember a communications class I took as a beginning freshman at UW-Green Bay (known fondly back then as Eco-U). As an unvarnished beginning college student, I took to heart what the professor taught about communicating: My intent and action are not enough. There are so many places a message can become misunderstood along the way from my intent and action of communicating to the receipt of the message—from my lack of perspective to the recipients' knowledge and interest (and vice versa) to various obstructions (e.g., noise and competing messages).

The second aha moment came as a college senior during a biometrics course, this time about the value of statistics to scientists. It was my second course in statistics, and the light bulb went on. I could see what a fantastic tool statistics was for scientists, to use math to quantify science, to put a probability on whether the topic of interest happened due to chance alone or something more.

The third influence on my journey was more protracted. I had just begun my master's work at Louisiana State University, studying marine science. My advisor encouraged me to take as many statistics classes as I could because he said it would make me a better scientist (and give me an advantage in the job market). He mentioned that two of his prior students had achieved master's degrees in both marine science and applied statistics. So, after taking some courses in the



experimental statistics department, I decided to get double master's degrees.

I found consulting under the tutelage of my statistics advisor, James Geaghan, to be especially useful. Working with graduate students and professors from other departments on the data questions for their research was a fantastic bridge between coursework and real-life research. I don't recall making graphs per se, but I do remember drawing pictures—this helped them understand statistical concepts and helped me understand the science.

Who would have thought then that my freshman year communications interest would lead to expertise in statistical graphics design and the opportunity to encourage improvements in graphics software (i.e., software

that creates publication-quality graphs, is compliant with regulatory requirements, and does it without a lot of fuss)? Fast forward 18 years. With 12 years as a biotech statistician and six years as a big pharma statistician at GSK under my belt, I was asked to co-develop a graphics software initiative I had proposed.

We can always do better, but there has been real progress on this journey. How did it happen? For one, we had strong support from senior leaders in statistics. And we listened to the rank-andfile statisticians and programmers, who told us the numberone issue with creating more and better graphs was time.

A symptom such as "I don't have enough time" can mean a number of things. Are the priorities appropriate for encouraging graphs? Is it possible that beefing

up graphic design skills would get key messages across more clearly? Do we have to fight with the available software for hours on end to get the graphs we need? Is the quality of the graphic sufficient for presentation and publication? Is there simply not enough time in the day because so many responsibilities are piled on biopharma statisticians?

As a co-leader of our graphics initiative, I took on this assignment like a research project and continuously educated myself. For graphics design, I had the pleasure of taking graphic design courses from well-known graphics experts: Edward Tufte, who taught me how to think graphically; Naomi Robbins, who taught me the value of designing collaboratively; and Frank Harrell, who taught me how statistical graphics fits within the practice of biostatistics. I had the pleasure of co-authoring an internal graphic design course, which gave me a better understanding of course participants' initial views about graphics and, from their feedback, in what ways they found it helpful. To better understand the cultural/people aspects of where sticking points might lie and how to rectify them, I gained valuable insights from The Eighth Habit and The Tipping Point and from an internal course, titled "Balancing Innovation and Execution."

Changing culture is the most challenging aspect of doing anything differently. In my experience, it surpasses any methodology or technology barrier. Humans are wired to keep doing things the same way—it's in our genes and in our culture. It takes courage and perseverance with a strong dose of support to make things 'tip' in an organization.

Having spoken with many statisticians about graphics, it seems a common experience that most of us weren't taught or encouraged to use graphics (or communications) as part of our statistical training. I was fortunate in my training to learn graphics and communication skills in my applied statistics program, but most of my training in this area came from consulting experience (beginning in my master's program). So, making graphics tip for statisticiansconsidering how to design graphs in the same way we consider the clinical endpoints chosen and the methods to analyze them—takes more than good software.

At the end of the day, I think statistical graphics is important because it is a key communications vehicle, helping us truly understand the meaning of the data. It is beneficial for all concerned when internal clinicians, regulatory authorities, prescribing physicians, and patients can more transparently understand what a medication does. It is in the statistician's hands to make it so. ■

# **Apply Now! ASA Student Travel Awards**

2012 Joint Statistical Meetings in San Diego 7/28 - 8/2!

# **Up to Two \$400 Travel Awards!**

- For grad students enrolled in applied statistics and/or quality management programs.
- Contact Willis Jensen (wjensen@wlgore.com) for complete information about the award and how to apply.
- Applications accepted through March 31, 2012

Awarded by the Quality and Productivity (Q&P) Section of the American Statistical Association (ASA)



### STATtr@k

# Statistics, Thy Name Is Flexibility

Meena Doshi, Tufts University Department of Civil and Environmental Engineering

statistician's job is multifaceted, fun, challenging, and flexible. As statisticians, we have the option to choose which hat we want to wear. We can work in fields such as pharmaceutical research, financial planning, public health research, marketing analysis, actuarial science, or education.

It's assumed that careers are supposed to be well-planned and executed in a straight line, but it only looks that way in hindsight for many. As for me, I began my career as a marketing analyst and moved to biostatistics.

On graduating with an MS from The Ohio State University, I started working as a marketing analyst on a variety of projects for such companies as Sears Portrait Studios, Talbots, and Toys"R"Us. It was then that I started to build on my programming, presentation, and client interaction skills. I enjoyed my job thoroughly. Then, an unforeseen medical problem occurred that required surgery and changed my life. I felt much needed to be achieved in the medical field and wanted to contribute in some way. After my surgery, I traveled to India and visited a contract research organization (CRO) in Mumbai. It was there that my curiosity was piqued and I became interested in clinical trials. I felt I needed a stronger foundation in biostatistics so I pursued a master's in public health at Tufts University and began working as a biostatistician at a CRO in Boston upon graduating.

So choose your own hat or multiple hats, and be willing to change as per your interests.



#### **Choose Your Work Pace**

Statistics is one field that gives you flexibility in the pace of your work. For example, the work environment at a CRO or a pharmaceutical company is fastpaced, where most of the deliverables are to be churned out under compressed deadlines. Hospitals, universities, and other private

contract research companies have research projects with loose deadlines and ongoing research studies.

#### **Choose Your Ladder**

A master's-level statistician can move up the ladder in a CRO or smaller biotech company, but it is harder in big pharmaceuticals, as a PhD is often required to gain



respect from junior colleagues. However, experienced statisticians can work as a contractor for bigger companies for six months to less than a year. One reason for this is that big pharmaceutical companies have

PhD-level statisticians who work primarily on designing trials and planning the appropriate type of analysis; they do not work on the routine periodic reports. Often master's-level statisticians have

much experience with run-of-themill analysis and report generation and hence are a good fit for this job.

### Language of Statisticians or Gibberish?

As statisticians, we talk our own language. But what good is it if it is gibberish to the person you are trying to talk to? One of the essential skills needed to be a successful statistician is to be able to talk our language in tune with the client's language. By that, I mean (i) have a thorough understanding of the different fields of applications we work in and (ii) be able to explain the applications to the client.

As a marketing analyst, I had to research the client's company,



Learn about the challenging research facing scientists and statisticians across the Department of Energy at the first Conference on Data Analysis (CoDA).

# Call for Posters: Abstract deadline January 27, 2012

We are looking for exciting statistical work that could lead to future collaborations.

**Students**: Register and submit your poster abstract to be considered for

- 2 travel scholarships from the ASA Section on Physical & Engineering Sciences
- Poster competition sponsored by the ASA Section on Defense & National Security

know the product we were working on, and understand the goals of the client. For example, one of the clients I worked with makes specialized gift items for various occasions. I had to be aware of five of the most popular gifts in each seasonal catalog, which gifts were not in the catalog and yet were popular, which gifts did well as graduation gifts in the summer, and which did well as Christmas gifts in the winter. In short, I had to have a good understanding of the client's business.

In the public health arena, I have to understand the illness or medical problem for which we are doing research—the cause, treatment options, epidemiology. I have worked on the oral health of children, HIV, erectile dysfunction, Marfan syndrome, nutrition, urethral problems, and children born with single ventricles. The client group for a biostatistician may consist of doctors, nurses, researchers from other fields, or engineers. Hence, it is important for biostatisticians to be able to explain what the numbers mean in a way the clients can understand.

## Visualize Like a **Photographer**

Statistics is a visual science. Much like a photographer, a statistician needs to develop good visualization skills. There are two types of visualizations: those intended to facilitate understanding of data and those intended to communicate to a wider audience. Visualizations intended to help the client understand data mostly consist of scatterplots and histograms. We have to be able to picture the data and how it fits in with the other known data shapes. The goal is to help develop a



hypothesis about the data for an audience that typically numbers one or a small team. Visualizations intended to communicate to a wider audience, whose goal is to advocate visually for a hypothesis, are required to display numbers in tables or graphs in a concise, effective manner.

The ability to visualize and communicate data is critical, because even with good data and rigorous statistical techniques, the results will not convince if they are poorly visualized.

### Peek Out of the Key Hole

Make extra effort to seek opportunities outside of work that help build your skills. I gave two talks at the Coders Corner section of the Boston SAS Users Group. This also gave me the opportunity to give the same talk at work, which was noted in my yearly review. Furthermore, I wrote an article about my project work at Tufts, which was published in CHANCE magazine. These actions help build your professional reputation, which goes a long way.

#### **Curious as a Cat**

Be upbeat and curious about everything happening at work. Show interest in other projects, talk about news relating to your job, and send out information about work-related seminars going on in the city. I took advantage of a \$100 benefit to attend a seminar on clinical trials at Harvard University School of Public Health. This allowed me to not only make use of my employer's benefits, but also gave me an opportunity to display my personality. Taking note of my personality, I filled my plate with three projects, when two are typically assigned to someone in my position. This increased my experience, enhanced my multitasking skills, and built my confidence.

Most statisticians are real-life statisticians, tailoring studies to real-life problems. It takes mathematical, visual, and practical skills to excel in this occupation, as well as flexibility, curiosity, and a rigorous mind. For those who think statisticians are geeks with oily hair and thick soda bottle glasses who sit behind computers crunching numbers, think again.

### **SCIENCE POLICY**

# Science Advocacy: What Is It and What Is the Role of Professional Societies?

Steve Pierson, ASA Director of Science Policy



he ASA Director of Science Policy's job is to advocate on behalf of statisticians' interests and to raise the profile of statisticians in policymaking. Both components are a form of science advocacy, yet they cover a broad range of activities, presenting one challenge to defining science advocacy. Another challenge is the many meanings advocacy has. I'll address what science advocacy is by discussing various forms of it in a policy realm (understanding that the ASA and its members have been engaged in a broader range of science advocacy activities). I'll then turn to the role—current and potential—of scientific professional associations.

### Dimensions and Considerations of **Policy-Related Science Advocacy**

Two policy-related categories of science advocacy are policy for science and science for policy. Policy for science relates to the first aspect of my job, advocating on behalf of statisticians' interests. This has ranged from supporting robust budgets for science research funding at the National Science Foundation (NSF), National Institutes of Health (NIH), and federal statistical agencies to promoting professional development for K-12 statistics teachers and advocating for policies facilitating the participation of federal scientists in professional society leadership and governance. Policy for science often can be reactive, whether reacting to specific member needs or, these days, reacting to potential budget cuts.

Science for policy seeks to inform policymakers about the relevant science on an issue they are considering and relates more to the second aspect of my job, raising the profile of statisticians in policymaking. This has included informing Congress of statistical perspectives on climate change, advocating forensic science reform, and promoting risk-limiting audits to election officials.



One dimension of science advocacy in science for policy is how active a particular policy is promoted. Susan Solomon, lead author of the fourth report of the Intergovernmental Panel on Climate Change addressed this dimension by distinguishing between "policy-prescriptive statements" and "policy-relevant statements." For climate change issues, the ASA's position—climate change is happening and human activity is the primary driver—stops well short of urging any policy action.

On the other hand, the ASA's board endorsed the National Academies' call for an independent body to direct and oversee the forensic science reform urged in Strengthening Forensic Science in the U.S.: A Path Forward. The ASA also has advocated against a provision in pending legislation that would place such a forensic science oversight body in the Department of Justice.

Since maintaining scientific credibility is paramount for the ASA and individual scientists, there are many guidelines to follow in providing science for policy. One is to speak only on issues within your scientific expertise, which may

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### **Stepping Outside the Fortress**

Stepping outside the fortress paraphrases one theme to emerge from the session, "The Role of Statisticians in Policy," that took place this summer at the International Statistical Institute World Congress in Dublin, Ireland. Organized by Peter Guttorp and chaired by Daniella Cocchi, the speakers were Bronwyn Harch, Dennis Trewin, Denise Lievesley, Guttorp, and Steve Pierson. Three themes present in at least a few of the presentations were the following:

Stepping outside the fortress. Paraphrased using Harch's words, this theme speaks to the necessity of statisticians (and scientists generally) to take the initiative and step outside the relative safety of their familiar surroundings to influence policy. As the phrase implies, there is some risk involved, which could include criticism about one's statements and credentials. Australian climate scientists even received death threats this summer.

### Science is one input of the policymaking process.

Policymakers often put more stock in inputs such as political (e.g., winning re-election) and economic considerations but, nevertheless, the goal of ensuring policymakers know the best available science

We must learn the language and needs of policymakers and others (e.g., journalists). If we wish to have a role in policymaking, we must put our messages and materials in terms that are easily accessible for the intended audience. We also must understand their needs and understanding. To expect policymakers to learn our language is naïve.



mean not answering certain questions or responding, "I don't know." If one decides to offer an opinion about a policy or scientific issue beyond one's expertise, one should state that. One also should be aware of opposing scientific views and be prepared to address them.

In general, speaking on issues within one's scientific expertise means staying on the science side of the science/policy line. The ASA's forensic science activity included policy recommendations that fall within the ASA's expertise because it involves science administration—how to address the scientific deficiencies in forensic science and the importance of independence in conducting the science.

I think an essential component of policy-related science advocacy is explaining science and the scientific process. Too few policymakers understand peer review, reproducibility, and scientific critique, so it's imperative to understand and address the audience's scientific literacy.

Since starting this job in 2008, I've come to believe that elevating the profile of statistics within the science community is also important to raising the profile of statisticians in policymaking. If our fellow scientists don't view us as equal partners, it makes it all the harder to convince policymakers to consult us. While the Strengthening Forensic Science panel included two statisticians, the National Academies' America's Climate Choices panels did not include a single statistician, despite the many data, data analysis, uncertainty, and decisionmaking issues. We need fellow scientists to recognize statistics as a mature, independent scientific discipline in order to make greater strides with policymakers.

#### **Role of Professional Associations**

When policymakers see scientific reports or interact with scientists, judging the veracity of the scientific claim can be daunting, especially when there are contradicting views (i.e., dueling experts). Scientific disagreement is, of course, common, but there are also individuals who might cherry pick the science in support of their cause. There is a need to support scientists engaged in policy-related science advocacy. As related in my sidebar, Stepping Outside

the Fortress, scientists can come under criticism or attack by speaking out publicly on a science-related policy issue.

Professional associations can help policymakers understand a complex scientific issue or deal with the dueling experts problem by assembling a group of experts to consider the literature and provide a review. The ASA's Advisory Committee on Climate Change Policy, for example, produced such a review in response to a query from a congressional committee about the health effects of climate change (See http://tinyurl.com/CCHealthImpacts.)

The American Physical Society's Panel on Public Affairs has produced a number of excellent and more extensive reports about energy and nuclear weapons issues: www.aps.org/policy/reports/ popa-reports. Through such reports, professional associations help policymakers by vetting, filtering, and synthesizing what can be a complicated literature. The National Academies and other groups also produce thorough and more interdisciplinary reports, so professional associations must find their niche to complement those reports.

Professional associations also can help individual scientists on a range of science advocacy activities, whether it be providing guidance for meeting with policymakers, explanations of policymaking process or dynamics, support for testifying before Congress, or introductions to policymakers. If a professional association has a report like those described in the previous paragraph, it can provide cover for scientists speaking publicly on the issues, assuming they speak in agreement with the report. Professional associations also can help organize the advocacy activity of scientists, thereby amplifying their voice, especially when other organizations are engaged.

There are many challenges to a professional association in fulfilling the potential described here. One challenge for producing policy-relevant reports is judging in advance what topics will be of interest to produce the reports in time for them to be helpful. Another is finding the volunteer time to produce such reports. Staff resource time is also a challenge, since policy staff members are usually few



Steve Pierson, ASA director of science policy (right), discusses Montserrat Fuentes's climate change poster with Rep. Brad Miller at the 16th Annual Coalition for National Science Funding (CNSF) Capitol Hill Exhibition on April 14, 2010.

Photo by David Scavone of Scavone Photography

in number and often must prioritize policy-for-science issues. These and other challenges may mean professional associations cannot be as responsive as policymakers need.

Returning to the first question in this column's title, I think the breadth of activities included under the science advocacy umbrella yields the exercise of trying to define science advocacy unproductive, at least for my purposes. Instead, I think it is better to think about the policy-related science advocacy in the dimensions of science-for-policy/policy-for-science and policy-relevant/policy-prescriptive. Scientific professional associations can play important, value-adding roles in policy-related science advocacy by facilitating constructive interactions between scientists and policymakers, but they must be careful to protect their credibility and integrity by basing our activities within our scientific expertise. ■



Bruce West (right) of the U.S. Army Research Laboratory receives the 2011 Army Wilks Medal from 2010 recipient Arthur Fries of the Institute for Defense Analyses.

Bruce J. West is the 2011 recipient of the U.S. Army Wilks Award, presented during the Army Conference on Applied Statistics held in Annapolis, Maryland, in October of 2011. This award was established in 1981 to commemorate the career of Samuel S. Wilks and his service to the Army. It is given periodically to a "deserving individual who has made a substantial contribution to statistical methodology and application, impacting the practice of statistics in the Army through personal research in statistics or application of statistics in the solution of Army problems."

West was honored for his pioneering contributions to the development of nonstationary, nonergodic statistical modeling techniques applicable to broad classes of adaptive phenomena and complex networks. He is the chief scientist (mathematics) in the information sciences directorate of the U.S. Army Research Office (ARO). West led the development of the Army's basic research program

on network science (NS), culminating with the formation of the Army Research Laboratory Director's Research Initiative on NS in 2007 and the establishment of a new ARO division on NS in 2008. Additionally, his research directly supported the creation and application of new analytical methods for detecting and assessing soldier injury, disease, and physiologic pathologies.

West earned his PhD in physics from the University of Rochester in 1970. His research, in academic settings and after joining the ARO in 1999, has focused on modeling complex phenomena: physical processes whose evolution cannot be described simply by differential equations or other definitive mathematical formulations; applications of discontinuous statistical processes (Levy distributions) to quantum chaos, nonequilibrium statistical physics, and biomedical time series; fractional calculus for stochastic processes; and fractals and powerlaw distributions. An elected Fellow of the American Physical

Society, he serves in key editorial posts for three journals and is co-author of 10 books and nearly 400 peer-reviewed publications. ■

ASA members Jae Chang Lee and Vijay Nair became president and president-elect, respectively, of the International Statistical Institute (ISI) after the World Statistics Congress in Dublin in August of 2011.

Lee is professor emeritus at the University of Korea in Seoul. He earned his PhD from The Ohio State University and worked as a faculty member in the United States for a few years before returning to South Korea. He spent most of his career at Korea University, where he served as faculty member, department chair, and dean. He is the founding chief of the statistical engineering lab at the Korea Standard Research Institute and co-editor of Computational Statistics and Data Analysis, the official journal of the International Association for Statistical Computing. Lee's honors include the Distinguished Service Award from the Korean Statistical Association (1986). Presidential Award for Statistical Contributions from the Korean Government (1993), and Order of Service Merit from the Korean Government (2002).

Nair is Donald A. Darling Professor of Statistics and professor of industrial and operational engineering at the University of Michigan. He was chair of the department of statistics from 1998-2010. Nair earned his undergraduate degree from Malaysia and his PhD from the University of California at Berkeley. He spent 15 years as a research scientist at Bell Labs in New Jersey before moving to Michigan. He is a Fellow of the AAAS, ASA, American Society

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Nair

for Quality, and Institute of Mathematical Statistics and a Senior Fellow of the Michigan Society of Fellows. Nair is president of the International Society for Business and Industrial Statistics, a former editor of Technometrics, and current co-editor of the International Statistical Review.

The ISI is an umbrella organization for seven international statistical associations: Bernoulli Society for Probability and Mathematical Statistics, International Association of Official Statistics, International Association of Survey Statistics, International Association of Statistical Education. International Association for Statistical Computing, International Association for Industrial and Business Statistics, and the Environmetrics Society. For more information about the ISI, visit www.isi-web.org. ■

# **Obituary**

### **Morris Hamburg**

Morris Hamburg, an emeritus professor of statistics and operations research at The Wharton School of the University of Pennsylvania, died November

Hamburg was faculty director and lecturer, earning numerous awards for teaching, including the Lindback Award for Distinguished Teaching in 1983. A Fellow of the ASA and International Statistical Institute, Hamburg coauthored a number of articles and served on the executive committee of the Penn Association of Senior and Emeritus Faculty, becoming its president during the 2006-2007 academic year.

He is survived by his wife of 58 years, Jean Hamburg; a son, Neil (Shelli); a daughter, Bobbie Weisbein (Paul); and two grandchildren, Winston and Grace Alford-Hamburg.

In accordance with his wishes, there was no funeral. Contributions can be made to the University of Pennsylvania in his memory.

Read more about Hamburg's life at the University of Pennsylvania's Almanac website, www.upenn.edu/almanac/volumes/v58/n13/obit.html.

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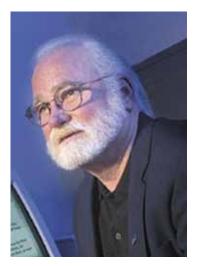
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### **ASA Announces the** Karl E. Peace Award



Peace

Christopher Peace, son of Karl Peace, recently established the Karl E. Peace Award for Outstanding Statistical Contributions for the Betterment of Society on behalf of the Peace family to honor the life work of his father. The award recognizes statisticians who have made substantial contributions

to the statistical profession that have led directly to improving the human condition. Recipients will have demonstrated through their accomplishments their commitment to service for the greater good.

Each recipient will receive an engraved award and cash prize, presented at the awards ceremony during the Joint Statistical Meetings. The initial amount of the prize is \$1,000, which will be divided evenly among the winners. The award is given every year if, in the opinion of the awards committee, there is a nominee worthy of the award.

Nominators should submit, at minimum, a CV and two letters of support for their candidate. The nomination should clearly document the candidate's substantial contributions to the statistical profession and how these contributions have led in direct ways to improving the human condition, as well as demonstrate the candidate's commitment to service for the greater good. Submit nominations

electronically to the ASA's Pam Craven, pamela@amstat.org, by March 15.

## **Nominations Sought** for Mentoring Award

Carol House, 2011 Griffith Award Selection Committee Chair

It is time to start thinking about nominating an outstanding supervisor, technical director, team coordinator, or other member of a governmental statistical staff who encourages mentoring of junior staff in the federal, state, or local statistical system for the 2012 Jeanne E. Griffith Mentoring Award. Nominations will be accepted until April 2.

The award consists of a \$1,000 honorarium (to be split if there is more than one awardee), a citation, and a plaque, which will be presented at a ceremony in June.

Winners are selected for their efforts to support the work and develop the careers of junior staff. Examples of typical mentoring activities include the following:

- Advising junior staff to help them create career opportunities, networking skills, and contacts for growth and development
- Counseling junior staff and providing resources to help develop their technical writing, analysis, presentation, and organizational skills and knowledge
- Encouraging junior staff growth and career development through attendance and oral presentations at meetings with higher-level officials and the staffs of other agencies
- Motivating junior staff and building self confidence through feedback on their efforts, being a listener when needed, and creating a caring and supportive environment





Griffith

her career, and especially in her later senior management positions at the National Center for Education Statistics and National Science Foundation, one of Griffith's top priorities was to mentor and encourage younger staff at all levels to learn, grow, and recognize and seize career opportunities as they came along.

Nomination packages may be mailed to Jeanne E. Griffith Mentoring Award Committee,

American Statistical Association, 732 N. Washington Street, Alexandria, VA 22314-1943. For more information about the award's history, visit http:// magazine.amstat.org/blog/2010/ 08/01/governmentstataug10. For questions about nominating a colleague, visit www.amstat.org/ sections/sgovt/JEGform11.pdf or contact Rick Peterson at rick@ amstat.org or Clyde Tucker at nctucker@cox.net.

 Serving as a role model for junior staff through professional expertise, information, and insight; balancing collegial and personal roles; and including everyone across rank, race, ethnicity, and seniority

Nominations should be prepared in the form of a letter or memorandum summarizing the nominee's actions that support and encourage junior staff in the federal, state, or local statistical community. Nominations may be accompanied by up to six supporting letters, which should be attached to the nomination. Photo and email copies of support letters are acceptable.

Descriptions of what nominees actually do are the strongest demonstration of candidate mentoring. Examples include "the mentor is a source of advice ... counsels with long-term goals in mind ... thought I was well qualified even though I had some doubts ... encourages staff to seek out positions that will increase their visibility and stretch their professional capabilities."

The Jeanne E. Griffith Mentoring Award was established to honor Griffith, who died in August of 2001 after working for more than 25 years in the federal statistical system. Throughout

# Deadlines and Contact Information for ASA National Awards. **Special Lectureships, and COPSS Awards**

### www.amstat.org/awards

March 2, 2012

March 2, 2012 ASA SPAIG Award

**ASA Fellows** 

March 9, 2012

ASA Statistics in Chemistry Award

March 15, 2012

Karl E. Peace Award for Outstanding Statistical Contributions for the Betterment of Society

March 15, 2012

ASA W. J. Dixon Award for Excellence in Statistical Consulting

March 15, 2012 ASA Founders Award

March 15, 2012

ASA W. J. Youden Award in Interlaboratory Testing

March 15, 2012 ASA Waller Education Award

April 2, 2012

ASA Gertrude M. Cox Scholarship

ASA Outstanding Statistical Application Award

April 2, 2012

ASA Edward C. Bryant Scholarship

April 2, 2012

ASA Excellence in Statistical Reporting Award

April 2, 2012

ASA Samuel S. Wilks Memorial Medal

Ji Zhang, ji.zhang@sanofi.com

Jessica L. Thompson, jessica.thomson@ars.usda.gov

Phil Ramsey, PJRSTATS@aol.com

Pam Craven, pamela@amstat.org

Nominations: Pam Craven, pamela@amstat.org Questions: Michael R. Chernick, chernickm@mlhs.org

Nominations: Pam Craven, pamela@amstat.org Questions: Nancy L. Geller, nancylgeller@amail.com

Nominations: Pam Craven, pamela@amstat.org Questions: Michael J. Messner, messner.michael@epa.gov

Nominations: Pam Craven, pamela@amstat.org Questions: June Morita, june@stat.washington.edu

Nominations: Pam Craven, pamela@amstat.org Questions: Eleanor Feingold, feingold@pitt.edu

Nominations: Pam Craven, pamela@amstat.org Questions: Petrutza C. Caragea, pcaragea@iastate.edu

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

Nominations: Pam Craven, pamela@amstat.org Questions: Morteza Marzjarani, marzjara@svsu.edu

Nominations: Pam Craven, pamela@amstat.org Questions: Paul P. Biemer, ppb@rti.org

# **section**news

### **Biometrics**

The Biometrics Section will sponsor the following invited sessions at JSM 2012 in San Diego, California:

- Recent Methodology Developed for the Design of Early-Phase Clinical Trials
- Statistical Challenges and Innovative Solutions for Correlated Data
- Biomarkers for Risk Prediction, Disease Detection, and Treatment Effect Estimation: Statistical Issues
- Shrinkage Estimation: Unifying Different Perspectives
- · New Methodological Advances in Network-Based Analysis of Omics Data

JSM 2012 Biometrics Section program chair, Timothy D. Johnson, is collecting proposals for topic-contributed sessions. If you are interested in organizing such a session, contact him at tdjtdj@umich. edu. Abstract submission will close on February 1.

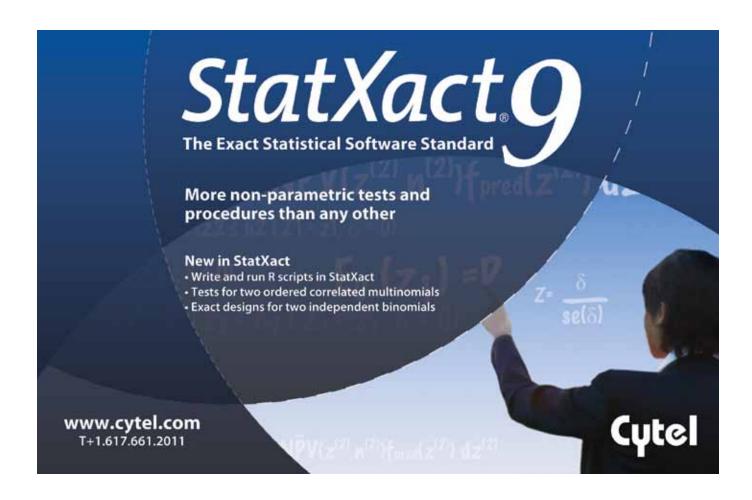
For details about the section's activities, visit the section news department online at http://magazine. amstat.org/?cat=17.

### Quality and Productivity

Don McCormack, 2012 chair of the Quality and Productivity Section, looks forward to 2012 activities, including awarding the Mary G. and Joseph Natrella Scholarship and attending the Quality and Productivity Research Conference (QPRC) in Long Beach, California, from June 4-7. In conjunction with the QPRC, the Mary G. and Joseph Natrella Scholarship offers a \$3,500 grant and \$500 travel

section news in its entirety, visit http://magazine. amstat.org.

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stipend to students currently pursuing full-time graduate work in statistics.

The Fall Technical Conference, chaired this year by David Edwards (dedwards7@vcu.edu), will be held from October 4-5 in St. Louis, Missouri. The deadline for submission of abstracts is February 28. Details will be available at www.amstat-online.org/ sections/qp/index.html.

Also, the section will offer up to five travel awards of \$400 to students looking to attend the Joint Statistical Meetings in San Diego, California, later this year. Contact Willis Jensen at wjensen@ wlgore.com with questions or to request an application. Applications will be accepted through March 31.

For more information about the section's upcoming events, visit the section news department online at http://magazine.amstat.org/?cat=17.

### **Survey Research Methods**

John L. Czajka, 2012 chair of the Survey Research Methods Section (SRMS), shares the section's plans to participate in several activities in the New Year, including the Joint Statistical Meetings (JSM). Also, a number of SRMS members will participate in the Fourth International Conference on Establishment Surveys (ICES-IV), to be held in Montréal, Canada, from June 11–14.

In addition, SRMS sponsors a number of webinars during the year. See www.amstat.org/sections/ SRMS/webinar for upcoming webinars. There is a fee for participation, but multiple persons can join a webinar from the same room for a single fee.

Last, section members have been working with the American Association for Public Opinion Research (AAPOR) to develop a new journal for statistically oriented survey methods papers. The journal, sponsored by AAPOR and the ASA, is intended to provide an outlet for survey methods papers that do not fall within the editorial scope of existing journals. A joint task force has issued a call for editors.

For more information about the section's upcoming events, visit the section news department online at http://magazine.amstat.org/?cat=17.

# chapternews

### **South Carolina**

The ASA South Carolina Chapter's fall 2011 meeting was held on November 11 in Charleston. About 20 people from Augusta, Georgia, and Clemson, Charleston, and Columbia, South Carolina, attended. Mulugeta Gebregziabher, chair of the meeting organizing committee, made several announcements, and Chris Rorden, director of the neuropsychology lab at the University of South Carolina, gave a talk about magnetic resonance imaging (MRI) analysis.

The spring meeting will be held in conjunction with the Palmetto Lectures from April 10-12 at the University of South Carolina-Columbia. The keynote address on April 12 will be given by Ed George from The Wharton School at the University of Pennsylvania. Student presentations also will be held on April 12. For details about the student paper competition, visit www.stat.sc.edu/scasa. ■

To list your section's news in Amstat News, send an email to Managing **Editor Megan** Murphy at megan@amstat. org with the details.



Did you know the Council of Chapters Governing Board (COCGB) publishes a biannual newsletter called Chapter Chatter every spring and fall? It features chapter activities and other news of interest to ASA chapter members. Read the current or a previous issue at www.amstat.org/ chapters/index.cfm. Also, contact Jim Cochran, COCGB communications officer and Chapter Chatter editor, at jcochran@latech.edu with news items and suggestions.

## 2012

# **February**

### \*2-3—Statistics and Public Policy, Alexandria, Virginia

For more information, visit www. amstat.org/meetings/publicpolicy/ index.cfm or contact David Banks. Duke University, Durham, NC 27708; banks@stat.duke.edu.

### >>13-14—National Health Policy Conference, Washington, DC

For more information, visit academyhealth.org/Events/content. cfm?ltemNumber=1551&navltem *Number=532* or contact Jennifer Masters, 1150 17th Street NW, Suite 600, Washington, DC 20036; jennifer. masters@academyhealth.org.

### »13-14—SAMSI Workshop -**Uncertainty Quantification:** Simulation of Rare Events, Research Triangle Park, **North Carolina**

For more information, visit www. samsi.info/workshop/uq-simulationrare-events-february-13-14-2012 or contact Karem Jackson, 19 T.W. Alexander Drive, RTP, NC 27709; (919) 685-9324; admin@samsi.info.

### \*16-18-2012 American Statistical Association **Conference on Statistical** Practice, Orlando, Florida

For more information, visit www. amstat.org/meetings/csp/2012 or contact ASA Meetings, 732 N. Washington St., Alexandria, VA 22314; (703) 684-1221; meetings@amstat.org.

### >>21-24—18th International Symposium on Mathematical Methods Applied to the Sciences, San José, Costa Rica

For details, visit www.cimpa. ucr.ac.cr/simmac or contact Javier Trejos, CIMPA, School of Mathematics, University of Costa Rica, San José, International 02060, Costa Rica: +(506) 2511 5889: javier.trejos@ucr.ac.cr.

### >>24-25—SAMSI Education & Outreach: Undergraduate Workshop, Research Triangle Park, North Carolina

For more information, visit www. samsi.info/workshop/undergraduateworkshop-february-24-25-2012 or contact Karem Jackson, 19 T.W. Alexander Drive, RTP, NC 27709; (919) 685-9324; admin@samsi.info.

#### 29-3/2—Conference on Data Analysis, Santa Fe, New Mexico

For details, visit cnls.lanl.gov/coda or contact Kary Myers, P.O. Box 1663, MS F600, Los Alamos, NM 87545; (505) 606-1455; karymyers@ gmail.com.

### March

#### >>2-3—Conference of Texas Statisticians, Beaumont, Texas

For more information, visit www. math.lamar.edu/activities/COTS or contact Kumer Das, Associate Professor, Department of Mathematics, Beaumont, TX 77710; (409) 880-7947; kumer.das@lamar.edu.

#### 14-16—IAENG International Conference on Data Mining and Applications 2012, Hong Kong, China

For details, visit www.iaena.org/ IMECS2012/ICDMA2012.html or contact IAENG Secretariat, Unit 1, 1/F. 37-39 Hung To Road, Hong Kong, International HK, Hong Kong; (852) 3169-3427; imecs@iaeng.org.

### »26-27—Signal Processing and Inference for the Physical Sciences, London, United Kingdom

For details, visit http:// royalsociety.org/events/ *signal-processing* or contact Emily Roberts, 6-9 Carlton House Terrace, London, International SW1Y 5AG, UK; Emily.Roberts@ rovalsociety.org.

### 30-31—Information and **Econometrics of Networks,** Washington, DC

For details, visit www.american. edu/cas/economics/info-metrics/ workshop/workshop-2012-spring. cfm or contact Amos Golan, 4400 Massachusetts Ave. NW, Economics, Kreeger 104, Washington, DC 20016; (202) 885-3770; info-metrics@american.edu.

# April

### \*2-4—SIAM Conference on **Uncertainty Quantification** (UQ12), Raleigh, North Carolina

For more information, visit www. siam.org/meetings/uq12 or contact Kirsten Wilden, 3600 Market St., 6th Floor, Philadelphia, PA 19104; (215) 382-9800; wilden@siam.org.

### 10-12—Fifth International Conference MAF 2012 -Mathematical and Statistical **Methods for Actuarial Sciences** and Finance, Venice, Italy

For details, visit maf2012.unive.it or contact Marcella Niglio, Via Ponte Don Melillo, Fisciano, International 84084, Italy; maf2012@unive.it.

### >>29-5/1-24th Annual Kansas **State University Conference on Applied Statistics in Agriculture,** Manhattan, Kansas

For more information, visit www. k-state.edu/stats/news/conference. *html* or contact John Boyer, Kansas State University, Department of Statistics, 101 Dickens Hall, Manhattan, KS 66506; (785) 532-0518; jboyer@ksu.edu.

# May

### »11—Conference on New Statistical Methods for Next-**Generation Sequencing Data** Analysis, Ames, Iowa

For more information, visit www. stat.iastate.edu/Conference2012 or contact Dan Nettleton, 2115 Snedecor Hall, Department of Statistics, Ames, IA 50011-1210; (515) 294-7754; dnett@iastate.edu.

### »14-18-SAMSI Interdisciplinary Workshop for **Undergraduate Students and** Faculty, Research Triangle Park, **North Carolina**

For details, visit www.samsi.info/ workshop/interdisciplinary-workshop-undergraduate-students-andfaculty-may-14-18-2012 or contact Karem Jackson, 19 T.W. Alexander Drive, RTP, NC 27709; (919) 685-9324; admin@samsi.info.

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

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#### 15-18-WCBF - 11th Annual **Lean Six Sigma and Process** Improvement in Healthcare Summit 2012, New Orleans, Louisiana

For more information, visit www. wcbf.com or contact Selina Mirpuri, WCBF Ltd. First Floor, Jubliee House, Merrion Avenue, Stanmore, Middlesex, London, International HA7 4RY, UK; +1 312 466 5774; selina.mirpuri@wcbf.com.

#### 17-19-Methods and **Models for Latent Variables** (MMLV2012), Naples, Italy

For details, visit www2.stat.unibo. it/MMLV/default.asp or contact Stefania Capecchi, c/o Department of Statistics, Via Rodino' 22, Naples, International I-80138, Italy; +390812537465; stefania.capecchi@ unina.it.

#### 29-8/17-2012 MBI **Undergraduate Summer** Research Program, Columbus, Ohio

For more information, visit www. mbi.osu.edu/eduprograms/ undergrad2012.html or contact Rebecca Martin, 1735 Neil Ave., Columbus, OH 43210; (614) 688-3519; rebecca@mbi.osu.edu.

#### June

#### \*4-7—Quality and Productivity Research Conference (QPRC), Long Beach, California

For details, visit www.qprc2012.com or contact Daniel Jeske, Room 2605, STAT-COMP Building, 900 University Ave., Riverside, CA 92521; (951) 827-3014; daniel.jeske@ucr.edu.

#### 6-9—MedicReS World Congress on Good Medical Research, Vienna, Austria

For more information, visit www. ic2012.medicres.org or contact Burcin Akicier, Armada Is Merkezi Kat 12 Sogutozu, Ankara, International 06100, Turkey; +905072072777; info@bsb.com.tr.

#### 17-21—ISBIS 2012, Bangkok, **Thailand**

For more information, visit www. isbis2012-thailand.org or contact David Banks, Department of

Statistical Science, Box 90251, Duke University, Durham, NC 27708; (919) 684-3743; banks@ stat.duke.edu.

#### 18-29-Joint 2012 MBI-NIMBioS-CAMBAM Summer **Graduate Workshop Stochastics Applied to Biological Systems,** Columbus, Ohio

For more information, visit www.mbi.osu.edu/eduprograms/ *graduate2012.html* or contact Rebecca Martin, 1735 Neil Ave., Columbus, OH 43210; (614) 688-3519: rebecca@mbi.osu.edu.

#### 20-24—8th International Symposium on Statistics, West Lafayette, Indiana

For more information, visit www. stat.purdue.edu or contact Diane Martin, 250 N. University Ave., West Lafayette, IN 47907; (765) 494-3141; martindl@purdue.edu.

#### 24-27-32nd Annual International Symposium on Forecasting, Boston, Massachusetts

For details, visit http://forecasters. org/isf/index.html or contact Pam Stroud, 53 Tesla Ave., Medford, MA 02155; (781) 234-4077; isf@ forecasters.org.

#### >>25-29—SAMSI Summer **Program: Nonlocal Continuum Models for** Diffusion, Mechanics, and Other Applications, Research Triangle Park, North Carolina

For more information, visit www.samsi.info/workshop/ nonlocal-continuum-modelsdiffusion-mechanics-and-otherapplications or contact Karem Jackson, 19 T.W. Alexander Drive, RTP, NC 27709; (919) 685-9324; admin@samsi.info.

#### July

#### 1-4—IMS Asia Pacific Rim Meetings, Tsukuba, Japan

For more information, visit http:// ims-aprm2012.org/index.html or contact Runze Li, Department of Statistics, Penn State University, University Park, PA 16802-2111; (814) 865-1555; rli@stat.psu.edu.

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

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

#### 3-6—International Statistical Ecology Conference (ISEC) 2012, Oslo, Norway

For more information, visit www. cees.uio.no/news/2010/isec2012.html or contact Carl Schwarz, Statistics and Actuarial Science, Burnaby, British Columbia, V5A1S6, Canada; (778) 782-3376; cschwarz@stat.sfu.ca.

#### 4–6—World Congress on Engineering 2012, London, **United Kingdom**

For details, visit www.iaeng. org/WCE2012 or contact IAENG Secretariat, Unit 1, 1/F, 37-39 Hung To Road, Hong Kong, International HK, Hong Kong; (852) 3169-3427; wce@iaeng.org.

#### »4-6—Statistical Inference in Complex/High-Dimensional Problems, Vienna, Austria

For details, visit www.univie.ac.at/ *inference2012* or contact Hannes Leeb, Department of Statistics, Universitaetsstr. 5/3, Vienna, International 1010, Austria; +43 1 4277 38620; hannes.leeb@univie. ac.at.

#### 9–14—8th World Congress in Probability and Statistics, Istanbul, Turkey

For details, visit www. worldcong2012.org or contact Aycil Yesilirmak, Ayazmaderesi Cad. Karadut Sok. No: 7, Dikilitas, Istanbul, International 34349, Turkey; +90 212 381 46 00; aycilyesilirmak@figur.net.

#### 16-18—International Symposium in Statistics (ISS) 2012 on Longitudinal Data Analysis Subject to Outliers, Measurement Errors, and/ or Missing Values, St. John's, Newfoundland

For more information, visit www. iss-2012-stjohns.ca or contact Brajendra Sutradhar, Elizabeth Avenue, St. John's, Newfoundland A1C5S7, Canada; (709) 864-8731; bsutradh@mun.ca.

#### 16-20-MBI BioSciences **Problem-Solving Workshop** (PSW@MBI), Columbus, Ohio

For more information, visit www. mbi.osu.edu/2012/stgrdescription. html or contact Rebecca Martin, 1735 Neil Ave., Columbus, OH 43210; (614) 688-3519; rebecca@ mbi.osu.edu.

#### 16-20—27th International **Workshop on Statistical** Modeling, Prague, Czech Republic

For more information, visit http:// iwsm2012.karlin.mff.cuni.cz or

contact Arnost Komarek, Sokolovska 83, Praha 8, International 18200, Czech Republic; 00420221913282; komarek@karlin.mff.cuni.cz.

#### 16-20-LinStat 2012 Conference and the 21st International Workshop on **Matrices and Statistics, IWMS** 2012, Bedlewo, Poland

For details, visit http://linstat2012. *au.poznan.pl/index.html* or contact Katarzyna Filipiak, Wojska Polskiego 28, Poznan, Non US/CAN Province 60637, Poland; linstat@up.poznan.pl.

#### »16-24—Industrial Math/ **Stat Modeling Workshop for** Graduate Students, Raleigh, **North Carolina**

For more information, visit www. samsi.info/workshop/2012-industrialmathstat-modeling-workshopgraduate-students-july-16-24-2012 or contact Karem Jackson, 19 T.W. Alexander Drive, RTP, NC 27709; (919) 685-9324; admin@samsi.info.

#### >>23-26—Joint Meeting of y-BIS and jSPE, Lisbon, Portugal

For details, visit http://ybis-ispe. com or contact Paulo Rodrigues, Department of Mathematics, Faculty of Sciences and Technology of UNL, Caparica, International 2829-516, Portugal; 00351936110338; paulocanas@ gmail.com.

#### 26-28-18th ISSAT International Conference on Reliability and Quality in Design, Boston, Massachusetts

For details, visit www. issatconferences.org or contact Conference Secretary, P.O. Box 1504, Piscataway, NJ 08855; rad@issatconferences.org.

#### \*28-8/2—2012 Joint Statistical Meetings, San Diego, California

For more information, visit www. amstat.org/meetings/jsm/2012/ index.cfm or contact ASA Meetings, 732 N. Washington St., Alexandria, VA 22314; (888) 231-3473; meetings@amstat.org. ■



## **Annual Conference on Statistical Issues** in Clinical Trials: April 18, 2012

#### Topic: Emerging Statistical Issues in Biomarker Validation for Clinical Trials

The 2012 Conference will bring together leading scientists who will make presentations and lead open discussions on state-of-the-art and developing methods. Participants from academic institutions, industry and governmental agencies with an interest in contributing to these discussions are encouraged to register.

Conference funded by NIH/NCI (R13-CA132565) and co-sponsored by the American Statistical Association and the Society for Clinical Trials. Organizers: Jonas H Ellenberg, Susan S. Ellenberg: University of Pennsylvania

#### **Faculty**

Dan Sargent (Mayo Clinic) Lisa McShane (NIH/NCI) Gene Pennello (FDA) Tianxi Cai (Harvard) Collin Begg (Memorial Sloan-Kettering) Yongming Qu (Eli Lilly) Rebecca Betensky (Harvard)

#### **Tentative Topic**

Biomarkers and surrogate end points-the challenges of statistical validation The Omics of biomarker validation: Statistical performance and clinical utility Assessment of biomarker assay and performance. When are biomarkers ready for prime time? Evaluating prognostic accuracy of biomarkers in nested case-control studies Testing the Incremental Predictive Accuracy of New Markers Quantification of treatment effect explained by markers in the presence of measurement error Importance of calibrating new biomarkers against imperfect gold standards

Victor DeGruttola (Harvard), Dave DeMets (U Wisconsin), Phyllis Gimotty (U Pennsylvania); Lisa LaVange (FDA) others to be announced

Venue, Housing, Registration, Fee. The Conference will be held at the Biomedical Research Building Auditorium on the campus of the Perelman School of Medicine at the University of Pennsylvania. The Hilton Inn at Penn and Sheraton University City are located within easy walking distance. Many alternative hotels in center city Philadelphia are also a short distance from the UPenn campus. Registration is limited to 220 participants. Deadline is April 4, 2012, or when conference sells out. Conference fee (includes breakfast, lunch, breaks): \$180 Industry, \$110 Academic & Government.

For Information visit the Conference website http://www.cceb.med.upenn.edu/biostat/conferences/ClinTrials12 or contact: Donna Zikowitz at zikowitz@ upenn.edu or (215) 573-2728. Registration will open January 9, 2012!

#### **Arizona**

■ T/TE Assistant/ Associate Professor in Biostatistics, University of Arizona. The successful candidate will develop and teach graduate-level courses, mentor graduate students, and contribute to the research and service mission of the college. Review will begin on Dec. 1, 2011 and continue until the position is filled. For a complete listing of position duties, qualifications and to apply, please visit: www.uacareertrack.com, Job #48491. AA/EOE.

#### **California**

- Department of Statistics at UC, Irvine seeks applicants who wish to focus on a teaching career at a major research university. We are hiring a Lecturer with Potential Security of Employment, which holds the benefits of a tenure-track assistant professor position, but is evaluated on excellence in teaching and related professional activities. PhD in Statistics or related field required. https://recruit. ap.uci.edu, Donald Bren School of ICS. The University of California, Irvine is an equal opportunity employer committed to excellence through diversity, has a National Science Foundation Advance Gender Equity Program, and is responsive to the needs of dual career couples.
- OptumRx is seeking a Manager, Biostatistics in Irvine, CA. We are seeking a leader with strong statistical skills to join our clinical analytics and outcomes research team. The ideal candidate will have experience handling large amounts of claims data, SAS, as well as strong leadership skills. Interested candidates should email their MS Word resume to *Jennifer schaible@uhc.com* and reference "Manager, Biostatistics" in the subject line. UnitedHealth Group is an EOE.

#### Connecticut

■ Tenure-track positions: two at the assistant and one at the assistant or associate level. Teach undergraduate/master's-level courses in mathematics and statistics, pursue creative activities, and participate in department and university service. Normal teaching load is 12 credit-hours per semester. For further information

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

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

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

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

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

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

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



#### Biostatistician Position

The Biostatistics Service Center within the Department of Epidemiology and Biostatistics at the Drexel University School of Public Health seeks biostatisticians at the masters level to provide statistical programming/consulting support to investigators engaged in biomedical research throughout the University. Excellent written and oral communication skills, positive interpersonal skills and outstanding teamwork are essential. Experience in statistical packages (SAS, SPSS), data management systems and document processing tools are preferred. Applicants should demonstrate a high level of self-motivation and initiative. Applicants with experience working effectively within a team-oriented environment are especially encouraged to apply.

> For details on how to apply for this position, go to http://publichealth.drexel.edu/bsc/

> Drexel University is an equal opportunity/affirmative action employer.

#### publichealth.drexel.edu

please see our advertisement at www. southernct.edu/employment/Job\_Openings. To apply, please visit www.mathjobs.org. Southern Connecticut State University is an AA/EOE. Women and minorities are strongly encouraged to apply.

#### Georgia

■ The Department of Mathematics and Statistics of Georgia State University invites applications for an anticipated tenure-track assistant professor position in public/urban health biostatistics beginning in August 2012 pending budgetary approval. Submit applications online at www.mathjobs.org. Georgia State University is a Research University of the University System of Georgia and an EEO/AAA institution that values the diversity of its faculty, staff and student body. www2.gsu.edu/-wwwMathemat. AA/EOE.

#### Idaho

- Department of Mathematics. Assistant Professor of Statistics; full-time, ninemonth, tenure-track starting August 2012. Responsible for teaching advanced and undergraduate courses in statistics, active research in statistics, and participation in the curricular oversight of the undergraduate statistics program. See www.isu.edu/math for details on both the job description and the application. Review of completed applications will continue until the position is filled. Idaho State University is an AA/EEO Employer.
- The BSU mathematics department invites applications for a tenure-track assistant professor position in statistics beginning August 2012. Candidates must hold PhD in statistics or biostatistics by employment start date, and be committed to excellence in research, teaching, and service. Apply at www.mathjobs.org with a cover letter, CV, research description, teaching statement, three recommendation letters, and graduate transcripts. Applications received by 01/12/2012 will receive full consideration. Boise State University is an AA/EOE.



Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

#### **Professor of Statistics**

The Department of Mathematics (www.math.ethz.ch) at ETH Zurich invites applications for a Full or Associate Professor of Statistics.

We are seeking candidates with an internationally recognized research record in any area of statistics and a proven ability to direct research of high quality with an impact on applications in Natural Sciences or Engineering. The Department of Mathematics and ETH Zurich with its various other departments offer an excellent environment for mathematical, computational, and interdisciplinary research in statistics.

Together with colleagues of the Institute for Statistics and the Department, the new Professor will be expected to teach undergraduate level courses (German or English) and graduate level courses (English) in statistics and mathematics for students of Mathematics, Engineering, and Natural Sciences.

Please apply online at www.facultyaffairs.ethz.ch. Your application should include your curriculum vitae and a list of publications. The letter of application should be addressed to the President of ETH Zurich, Prof. Dr. Ralph Eichler. The closing date for applications is 29 February 2012. With a view towards increasing the number of women in leading academic positions, ETH Zurich specifically encourages women to apply.

#### MEDICAL UNIVERSITY OF SOUTH CAROLINA

#### Advanced Level Psychometrician/ Statistician

Healthcare Simulation South Carolina (HCSSC) is seeking a Psychometrician/Statistician to direct the educational research agenda for the new state-wide network of integrated medical simulation centers. These cutting-edge simulation centers support the healthcare training missions of the University of South Carolina Upstate, Medical University of South Carolina, Clemson University, the Greenville Hospital System, Horry Georgetown Technical College, Trident Technical College, University of South Carolina Beaufort, Greenville Technical College, and University of South Carolina College of Nursing. The Center's research missions include the impact of advanced instructional technology in patient safety, efficiency of training, efficacy of training, and establishing best practice competencies in a broad range of healthcare students and practitioners.

This position requires advanced degrees and some experience in educational research, specifically including guidance in research design, psychometrics of performance evaluation, statistical expertise related to this domain. A track record of publication is preferred. The position will be based from the Medical University of South Carolina in coastal Charleston, South Carolina, including academic appointments in the College of Medicine Department of Anesthesiology and College of Nursing.

Interested applicants in this novel opportunity for healthcare educational research across the State of South Carolina should apply at www.jobs.musc.edu with curriculum vitae and three professional references. Please reference requisition identification number 047659. If you have any questions or concerns in reference to this career opportunity, please contact Jacqueline Gaines, Administrative Director, at gainesj@musc.edu.

Medical University of South Carolina Healthcare Simulation South Carolina Harborview Tower, 19 Hagood Avenue, Suite 706 PO Box 250812 Charleston, South Carolina 29425





The Study Design, Biostatistics and Management Core (SDBDMC) at Morehouse School of Medicine (MSM), Atlanta GA seeks a senior-level biostatistician to play a leadership role in supporting the infrastructure for statistical analysis, study design planning and conduct, and data management methodologies in supporting biomedical, clinical and translational research. The successful candidate will also lead strategic efforts to develop new programs and funding to support the SDBDMC. The applicant must be proficient in data analysis, developing and writing statistical analytical plans for grant proposals and manuscripts and have the ability to communicate clearly and effectively to faculty, staff, and students who seek statistical support. The applicant must also demonstrate an interest in statistical research and teaching in the graduate training programs. A PhD degree in biostatistics or statistics from an accredited college or university with at least five years experience in research and teaching is required for this position. An academic appointment as Professor in Biostatistics is also expected for this position. AA/EOE. Apply online at: https://careers.msm.edu/

#### **Indiana**

■ Two faculty positions (level commensurate with experience/qualifications), Department of Biostatistics/IU School of Medicine. Duties include statistical research, collaborative research and teaching. PhD in biostatistics, statistics or related field required; Practical experience preferred. Observational studies, imaging or psychometrics expertise desirable. Excellent communication skills required. Competitive salary/excellent benefits. Send CV, research/teaching statements, 3 refs: Search Committee, Biostatistics, HS3000, 410 W. Tenth Street, Indianapolis, IN 46202-3012. Indiana University is an EEO/AA employer, M/F/D.

#### lowa

■ The Department of Biostatistics in the College of Public Health at The University of Iowa invites applications at the rank of tenure-track Assistant Professor. A PhD in biostatistics, statistics, or a related area is required. The successful candidate will be involved



#### BIOSTATISTICIAN

The Department of Community Health Sciences invites applications for two full-time academic positions, at the Assistant Professor level, for a biostatistician. These positions offer excellent opportunities to develop independent research programs with collaborative interactions in a multidisciplinary research environment of the Department of Community Health Sciences, the Calgary Institute for Population and Public Health, and the broader Faculty of Medicine including its other research institutes.

Duties will include graduate teaching, supervising graduate students, and teaching in continuous professional development courses offered to the local health care community, with up to 50-75% of time protected for research. The successful candidates will be expected to apply and be successful at national grant agencies such as Canadian Institutes of Health Research (CIHR).

Candidates should have a PhD in Biostatistics or Statistics with evidence of strong methodological and analysis skills applied in clinical/population/public health research. Candidates with strong records of collaboration with researchers in epidemiology and other health related disciplines are encouraged to apply. Particular expertise or experience in clinical neuroscience and design/analysis of clinical trial data would be expected for one of the successful candidates. Good teaching and communication skills are essential. Current faculty in biostatistics have research interests in epidemiologic risk assessment, statistical computing, longitudinal data analysis, network analysis, and survival analysis. The successful candidates will benefit from the growing research activity in biostatistics at the UofC, and the strong Faculty of Medicine support for the Calgary Institute for Public and Population Health. One candidate will work closely with the researchers from the Hotchkiss Brain Institute, a particular focus for the Faculty of Medicine and the University of Calgary.

The Department of Community Health Sciences is part of the rapidly growing Faculty of Medicine. Calgary is a vibrant, multicultural city (population ~1,000,000) near the Rocky Mountains, Banff National Park and Lake Louise.

Please forward curriculum vitae, a statement of research interests, and the names and addresses of three prospective referees, by February 15, 2012, to:

Dr. Christopher Doig, Head Department of Community Health Sciences c/o Rm 3D39, Teaching, Research and Wellness Bldg Faculty of Medicine, University of Calgary 3280 Hospital Drive NW Calgary, Alberta, T2N 4Z6 Canada

All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. The University of Calgary respects, appreciates, and encourages diversity.

www.ucalgary.ca



**Graduate Intern Program** (No Application Deadline): Primarily for individuals being trained as statisticians and related professionals who have completed the first year of a master's or Ph.D. degree program.

- Collaborative research for the 12-week to 1-year period is conducted at the U.S. Census Bureau.
- Details: <a href="http://www.census.gov/hrd/www/jobs/stu\_temp.html">http://www.census.gov/hrd/www/jobs/stu\_temp.html</a>>.

Dissertation Fellowship Program (Application Deadline-February 28): Primarily for doctoral candidates in statistics or related areas who propose for their dissertation to investigate research topics of primary interest to the U.S. Census Bureau.

- Research is conducted and completed at the selected fellow's university/institution.
- Details: <www.census.gov/srd/www/DissertationFellowshipTopics.pdf> or contact <tommy.wright@census.gov>.

Postdoctoral Research Program (Application Deadline-January 31): Primarily for statisticians and related professionals who have held their Ph.D. (or equivalent) no more than 6 years before the commencement of work as a postdoctoral researcher.

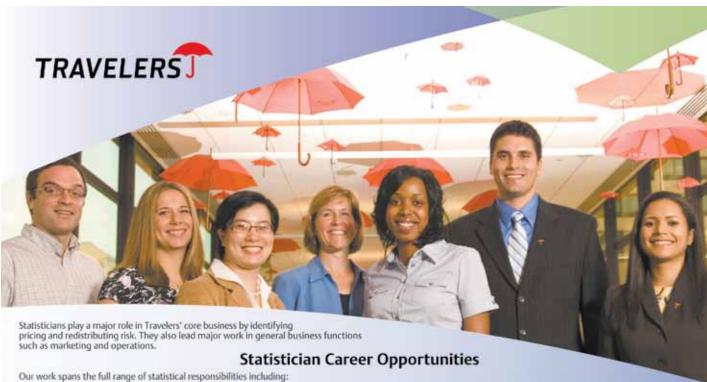
- Collaborative research for the 2-year appointment is conducted at the U.S. Census Bureau.
- Details: <a href="http://www.census.gov/hrd/www/jobs/prp.html">http://www.census.gov/hrd/www/jobs/prp.html</a> or contact <a href="total">contact <a href="total">total</a> census.gov/hrd/www/jobs/prp.html

ASA/NSF/Census Research Fellowship Program (Application Deadline—December 10): Primarily for statisticians and related professionals who have recognized research records and considerable expertise in their areas of proposed research.

- Collaborative research for the 6-12 month period is conducted at the U.S. Census Bureau.
- Details: <www.census.gov/srd/www/fellweb.html> or contact <tommy.wright@census.gov>.



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- Statistical modeling using a wide-range of standard, advanced and research-level techniques
- · Implementation, performance tracking and rapid-cycle improvement

Statisticians at all career stages are invited to apply.

For more information please visit our website: travelers.com/Careers.

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## **Chair, Department of Preventive** Medicine, College of Medicine

#### **University of Tennessee Health Science Center**

The Department of Preventive Medicine, with recognized excellence in epidemiology, biostatistics, community participatory research, and clinical trials, seeks a leader with a history of research collaboration and achievement, a demonstrated commitment to education, a track record of mentoring junior faculty, national involvement in professional organizations in an area of expertise, and a proven ability to administer and manage. For more information, please visit http://www.uthsc.edu/prevmed/pm/index.htm.

Confidential review of materials will begin immediately and will continue until the appointment is made. It is preferred, however, that all materials be submitted by February 1, 2012. Submit materials (a Letter of Interest, a complete CV, and a list of three references) or inquiries to: Preventive Medicine Chair Search, P. O. Box 63647, or preferably via e-mail to rjacks12@uthsc.edu.

The University of Tennessee is an EEO/AA/ Title VI/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services. Applicants should have a demonstrated commitment to and knowledge of equal employment opportunity and affirmative action.

## Faculty Position in Statistics, Fall 2012 (Search # 2012-210)

The Department of Statistics at the University of Connecticut, Storrs invites applications for a tenure track assistant professor position beginning Fall 2012. The new faculty is expected to demonstrate excellence in methodological research in Statistics or Biostatistics, teaching at both graduate and undergraduate levels, and supervision of students. Minimum Qualifications: Candidates must hold a doctoral degree in Statistics or Biostatistics. Equivalent foreign degrees are acceptable. Preferred Qualifications: Candidates with strong focus on interdisciplinary research, and strong interpersonal and communication skills are preferred. The preferred candidate will demonstrate the ability to contribute through research, teaching, and/ or public engagement to the diversity and excellence of the learning experience. Salary is competitive based on experience and qualifications. Please use Husky Hire: http://jobs.uconn.edu to submit a cover letter, curriculum vita, statements of research and teaching agenda, and copy of transcript. Three letters of recommendation in pdf files must be sent by email to tracy.burke@uconn.edu, or by regular mail to Tracy Burke, Department of Statistics, University of Connecticut, 215 Glenbrook Road, Storrs, CT 06269-4120. Inquiries may be addressed to Nalini Ravishanker, search committee chair, at statsearch I @gmail.com. Applications will be considered until the position is filled.

University of Connecticut is an affirmative action/equal opportunity employer. The University greatly values diversity among its faculty, students, and staff, and strongly encourages applications from underrepresented groups, including minorities, women, and persons with disabilities.

in teaching, service, and research. See http://jobs.uiowa.edu, Requisition #60379 for complete position description and electronic application information. The University of Iowa is an Affirmative Action/Equal Opportunity Employer.

#### Massachusetts

- Assistant/Associate Professor. Department of Biostatistics and Computational Biology, Dana-Farber Cancer Institute, Boston, MA.Expected to become a leader in quantitative methods relevant in cancer research; collaborate with investigators; and pursue independent methodologic research. Doctorate in statistics, biostatistics, or allied field. Email letter of application, statement of research interests, CV, sample publications, and names of four referees to giovanni\_parmigiani@dfci. harvard.edu. Referees should write independently to this address. Dana-Farber Cancer Institute/Harvard Medical School are Equal Opportunity/Affirmative Action Employers actively committed to increasing the diversity of our faculty: women and members of underrepresented minority groups are therefore strongly encouraged to apply.
- Postdoctoral fellowships are available in the Department of Biostatistics at the Harvard School of Public Health. Fellows will engage in methodological research and participate in ongoing collaborative projects. Please view details on specific positions at our website: www. hsph.harvard.edu/departments/biostatistics/ *fellowship-opportunities*. Applications from minority and female candidates are especially encouraged. Harvard University is an AA/EOE.
- Williams College invites applications for two tenure-track positions in statistics, beginning fall 2012, at the rank of assistant professor (in an exceptional case, a more advanced appointment may be considered). We are seeking highly qualified candidates who have demonstrated excellence in teaching and research, and who will have a PhD by the time of appointment. Information: Marissa.M.Barschdorf@williams.edu. Williams College is a coeducational liberal arts institution located in the Berkshire Hills of western Massachusetts. Williams has built its reputation on outstanding

# What are the ASA's Accredited Professional Statisticians™ saying?



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> John Bartko Biostatistician

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- Maintenance of appropriate professional development
- Adherence to the ethical standards of practice
- Ability to communicate effectively



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### **Survey Sampling Statistician**

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

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

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

We are currently recruiting for the following statistical position:

#### **Survey Sampling Statistician**

Job Code 4130BR

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

Westat offers excellent growth opportunities and an outstanding benefits package including life and health insurance, an Employee Stock Ownership Plan (ESOP), a 401(k) plan, flexible spending accounts, professional development, and tuition assistance. To apply, go to www.westat.com/jobs and enter 4130BR in the space provided.



An Employee-Owned

teaching and scholarship and on the academic excellence of its students. Beyond meeting fully its legal obligations for nondiscrimination, Williams College is committed to building a diverse and inclusive community where members from all backgrounds can live, learn, and thrive.

#### **New York**

■ The Schools of Business at Fordham University: tenure-track position in strategic decision-making in the Management Area. Candidate will have research and/or teaching interest in the field of data driven risk analysis within an entrepreneurial environment. Include a curriculum vita and names of three letters of referees. Deadline: Monday, 01/16/2012. Apply to: Falguni Sen, Chair, Management Systems Area, 1790 Broadway #1112, New York, NY 10019; email: fsen@ fordham.edu. Fordham is an independent, Catholic university in the Jesuit tradition that welcomes applications from men and women of all backgrounds. Fordham University is an Affirmative Action/Equal Opportunity employer. Fordham Business Schools are accredited by the AACSB.

The Division of Mathematical Sciences (http://www.spms.ntu.edu.sg/mas) of the Nanyang Technological University (NTU), Singapore, is looking to add to its tenure-track faculty at all ranks. The research interest areas include, but are not limited to:

- 1. Analysis
- 2. Algebraic Number Theory, Computational Number Theory
- 3. Scientific Computation
- 4. Optimization, Operations Research
- 5. Probability & Statistics, especially with applications in Business Analytics or Actuarial Science

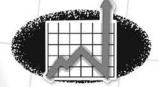
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- **Application Letter**
- Curriculum Vitae
- Research Statement
- Teaching Statement
- Names of at least three referees



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#### **North Dakota**

Assistant Professor position beginning August 16, 2012. Minimum qualifications required include: PhD in Statistics or related area by August 15, 2012; demonstration of strong research potential and quality teaching; and effective oral and written communication skills. Duties include teaching, research, supervising graduate students and service to the department and the university. For additional information and to complete an online application, please visit http://jobs. ndsu.edu/postings/1571. North Dakota State University is an EOE.

#### Ohio

■ The Department of Mathematics and Statistics at Wright State University invites applications for a tenure-track position in biostatistics at the rank of assistant or associate professor starting Fall 2012. More info is available at www.math. wright.edu, and application is online at https://jobs.wright.edu/postings/4663. WSU is an affirmative action/equal opportunity employee.

#### Oregon

Portland State University, Portland Oregon. Fariborz Maseeh Department in Mathematics and Statistics. Applications are invited for tenure-track position at Assistant Professor level beginning 09/16/2012. All areas of Statistics will be considered. Qualifications include an outstanding record of research, a potential of securing external funding, and a commitment to excellence in teaching. For more information, see www.mth.pdx.edu/ employment. Please send inquiries (PDF preferred) to stathire@pdx.edu. Portland State University is an Affirmative Action, Equal Opportunity institution and welcomes applications from diverse candidates and candidates who support diversity.

#### **Pennsylvania**

■ The Statistics Department at Temple University invites applications for a Tenure-Track, Associate Professor position. Candidates in any area of statistics must have a PhD in Statistics, publications in top-tier journals, teaching excellence, and strong theory/application background. Apply electronically to

The Williams College Department of Mathematics and Statistics invites applications for two tenure-track positions in statistics, beginning fall 2012, at the rank of assistant professor (in an exceptional case, a more advanced appointment may be considered). We are seeking highly qualified candidates who have demonstrated excellence in teaching and research, and who will have a Ph.D. by the time of appointment. The candidates will become the third and fourth tenure-track statisticians in the department, joining a vibrant and active statistics group.

Williams College is a private, residential, highly selective liberal arts college with an undergraduate enrollment of approximately 2,000 students. The teaching load is two courses per 12-week semester and a winter term course every other January. In addition to excellence in teaching, an active and successful research program is expected.

To apply, please send a vita and have three letters of recommendation on teaching and research sent to the

> Hiring Committee, Department of Mathematics and Statistics Williams College 18 Hoxsey Street Williamstown, MA 01267

Teaching and research statements are also welcome. Evaluations of applications will begin on or after November 15 and will continue until the position is filled. For more information on the Department of Mathematics and Statistics, visit http://math.williams.edu/.

Williams College is a coeducational liberal arts institution located in the Berkshire Hills of western Massachusetts with easy access to the culturally rich cities of Albany, Boston, and New York City. The College is committed to building and supporting a diverse population of approximately 2,000 students, and to fostering an inclusive faculty, staff and curriculum. Williams has built its reputation on outstanding teaching and scholarship and on the academic excellence of its students. Please visit the Williams College website http://www.williams. edul. Beyond meeting fully its legal obligations for non-discrimination, Williams College is committed to building a diverse and inclusive community where members from all backgrounds can live, learn, and thrive.

Sanat Sarkar, stat.recruiting@temple.edu, with cover letter, CV, teaching evidence & three recommendation letters. For more information, visit: www.fox. temple.edu/dept/statistics. Temple University is an Equal Opportunity/ Affirmative Action Employer.

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



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## **Tenure Track Assistant/Associate Professor Position in Biostatistics**

The Department of Statistics at the University of Connecticut, Storrs, invites applications for a tenure track assistant/associate professor beginning August, 2012. This appointment is within the Department of Statistics, with joint appointment involving research collaboration at the Center for Health, Intervention, and Prevention (CHIP) at UConn (www.chip. uconn.edu). Responsibilities will include methodological and interdisciplinary research in biostatistics with applications in behavioral and social sciences. It will also include teaching at both graduate and undergraduate levels, and supervision of MS and Ph. D. students in statistics. Candidates must hold a doctoral degree in statistics, biostatistics or a closely related discipline. Equivalent foreign degrees are acceptable. An established research record in the area of biostatistics is required as well as strong interpersonal and communication skills. Expertise in factor analysis, meta-analysis, missing data, multilevel modeling, and structural equation modeling is desirable. Salary is competitive based on experience and qualifications. Please use Husky Hire: http://jobs.uconn.edu to submit a cover letter, curriculum vita, statements of research and teaching agenda, and copy of transcript. Three letters of recommendation in pdf files must be sent by e-mail to ming-hui.chen@uconn.edu. Applications will be considered until the position is filled. Inquiries should be addressed to Professor Ming-Hui Chen, Chair, Search committee, Department of Statistics, University of Connecticut, 215 Glenbrook Road, U-4120, Storrs, CT 06269-4120.

University of Connecticut is an affirmative action/equal opportunity employer. The University greatly values diversity among its faculty, students, and staff, and strongly encourages applications from underrepresented groups, including minorities, women, and persons with disabilities.

Founded in 1911, The University of Hong Kong is committed to the highest international standards of excellence in teaching and research, and has been at the international forefront of academic scholarship for many years. The University has a comprehensive range of study programmes and research disciplines spread across 10 faculties and about 100 sub-divisions of studies and learning. There are over 23,400 undergraduate and postgraduate students coming from 50 countries, and more than 1,200 members of academic and academic-related staff.

#### Teaching Consultants in Common Core Curriculum (Ref.: 201101091)

Applications are invited for appointments as Teaching Consultant in the Common Core Curriculum in the Faculty of Science, from as soon as possible, on a two-year fixed-term basis, with the possibility of renewal.

The University of Hong Kong has established a Common Core Curriculum for all undergraduates to begin in September 2012. The Faculty of Science will be offering courses in the area of Scientific and Technology Literacy to students from all ten Faculties. Some of the Common Core courses will be offered to freshmen on a pilot basis from 2010-2011 onwards. A senior Professor in the Faculty of Science will lead the teaching of these courses and work with the Teaching Consultants in the relevant area who will serve primarily as a tutor for small groups of students from multiple disciplines. The medium of instruction is English. Information about the Common Core Curriculum can be viewed at http://tl.hku.hk/common-core-curriculum.

Applicants should have a Master's degree in one of the following fields: Mathematics or Statistics, Physical Sciences, Biological Sciences, and have substantial teaching experience in subjects related to general education at the university level. Those with a Ph.D. degree would have an advantage. The appointees' duties include conducting small-group tutorials for two courses per semester, marking assignments/examination scripts, preparing teaching materials, supervising student work, developing new courses, and undertaking other tasks related to science education. They will meet regularly with the Centre for the Enhancement of Teaching and Learning to reflect on and refine the teaching activities in Common Core courses.

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

For enquiries about the specific job requirements, please write to Professor Sun Kwok, Dean of Science (e-mail: deansci@hku.hk). Applicants should send a completed application form, together with a curriculum vitae and a statement on teaching philosophy, which includes a portfolio of syllabi and descriptions of courses they have taught or co-taught by e-mail to sciappt@hku.hk. They should also arrange for submission of three references from senior academics who are familiar with their teaching approaches, skills and experience. Please indicate clearly "Ref.: 201101091 (Teaching Consultants in Common Core Curriculum)" in the subject of the email. Application form (341/1111) can be obtained at http://www.hku.hk/apptunit/form-ext.doc, and further particulars can be obtained at http://www.hku.hk/apptunit/. Closes March 10, 2012. The University thanks applicants for their interest, but advise that only shortlisted candidates will be notified of the application result.

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w/dissertation research or exp in use of survival analysis, longitudinal data analysis, & joint modeling analysis for either clinical or health outcomes research projects. Send CV & cvr ltr to Tracey Wolfe, AVP, Center for Health Research, 100 N. Academy Ave., Danville, PA 17822-4400. EOE.

#### **Rhode Island**

- Tenure track Assistant Professor, Biostatistics, Brown University. Effective Fall 2012. Doctorate Biostatistics/ Statistics. Spatial data expertise, strong methodologic and collaborative research potential, excellent communication skills, strong teaching ability. Application deadline: 15 January 2012. Letter, CV, 3 recommendation letters: Constantine Gatsonis, Biostatistics Department, Brown University, Box G-S121-7, Providence, RI 02912. Brown University is Equal Opportunity/Affirmative Action Employer, actively solicits applications from women and minorities. Contact gatsonis@stat.brown.edu, (401) 863-9183. EOE/AA.
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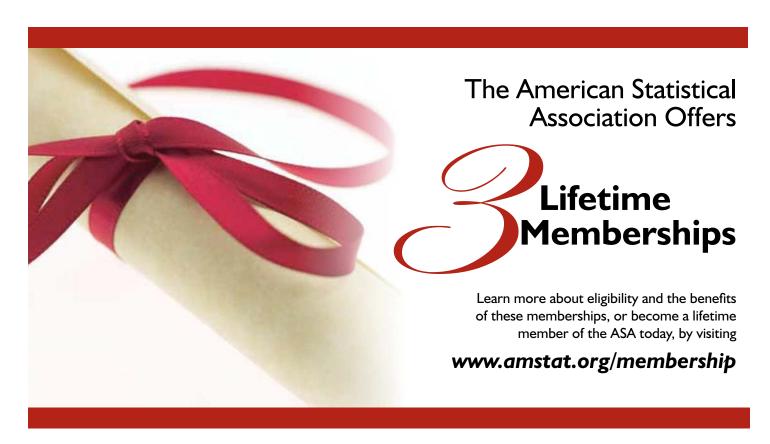
research record, significant interdisciplinary research experience, leadership potential, research funding success, student mentoring experience. Application deadline: 15 January 2012. Letter, vita, 5 referee names to Constantine Gatsonis, Department of Biostatistics, Brown University, Box-G-S121-7, Providence, RI 02912. Brown University is Equal Opportunity/Affirmative Action Employer and actively solicits applications from women and minorities. Contact: gatsonis@stat.brown.edu, (401) 863-9183. EOE/AA.

#### **South Carolina**

■ Medical University of South Carolina. Advanced Level Psychometrician/ Statistician. Healthcare Simulation South Carolina (HCSSC) is seeking a Psychometrician/Statistician to direct the educational research agenda for the state-wide network of integrated medical simulation centers. Interested applicants in this novel opportunity for healthcare educational research across the State of South Carolina should apply at www.jobs. musc.edu with a CV and three references. Please reference requisition identification number 047659. AA/EOE.

#### **Texas**

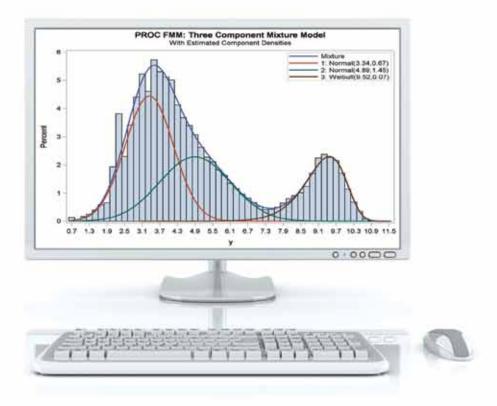
- The Division of Statistics and Scientific Computation at The University of Texas at Austin invites applications for a faculty appointment at the level of Assistant, Associate, or Full Professor, to begin in Fall 2012. Preference will be given to candidates whose core research interests in statistical methodology are accompanied by evidence of well-developed applied interests. See http://facultyjobs.utexas.edu/ potential/view\_job.cfm?jobID=1846 for details and instructions. AA/EEO.
- Mathematics Department at University of North Texas invites applications for a tenure-track assistant professor and a tenured associate or full professor in statistics beginning Fall 2012. For more information on the positions, qualifications, and application instructions, see www.math. unt.edu. Applicants must apply online at http://facultyjobs.unt.edu. Applications will be reviewed until the search is closed. The University of North Texas is an EOE/ ADA/AA institution committed to diversity in its employment and educational programs, thereby creating a welcoming environment for everyone.



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