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AMSTATNEWS

# ASA Members Rise to New High

Annual Fund Drive contributions beat last year's record





ALSO:

2012 Salary Survey of Biostatistics and Other Biomedical Statistics Departments and Units

The Future of the ASA's Electronic Publications





CEOs of US Software Companies To: From: Paul Lewicki, CEO, StatSoft, Inc. October 22, 2012 Date: Aid for European Struggling Economies Re:

Dear Colleagues,

As some of you may know, StatSoft has launched a program to offer free Enterprise Business Analytics software to struggling companies in Greece, Portugal, and Spain with the intent to help the economy in these developed and, until only recently, thriving nations, where now 25% of the population cannot afford the most basic necessities such as adequate nutrition or health care.

I invite you to join this initiative, which will not only reduce human suffering, but also have global, longterm benefits of reducing the risk to the Euro and the global economic system.

In our (software) industry, we are in a unique position to help tremendously those companies that are now in the paradoxical situation where (a) their highly educated workforce and developed infrastructure is prepared to greatly benefit from software designed to increase productivity and international competitiveness, but (b) their lack of credit prevents them from making any investments and acquiring the critical tools (software) that would radically increase their chances for a quick recovery.

These companies need not only the Advanced Analytics software that StatSoft is providing; they also need software for database management, enterprise resource planning, factory automation, and many other software tools and solutions.

The anticipated (caused by this program) loss of revenue for our industry from these cash strapped nations will be - in the case of most midsize software companies - limited to just a few million dollars; but, the "Return" on this small "Investment" in terms of the social and global benefits is virtually priceless given the depth of that economic calamity.

I have had discussions with my counterparts at several large software companies. While all of them understood the benefits, they raised concerns regarding the significant and unbudgeted cost involved in supporting this initiative, but there are a number of creative ways in which these costs can be reduced. We at StatSoft have developed some of them, and we are happy to share our ideas with you.

Also, we do not recommend that the free software offer be unconditional (e.g., multinational companies are excluded from the StatSoft program), and your company should include its own limitations. The time to act is now; if we wait until the next fiscal year, it may be simply too late.

I am looking forward to hearing from you and working with you on this initiative where every party involved will be a real winner.

Pan hici

Paul Lewicki, CEO StatSoft, Inc.



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### features

- 3 President's Corner
- 5 Recognizing the ASA's Lifetime Members
- 8 ASA Members Rise to New High Annual Fund Drive contributions beat last year's record
- 14 2012 Salary Survey of Biostatistics and Other Biomedical Statistics Departments and Units
- 16 Outreach Group Statistics Without Borders Grows in Membership, Project Diversity
- 17 Preparing Master's Statistics Students for Success: A Perspective from Recent Graduates and Employers
- 19 The Future of the ASA's Electronic Publications
- 21 Stephen Fienberg Chosen as 22nd Pfizer Colloquium Presenter
- 22 NISS Director Provides Update on Institute Activities
- 23 Discover Statistical Analysis and Data Mining Journal
- 24 *Technometrics* Highlights Design and Analysis of Computer Experiments Featured in February Issue
- 26 Journal of Computational and Graphical Statistics Highlights JCGS Celebrates International Year of Statistics

New plaque honoring "Student" William Gosset

See Page 21

## columns



STAITISTEOIR

#### 27 175 My Friend Statistics

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



Robert Hogg has had a long and distinguished career as a statistics professor at the University of Iowa and is recognized worldwide. Elected president of the ASA in 1988, he has been a member for more than 40 years.

Hogg



## **Online Articles**

The following articles in this issue can be found online at *http://magazine.amstat.org.* 

The 36th Midwest Biopharmaceutical Statistics

**Workshop (MBSW)**—cosponsored by the ASA's Biopharmaceutical Section—will be held at Ball State University in Muncie, Indiana, May 20–22. There will be four tracks: clinical; discovery/pre-clinical; chemistry, manufacturing, and controls; and health outcomes and observational research. For information, visit the website at www.mbswonline.com or see Amstat News online at http://magazine.amstat.org.

**SAMSI** is holding a summer program on Neuroimaging Data Analysis (NDA) June 4–14 in Research Triangle Park, North Carolina. The two-week workshop will begin with five days of training courses focused on structural and functional neuroimaging data analysis and conclude with working groups held in the afternoons and a workshop held in the mornings. For details, visit *http://magazine.amstat.org/ blog/2013/02/01/samsi-2/*.

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 *http://magazine.amstat.org*.



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## columns

#### 28 STAT*tr@k* Statisticians' Place in Big Data

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

Sherri Rose is an NSF mathematical sciences postdoctoral research fellow in the department of biostatistics at the Johns Hopkins Bloomberg School of Public Health. Rose recently coauthored the book Targeted Learning: Causal Inference for Observational and Experimental Data with Mark van der Laan for the Springer Series in Statistics.

#### NUSC

#### 29 MASTER'S NOTEBOOK My Climb Up the Corporate Ladder: Lessons Learned

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

Allison Florance is a director of statistics in the oncology early development clinical sciences group at GlaxoSmithKline. She has more than 15 years of experience designing, analyzing, and reporting clinical trials in large pharma, academic, and CRO organizations. She earned a BS in biology at St. Olaf College and an MS in statistics from lowa State University.

Florance

## departments

#### 31 **international year of statistics** International Year of Statistics Kicks Off

#### 32 meetings

Call for Proposals for Late-Breaking JSM Sessions

### member news

- 33 People News
- 36 Awards and Deadlines
- 38 Section Chapter Committee News
- 39 Calendar of Events
- 42 Professional Opportunities

# Building the Statistical Work Force: Increasing the Pipeline of U.S. Students

t the November 2012 ASA Board of Directors meeting, past-president Bob Rodriguez and I were pulled aside by ASA Public Relations Coordinator Jeff Myers. A *Boston Globe* reporter was hoping to talk to someone for a story on "the growing interest in statistics." Her timing was fortuitous, and Bob and I arranged a phone interview with her.

As is often the case, most of what we said did not make it into the final piece (*http://tinyurl. com/cg9jhjy*). Luckily, however, our plugs for the International Year of Statistics and the 2011 McKinsey Global Institute report, projecting 140,000–190,000 new positions for individuals with data analytic expertise by 2018 (*www.mckinsey. com/insights/mgi/research/technology\_and\_innovation/ big\_data\_the\_next\_frontier\_for\_innovation*), did.

The Globe article is just another in a series on our field over the past few years. In *The New York Times* alone, careers in statistics have been getting some great press: "For Today's Graduate, Just One Word: Statistics," www.nytimes.com/2009/08/06/ technology/06stats.html?\_r=2c (2009); "What Are the Odds That Statistics Would Be This Popular?" http://bits.blogs.nytimes.com/2012/01/26/ what-are-the-odds-that-stats-would-get-this-popular (2012); and "The Age of Big Data," www.nytimes. com/2012/02/12/sunday-review/big-datas-impact-inthe-world.html?pagewanted=all (2012).

This press might be contributing to growing interest in statistics among U.S. students. As Bob's President's Corner columns in the August and September 2012 issues of *Amstat News* report, the number of high-school students taking Advanced Placement (AP) Statistics has soared, increasing 7% in the last year alone, and record numbers of undergraduates are majoring in statistics in several large departments nationwide.

This is fantastic news! However, a persistent concern for more than a decade has been that U.S. students are not pursuing advanced degrees in statistics, especially PhDs, in sufficient numbers to meet the demand. Even if the surge in interest at the lower levels is leading to more U.S. students going on to graduate study of statistics, reports continue to suggest it is not enough.

A recent Nature article (www.nature.com/ naturejobs/science/articles/10.1038/nj7384-263a) cites a National Institutes of Health (NIH) survey of statistical geneticists who report considerable difficulty recruiting qualified candidates for research positions. Directors at our U.S. federal statistical agencies repeatedly cite the dearth of U.S. citizens with the requisite skills for positions there. Reports by the NIH Advisory Committee to the Director, Biomedical Workforce Working Group, and Data and Informatics Working Group (http://acd.od.nih.gov) call for more PhD biostatisticians and other quantitative scientists in health sciences research and greater NIH investment in relevant training programs. Leaders of biostatistical units in research institutions nationwide report their struggles to fill positions.

A decade ago, this concern was taken up in two NIH workshops to "examine the need to train more biostatisticians in the U.S.," summarized in a 2006 *Statistics in Medicine* article (*http://onlinelibrary.wiley. com/doi/10.1002/sim.2668/full*) documenting the flat production of PhDs in biostatistics and the heightening demand. Workshop leaders called for efforts to enhance awareness of careers in biostatistics for those with advanced training among U.S. undergraduates.



Marie Davidian

### [R]eports of an insufficient number of U.S. students pursuing advanced statistics degrees continue.

In 2003, responding to this challenge, the National Heart, Lung, and Blood Institute (NHLBI) issued a request for applications (RFA) for a Summer Institute for Training in Biostatistics (SIBS), which would host undergraduates majoring in quantitative areas for six weeks, expose them to statistical principles and career opportunities in biostatistics, and encourage them to pursue graduate training. Three SIBS programs were awarded to Boston University, the University of Wisconsin, and a joint North Carolina State University and Duke Clinical Research Institute (NCSU-DCRI) team.

For the past nine summers, I have co-directed the NCSU-DCRI program and witnessed how exposing undergraduates majoring in not only statistics, but also mathematics, engineering, and a host of disciplines, to the opportunities for PhD biostatisticians can inspire them to pursue graduate training. Through lectures on statistical methods and case studies presented by practicing biostatisticians and clinicians; field trips to sites such as DCRI, the U.S. headquarters of GlaxoSmithKline, and SAS Institute; and data analysis projects based on cardiovascular disease studies coordinated at DCRI, we showcase the excitement and rewards of a career in the field. Our sister programs exploit their own local resources to do the same.

The results have been inspiring. From 2004-2009, 409 students attended these three programs and more than 65% went on to graduate programs in biostatistics or statistics. Some, no doubt, would have regardless, but program evaluations and follow-up communications tell an encouraging story. I could fill pages with comments like these: "I'm leaving with a whole new appreciation for statistics. I never realized there was so much out there!" "I wasn't sure of my future plans before this program, but after participating in SIBS, I am undoubtedly going to pursue a PhD in biostatistics." "Without SIBS, I would certainly not be on the path I am now." Numerous SIBS participants are now in graduate programs in statistics and biostatistics across the United States, and several have earned PhDs and hold positions in industry, government, and academia.

This success led to a new SIBS RFA in 2009, resulting in eight programs in 2010–2012 at

the original three sites plus Emory University; the Universities of Iowa, Pittsburgh, and South Florida; and Washington University in St. Louis. In 2010–2011, there were 329 participants; among those eligible, more than 60% had gone on to graduate school by fall 2011. Six programs have been funded for 2013–2015; sites offering programs in 2013 are listed on the NHLBI SIBS website at www.nhlbi.nih.gov/funding/training/ redbook/sibsweb.htm.

SIBS has exposed students to the exciting possibilities presented by advanced study of statistics work. So much so that past-president Nancy Geller proposed as one of her presidential initiatives that the ASA design a solicitation and identify funding sources for a SIBS-like program for statistics more generally.

My SIBS experience has led me to follow up on Nancy's proposal with my own initiative. It has been more than 10 years since the NIH workshops, which focused on biostatistics. While the anecdotal reports of an insufficient number of U.S. students pursuing advanced statistics degrees continue, there has been no recent, systematic effort to document current and future work force needs, assess the adequacy of the pipeline to meet them, identify fruitful recruitment strategies (like SIBS), and describe training experiences that will best prepare these students for the expectations of employers in business, academia, and government.

With so much positive coverage of our discipline, the time is ripe. By JSM 2013, a workgroup chaired by Lance Waller (also a SIBS director) with members in academia, industry, and government plans to finalize a white paper similar to the 2006 article addressing these issues, including identifying potential funding sources for recruitment and training programs. The white paper will serve as a tool for engaging stakeholders and forging innovative cross-sector partnerships focused on achieving the needed statistical work force. An initial meeting of stakeholders will take place in late 2013, possibly at JSM.

Please contact Lance if you have ideas or suggestions. I look forward to reporting to you on the workgroup's progress.

If you are interested in learning more about SIBS, look for an article in *CHANCE* magazine, Volume 26, Number 1, or visit my website at *www4.stat. ncsu.edu/~davidian* for slides from presentations I've given. And if you mentor undergraduates, encourage them to apply!

Marie Dovidian\_

# **Recognizing the ASA's Lifetime Members**

The American Statistical Association would like to thank its lifetime members. We are grateful to the following members for their distinguished and faithful membership. Your lifetime membership in the ASA demonstrates your commitment to our association and to statistics. Lifetime membership includes all benefits of regular ASA membership and is intended for those who wish to continue the benefits of ASA membership with one final payment.

If you are a lifetime member and your name is not below and you believe it should be included, contact Amy Farris at *amy@amstat.org* to correct your record.



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# ASA Members Rise to New High Annual Fund Drive contributions beat last year's record

# I choose to give to the ASA annual fund to support efforts to increase statistical literacy.

SA members have again set new marks for generosity in financial support of their association. More than 700 members contributed a total of nearly \$53,000 to the ASA's Annual Fund Drive during 2012. This is another record, up almost \$15,000 (39%) from last year's record figure. (Note: Memorial gifts designated for scholarships or other specific purposes are not included in these totals.)

These funds helped the ASA promote the practice and profession of statistics in several ways during 2012. Here are examples of the ways gifts from ASA members were put to good use:

- Development of the International Year of Statistics website and celebration
- Advocating to Congress and others through the ASA Science Policy program
- Education programs such as the Meeting Within a Meeting at JSM and the ASA Educational Ambassador program
- Student travel for conferences and meetings
- Preparations for the ASA's 175th anniversary celebration

- International Census at School Workshop held in conjunction with JSM 2012
- Support for StatFest, a one-day conference aimed at encouraging students from underrepresented groups to consider careers and graduate studies in the statistical sciences

Supporters of the 2012 annual fund drive are listed at the end of this article. Also listed are those members who have taken part in the last three annual fund drives. The ASA is deeply fortunate to have such consistent support. We are also grateful to several companies who made matching gifts to the ASA (Amgen, GE Foundation, Macmillan, Millennium Pharmaceuticals, and Pfizer).

Members participate in the annual fund drive because they see value in what the ASA does and want to help it do more. Tim Hesterberg, senior statistician at Google, said, "I've gotten a lot from the ASA, met a lot of people and learned a lot, at conferences and from ASA journals. It has definitely helped my career. I'm donating so the ASA can continue its great work and keep costs low for those who need it."

"ASA membership has been an indispensable resource to me since I joined as a graduate student in the early 1980s," noted Marie Davidian, ASA president. "The advocacy efforts ASA undertakes to promote our profession, the importance of statistics in science and policy, and the sound practice of statistics benefit all of us. By giving to the ASA, I can help to further the association's programs and ensure that it can continue to pursue its mission to be a leading voice for the profession, not just in the U.S., but around the world. In this International Year of Statistics, there is no better time to acknowledge the association's role in my personal professional development and in the advance of our field through my gift to the ASA."

Andy White, senior research statistician at the National Center for Education Statistics, also has seen the value of the ASA to his career and society at large. "My 30+-year career in statistics has been largely devoted to supporting data-based decisionmaking at national, state, and local levels. ASA has given me the ability to stay abreast of issues and methodological developments, interact with and learn from statisticians in a broad range of practice areas, and opportunities to have an impact on our profession through service to the association directly. I choose to give to the ASA annual fund to support efforts to increase statistical literacy and the use of objective data to guide the nation now and in the future."

Teri Utlaut, principal engineer and statistician at Intel Corporation, said she chose to give to the ASA annual fund because of her passion about educating young people and college students about our profession. "I don't think enough students are aware that a career in statistics is an option, and I would like more to discover what a great career it can be." Utlaut said.

Of course, the ASA's richest support is the thousands of hours of volunteer work our members contribute. We thank you all for that support, and we encourage our newer members to take part as well. Hesterberg notes there are many ways to do this. "Get involved," Hesterberg says, "by organizing a conference session, or volunteering for a section or local chapter; you'll meet people and learn more about what is going on in statistics."

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# 2012 Salary Survey of Biostatistics and Other Biomedical Statistics Departments and Units

Table 1—Results from the Fall 2012 Salary Survey of Biostatistics and Other Biomedical Statistics

Keith Crank

Departments and Units								
Rank/Years in Rank	Percentile	Fall 2006 (Sample Size)	Fall 2007 (Sample Size)	Fall 2008 (Sample Size)	Fall 2009 (Sample Size)	Fall 2010 (Sample Size)	Fall 2011 (Sample Size)	Fall 2012 (Sample Size)
Assistant	25th	\$82,400	\$86,000	\$89,200	\$89,100	\$89.500	\$91,900	\$92,700
1–3	50th	85,000	88,452	93,600	93,500	93,600	97,400	\$96,900
	75th	90,000	92,869	98,300	99,100	102,600	104,300	\$106,300
	90th			104,900	103,300	111,300	111,500	\$117,200
		(112)	(106)	(69)	(82)	(78)	(83)	(73)
4 or more	25th	\$84,476	\$87,400	\$90,500	\$89,400	\$91,000	\$93,000	\$96,800
	50th	88,471	92,000	95,500	95,500	97,300	97,200	\$99,500
	75th	94,819	98,220	106,200	100,700	103,000	104,600	\$106,300
	90th			118,000	110,500	116,400	113,800	\$116,400
		(48)	(65)	(62)	(87)	(101)	(97)	(80)
Associate	25th	\$ 89,937	\$102,525	\$102,500	\$102,400	\$103,000	\$109,600	\$105,800
0–2	50th	100,441	110,493	110,800	114,000	110,100	118,000	\$115,500
	75th	113,000	118,900	127,000	129,200	122,400	130,600	\$125,000
	90th			140,000	139,000	140,000	143,800	\$135,300
		(46)	(50)	(36)	(62)	(46)	(56)	(54)
3 or more	25th	\$101,384	\$105,000	\$109,300	\$108,100	\$110,100	\$112,800	\$112,700
	50th	107,981	109,350	118,000	116,800	123,800	125,000	\$126,200
	75th	120,000	124,924	130,000	130,000	141,000	140,500	\$145,300
	90th			155,000	155,800	153,900	155,900	\$159,000
		(65)	(66)	(69)	(69)	(94)	(101)	(114)
Full	25th	\$127,893	\$137,991	\$130,200	\$127,100	\$138,500	\$141,900	\$153,200
0–6	50th	147,488	163,870	145,200	152,300	159,100	157,300	\$172,000
	75th	177,840	180,365	174,600	181,100	185,000	185,400	\$194,000
	90th			205,500	208,100	208,500	203,000	\$220,000
		(54)	(60)	(65)	(84)	(66)	(79)	(78)
7 or more	25th	\$139,959	\$147,575	\$156,200	\$145,600	\$163,300	\$166,900	\$160,500
	50th	172,523	180,760	187,000	178,600	194,200	191,500	\$191,600
	75th	197,277	209,147	215,500	203,200	222,600	234,500	\$232,800
	90th			246,700	224,400	251,800	259,300	\$277,000
		(84)	(71)	(77)	(92)	(97)	(109)	(115)
Starting	25th	\$77,500	\$84,000	\$87,500	\$103,200	\$85,000	\$92,500	\$92,000
Assistant	50th	82,400	85,000	91,500	107,000	90,000	95,700	\$102,200
101035015	75th	85,279	93,150	98,500	110,600	104,100	113,300	\$116,000
	90th			NA	NA	NA	120,000	NA
		(27)	(13)	(09)	(12)	(11)	(19)	(15)

Table 1 includes the results from the fall 2012 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, as well as the quartiles.) The estimates are based on responses from 35 departments, plus a few individuals who responded to the survey. Questions regarding the tabulations should be addressed to Keith Crank at *kcrank@comcast.net*. If you would like your biostatistical unit to participate in future surveys, contact ASA Director of Programs Lynn Palmer at *palmer@amstat.org*.

Beginning with the 2009 survey, gender data were collected along with the salary information. Table 2 provides 2012 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	4	NA	\$ 97,100	NA	NA
	0	Female	9	\$ 92,000	\$ 101,000	\$ 112,200	NA
	1–3	Male	41	\$ 92,000	\$ 96,300	\$ 102,000	\$ 110,300
		Female	30	\$ 93,300	\$ 97,600	\$ 112,400	\$ 119,500
		Male	47	\$ 96,600	\$ 98,800	\$ 103,900	\$ 109,200
	4 of more	Female	32	\$ 97,300	\$ 101,900	\$ 112,600	\$ 119,100
Associate Professor	0–2	Male	38	\$ 104,600	\$ 115,000	\$ 125,000	\$ 135,300
		Female	15	\$ 106,900	\$ 116,700	\$ 125,000	NA
	3 or more	Male	71	\$ 112,000	\$ 123,000	\$ 137,000	\$ 160,800
		Female	39	\$ 112,000	\$ 127,500	\$ 145,300	\$ 154,900
Full Professor	0.6	Male	51	\$ 155,900	\$ 173,000	\$ 194,400	\$ 217,500
	0-0	Female	24	\$ 138,000	\$ 155,500	\$ 182,600	\$ 235,700
	7 or more	Male	83	\$ 160,500	\$ 191,600	\$ 232,900	\$ 279,700
		Female	25	\$ 146,300	\$ 177,700	\$ 219,000	\$ 255,300

**Table 2**—2012 Percentiles for the Groups in Table 1, Separated by Gender

In 2012, we continued to collect data on nonfaculty, academic statisticians and biostatisticians. Table 3 provides information about the salaries for full time, non-faculty, academic biostatisticians. (There were not enough responses for non-faculty, academic statisticians to provide any summary statistics.) Quartiles are provided for categories that have 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.

Highest Degree	Years Since Highest Degree	Count	1st Quartile	Median	3rd Quartile	90th Percentile
Master's	0–2	24	\$ 58,800	\$ 63,200	\$ 71,000	\$ 73,300
	3–5	21	\$ 61,900	\$ 75,000	\$ 83,700	\$ 88,100
	6–10	35	\$ 66,100	\$ 76,300	\$ 81,100	\$ 93,100
	11–15	19	\$ 76,200	\$ 85,300	\$ 104,300	\$ 112,800
	16 or more	18	\$ 85,700	\$ 91,900	\$ 113,000	NA
	All	117	\$ 65,900	\$ 75,600	\$ 87,400	\$ 104,300
PhD	All	26	\$ 85,600	\$ 99,300	\$ 113,300	\$ 131,600

### OUTREACH GROUP Statistics Without Borders Grows in Membership, Project Diversity

Rebecca Scherzer

Statistics Without Borders (SWB), an ASA outreach group, provides free statistical consulting to organizations and government agencies, particularly from developing nations that do not have the resources for statistical services. In support of nonpartisan and secular activities, SWB promotes the use of statistics to improve the health and well-being of all people. The group's vision is to achieve and implement the best statistical practice in the service of others.

From its beginning in October 2008 until August 2011, SWB grew to a membership of about 325. SWB now counts more than 600 statisticians among its all-volunteer membership. Members continue to be diverse, ranging from high-school students to highly experienced retired statisticians, and include statisticians from universities, industry, and government, as well as retirees. SWB also is becoming increasingly international, with many new members from every continent except Antarctica

One of SWB's current projects is a study with UNICEF on acute malnutrition in children in multiple West African countries, including Niger, Mauritania, and Senegal. SWB's project team is advising UNICEF on modeling seasonal accounts of new admissions and number of children in treatment and providing suggestions for improved methods for annual estimates of caseload. At present, the group's team is working with survey data from multiple countries with varying levels of coverage. It also is working with the International Medical Geology Association to link existing community epidemiological databases with environmental data to develop an index of cumulative pathogenic exposure.

Examples of other projects in which SWB has played an important role include the following:

Studies of early childhood mortality for UNICEF

Work with local Haitian authorities and representatives of other organizations in Haiti to assess the situation and potential difficulties for data collection following the 2010 earthquake

Surveys in India and Nepal and a series of initiatives in Africa to increase the number of girls going to school (through CARE)

Sample design for an evaluation of community case management for sick children in Rwanda (with the International Rescue Committee)

SWB strives to promote sound statistical practices so international health projects and initiatives are delivered more effectively and efficiently. Ultimately, volunteers want to make a difference in the daily lives of people throughout the world. Members of the outreach group are always eager to hear from organizations in need of statistical help or who wish to become partners. For further information, visit SWB's website at *http://community.amstat.org/statisticswithoutborders/home.* ■





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# **Preparing Master's Statistics Students for Success:** A Perspective from Recent Graduates and Employers

John Bailer, Roger Hoerl, David Madigan, Jill Montaquila, and Tommy Wright

The ASA Workgroup on Master's Degrees submitted its report to the ASA Board of Directors in November. This committee was charged by 2012 ASA President Bob Rodriguez to develop guidelines, framed as learning outcomes, for master's degree programs in statistics and biostatistics that are responsive to the needs of stakeholders who employ such graduates. The guidelines will reflect discussions with a variety of stakeholders in business and government to determine the needs of their master's degree–level statistical work forces. These guidelines will assist master's degree programs in statistics and biostatistics in aligning their curricula with desired outcomes.

#### What Did the Workgroup Do?

Names of 366 recent graduates were provided by 21 schools. Approximately 115 graduates from 13 schools were contacted to generate 29 completed phone interviews. The 19 employer responses were generated based on email contact with 68 employers. Organizations reflected in our employer surveys include university-based collaborative study centers/ academic medical research settings (5 of 19), federal government (3), contract research organizations (2), survey organizations (2), and financial/banking (2). The remaining organizations were represented: clinical trials consulting, pharmaceutical, public policy nonprofit, consumer products, clinical research organization, or manufacturing. Some employers responded based on experience in hiring for two industry types.

#### What Did We Learn?

A synthesis of these responses led to the following seven recommendations [words in brackets are workgroup commentary]:

Graduates should have a solid foundation in statistical theory and methods. [Graduates noted this was needed to both get and perform their first job. Employers assumed this to be a given and was viewed as a foundation required for learning new methods. The workgroup views this as an affirmation of the core taught in master's programs.]



Bob Rodriguez speaks with master's degree statistics students during his November 2012 visit to Miami University.

Programming skills are critical and should be infused throughout the graduate student experience. [Graduates viewed programming skills as necessary to get and perform their first job, but wished they possessed better programming skills and would like to see more programming added in their programs. Employers stated this more strongly and noted that programming differentiated top candidates for jobs from others; made hires successful; and reflected a required, critical, and desired skill, but that it was a deficit in recent hires. While SAS was mentioned more frequently than other environments, general programming skills beyond applying templates was a key feature that should be developed.]

Communication skills are critical and should be developed and practiced throughout graduate programs. [Graduates believed these skills were needed to perform their first jobs. Employers stated that they viewed these skills as differentiating between top candidates, that these skills are part of what makes hires successful, and that these were required and critical skills that were also a deficit in recent hires.]

Collaboration, teamwork, and leadership development should be part of graduate education. [Employers noted that being able to function in a team environment was observed in the most successful hires.]

Students should encounter non-routine, real problems throughout their graduate education. [The ability to think carefully through such problems and develop an analysis strategy was highly valued among employers. Schools should consider how to nurture and develop such skills.]

Internships, co-ops, or other significant immersive work experiences should be integrated into graduate education. [Graduates and employers commented on the value of such experiences that might involve consulting, project management, and teamwork experiences. Graduate programs might look to develop internships with local employers or on campus with other offices that might appreciate the assistance a statistics intern could provide. These experiences would help accomplish and reinforce previous recommendations, particularly recommendations 2–5.]

Programs should be encouraged to survey recent graduates and employers of recent graduates periodically as a means of evaluating the success of their programs and examining whether other programmatic changes are warranted. [Employer needs will likely evolve over time, and while it is hard to imagine that good statistical thinking will ever lose value, it is easy to imagine electives and other experiences in the graduate program will need to evolve over time. The workgroup believed this should be a review that would occur every 3–4 years. We encourage departments to maintain and update contact information for recent graduates to facilitate this survey.]

#### **Next Steps?**

This report reflected the perspectives of a snapshot of recent graduates and employers (see http:// magazine.amstat.org/wp-content/uploads/2013an/ masterworkgroup.pdf for the complete workgroup report). Members of the workgroup hope this report will be useful to programs offering master's degrees in statistics. In addition, the workgroup proposes this as a challenge for industry and government employers to work in partnership with academic programs to provide experiential learning opportunities that benefit current and upcoming generations of master's students in statistics and biostatistics.

Reactions to and feedback on the recommendations from this report are invited. Please comment at *http://magazine.amstat.org/blog/2013/02/01/ mastersworkgrou* or email ASA Executive Director Ron Wasserstein at *ron@amstat.org*. ASA member feedback will be shared with the ASA Board at the April 2013 board meeting. ■



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# The Future of the ASA's Electronic Publications

uring the last decade, the publications industry has undergone revolutionary change. Just a few years ago, most research journals were print-based; their organization and management were essentially the same as they had been for centuries. Now, virtually every journal is available electronically, and most new journals are electronic-only publications. Books, academic and otherwise, are undergoing comparably radical changes. This change from hardcopy to electronic media is opening new avenues and poses important challenges to the ASA.

The ASA publishes 16 journals; some are owned entirely by the ASA, and some are jointly published with other societies or publishers. These journals are foundational to the ASA's mission as a professional society because they disseminate knowledge and advance research. They also serve as a key source of revenue for our association, allowing us to provide other services to our members and society.

Clearly, change in the publishing industry will have a significant effect on the ASA. For that reason, 2012 ASA President Bob Rodriguez appointed a panel to consider the future of electronic publications. In November, the ASA Board received a report from the panel (*http://magazine.amstat. org/wp-content/uploads/2013an/ masterworkgroup.pdf*), which raised a number of important and complex issues.

Over the next few months, *Amstat News* will publish a series of articles to address these issues and seek feedback from the statistics community on how our association should manage publications going forward. Here



are some of the issues that will be addressed:

Electronic-only publication versus hybrid (print and electronic)

Open access to journals and how to pay for this access

Content in an electronic-only publishing world (data sets, code, case studies, discussion threads, gray literature, research-in-progress, etc.)

Living versus static publications (Should articles be immutable, or should they be corrected and updated in response to reader feedback?)

Alternative approaches to article submission and review

Interaction with the content (notifications, search capabilities, use of code with new data sets, and more)

In this, the first article in the series, we invite ASA members

and the rest of the statistics community to comment about issues related to journal structure and article submission. Here are some possibilities presented by current and anticipated capabilities in electronic publications and some questions that arise from them.

#### **Journal Structure**

There are numerous ways by which articles can be discovered, searched, and accessed easily. Most do not involve browsing through a particular journal to look for content of interest. In the future, will we need journals at all, or can they be replaced by articles collected in a repository (or networks of repositories) without a journal designation? In the shorter term, do we still need "issues" for journals that are published only electronically?

#### **Submission Process**

In the current system, authors select a journal to submit their

# One alternative is for authors to submit papers to a repository that allows reader comments and ratings.

work to. After review, the article may be declined, and the author often chooses to begin again with another journal. Multiple rounds of refereeing can result as the article moves from journal to journal.

One alternative is for authors to submit papers to a repository that allows reader comments and ratings and from which editors can invite authors to submit their work. The repository could allow for sophisticated methods of crowd-sourced review (see Peer Review). Another alternative is journal cascading, the strategy of automatically (with the author's consent) having a paper that is rejected by Journal A submitted to Journal B, in which case the reviews from the rejecting journal are sent to the second journal, along with author rebuttal/ explanation if the author so desires. Designed cascading could shorten the time to publication and saves on refereeing effort by reusing reviews.

Do either of these alternatives have appeal? What are their advantages and pitfalls? What



other approaches might simplify this process and increase its efficiency?

#### **Peer Review**

The current peer review process has served for generations as the way to measure and/or ensure the quality of an article. Peer review is the gold standard for determining whether articles are worthy of publication. While careful refereeing can lead to improvements in content and readability, it is also labor-intensive and slow, and it takes almost no advantage of the new capabilities of electronic publications.

Numerous methods have emerged that allow users to evaluate the content of material they receive. For example, material can be reviewed and rated by anyone, and the weight of these ratings can be adjusted for the expertise of the reviewer. Would such approaches have use or merit in evaluating research work?

Some journals are allowing reviewers and authors to interact directly as a way to speed up the review process while increasing the quality of the finished work. Does this model have appeal? What are its advantages and pitfalls?

Articles could be posted for open review by any reader for a period of time, after which the author could modify the work if needed and submit it through traditional means. This would have the advantage of getting preliminary work out and available, allowing authors to make their work known and to get relevant feedback. Does this approach have appeal? What are the problems associated with it?

We are eager to receive your comments about these matters. To comment, please go to the comment section in the online version of this article at *http://magazine.amstat.org*. All comments will be read by a panel appointed by the ASA Board to review and summarize feedback.

# Stephen Fienberg Chosen as 22nd Pfizer Colloquium Presenter

Nitis Mukhopadhyay, University of Connecticut-Storrs

Stephen E. Fienberg, Maurice Falk University Professor of Statistics and Social Science in the Department of Statistics at Carnegie Mellon University, was chosen as the 22nd Pfizer Colloquium presenter in the Distinguished Statistician series. He presented a colloquium in honor of David Salsburg, titled "Statistics in Service to the Nation."

The 72-minute lecture was professionally filmed on October 29, 2009, and is archived at the American Statistical Association.

In this film, Fienberg tells about his journey and explains how his mentors, Don Fraser and Fred Mosteller, influenced him to collaborate in solving a number of nationally important problem areas requiring both novel statistical input and new research. Fienberg made fundamental contributions in many of those areas.

Miron L. Straf, deputy director of the Division of Behavioral and Social Sciences and Education at the National Academy of Sciences, and Judith M. Tanur, distinguished teaching professor emeriti in the department of sociology at SUNY-Stony Brook, were invited guests.

Another film, titled "A Conversation with Stephen E. Fienberg," is 65 minutes long and dedicated to professor Harry O. Posten. In this conversation, Fienberg, Straf, and Tanur discuss Fienberg's life and research, his passion for solving practical statistical problems, and a career path that made him a living legend in our profession.

The Pfizer Colloquia by Distinguished Statisticians lecture series is sponsored by the Pfizer Global Research and Development at New London, Connecticut, the University of Connecticut-Storrs, and the ASA. Nitis Mukhopadhyay directs the project.

Inquiries about these films should be directed to ASA Continuing Education Associate Rick Peterson at *rick@amstat.org*. To view earlier films in this lecture series, visit *www.amstat.org/eseries/scriptcontent/ BEWeb/orders*. ■



# NISS Director Provides Update on Institute Activities

Alan F. Karr, Director of the National Institute of Statistical Sciences

# **NISS** National Institute of Statistical Sciences

The National Institute of Statistical Sciences (NISS) has been busy this year, with several new projects under way and an expanded presence, including new office space, in Washington, DC.

NISS, along with the American Institutes for Research (AIR), hired a postdoctoral fellow, Zhulin He, to work on Project TALENT, a longitudinal survey that originally took place with senior high-school students beginning in 1960. The original survey involved more than 400,000 students in 1,000 schools. The follow-up surveys will look at what has happened over the lifetimes of the original participants, including employment, health, and finance. NISS is part of an AIR team addressing many interesting statistical challenges such as survey weights and designing new data collections.

#### THE MYRTO LEFKOPOULOU DISTINGUISHED LECTURE AT HARVARD SCHOOL OF PUBLIC HEALTH

The annual Myrto Lefkopoulou Distinguished Lecture was initiated in 1993 in memory of Myrto Lefkopoulou, a former beloved faculty member and student in the Department of Biostatistics. Dr. Lefkopoulou tragically died of cancer in 1992 at the age of 34 after a courageous two-year battle.

Each year the Myrto Lefkopoulou Lectureship is awarded to a promising biostatistical scientist who has made contributions to either collaborative or methodologic research in the applications of statistical methods to biology or medicine and/or excellence in the teaching of biostatistics. Ordinarily, the lectureship is given to an individual within 15 years of receiving an earned doctorate. In the case of nominees without an earned doctorate, the Committee will make a relative adjustment of time in keeping with the spirit of the selection process. The lecture is targeted at a general scientific audience and is the first Department colloquium of each academic year. The lectureship includes travel to Boston, a reception following the lecture, and an honorarium of \$1000.

Previous lecturers have been Rafael Irizarry, Jeffrey Morris, David Dunson, Xihong Lin, Heping Zhang, Francesca Dominici, Jianqing Fan, Mark van der Laan, Geert Molenberghs, Marie Davidian, Danyu Lin, Bradley Carlin, Steven Goodman, Giovanni Parmigiani, Kathryn Roeder, Ronald Brookmeyer, Trevor Hastie, Hans-Georg Mueller, and Louise Ryan.

Nominations for next year's lectureship are currently being solicited and should be sent to the Myrto Lefkopoulou Lecture Committee, Department of Biostatistics, Harvard School of Public Health, 655 Huntington Avenue, Boston, MA 02115. Nominations should include a letter of nomination and a C.V. The deadline for submission of nominations is March 31, 2013.

Along with Duke University, NISS has hired Hang Kim as a postdoctoral fellow to work on the Triangle Census Research Network (TCRN). TCRN is one of eight awards made by the NSF-Census Research Network (NCRN), a partnership of the U.S. Census Bureau and the National Science Foundation. Ierome Reiter of Duke is the PI, and Alan Karr is the co-PI. TCRN is developing broadly applicable methodologies that transform and improve data dissemination practice in the federal statistical system. Among other things, they are working on developing a microsimulation modeling framework for surveys.

NISS, jointly with Cornell University, was awarded a grant from NSF to operate the NCRN Coordination Office (NCRN-CO). NCRN-CO facilitates communication and collaboration among the eight research nodes, as well as with other key stakeholders, including the federal statistical (FedStats) agencies, academia, and the private sector. A dedicated website—*www.ncrn. info*—will be online soon.

Over the past five years, the NISS "DC presence" has expanded steadily, especially under the leadership of Associate Director Nell Sedransk. In addition to Sedransk, NISS staff located in Washington include Larry Cox, assistant director for official statistics; three people working together with Karr for the National Center for Education Statistics (NCES) via the Education Statistics Support Institute-Bruce Daniel, senior analyst; Joy Edington, research analyst; and David Yang, research associate-and postdoctoral fellows He and Weiwei Cui.

Among Sedransk's many achievements are a regular series of research discussions among DC personnel and the procuring of office space in the ASA building in Alexandria, Virginia.

The work for NCES is a major component of NISS and currently includes constructing software to support safe release of student performance data at the individual school level; modernization of data from the 1980s High School and Beyond surveypartly with a plan potentially to link HSB to other databases; implementation of the comparable wage index—a geographical adjustment tool for comparing educational expenditures across districts and states; evaluation of the Teacher Compensation Survey; and support for NCES' Statistical Standards Program and the National Assessment of Educational Progress.

During the past year, we completed work on the travel time reliability project funded by the Transportation Research Board of the National Academies. Partners in this project were the Institute for Transportation Research and Education at North Carolina State University, Kittelson & Associates, Inc., Berkeley Transportation Systems, the University of Utah, and Rensselaer Polytechnic Institute. The group created a traffic system manager's guidebook on travel time reliability. Our contribution focused on multiple insights about travel time distributions and different data sources.

Continuing projects include research on surveys supported by the National Center on Science and Engineering Statistics at the NSF, online reading comprehension assessment supported by the Institute for Education Sciences, and research stemming from the 2012–2013 SAMSI program on data-driven decisions in health care. ■

#### DISCOVER STATISTICAL ANALYSIS AND DATA MINING JOURNAL

The *Statistical Analysis and Data Mining* journal of the American Statistical Association addresses the broad area of data analysis, including data mining algorithms, statistical approaches, and practical applications. Topics include problems involving massive and complex data sets, solutions using innovative data mining algorithms and/or novel statistical approaches, and the objective evaluation of analyses and solutions.

Of special interest are articles that describe analytical techniques and discuss their application to real problems in such a way that they are accessible to domain experts across science, engineering, and commerce.

David Madigan of Columbia University is the current editor. The journal costs \$25 for ASA members. To order, visit Wiley's online library at *www.wileyonlinelibrary.com/journal/sam*. Wiley also offers ASA members free three-month access to more than 20 journals. For details, visit *www.statisticsviews.com*.



# **Design and Analysis of Computer Experiments Featured in February Issue**

Hugh A. Chipman, Technometrics Editor

ith increased use of large and complex computer models and growing interest in the field of uncertainty quantification, the design and analysis of computer experiments is seeing considerable research activity. This issue reflects this activity, with five articles and one note concerning recent extensions, generalizations, and applications of computer experiments.

Gaussian process models have become a popular statistical technique for emulating expensive computer experiments and can be used to optimize a computer model efficiently. When the computer model is subject to noise, with Monte Carlo simulators for example, the design and analysis of computer experiments takes a few twists. In the lead article, "Optimization of Noisy Computer Experiments with Tunable Precision," Victor Picheny, David Ginsbourger, Yann Richet and Gregory Caplin address kriging-based optimization of stochastic simulators. Many of these simulators depend on factors that tune the level of precision of the response, the gain in accuracy being at a price of computational time.

The contribution of this work is two-fold. First, it proposes a quantile-based criterion for the sequential design of experiments, in the fashion of the classic expected improvement criterion, enabling an elegant treatment of heterogeneous response precisions. Second, a sequential design strategy is augmented to include a procedure for the allocation of the computational time given to each measurement, allowing a better distribution of the computational effort and increased efficiency. The optimization method is applied to an original application in nuclear criticality safety. This article features discussion by **Alexander I. J. Forrester, Robert B. Gramacy, Jack P. C. Kleijnen, Peter Z. G. Qian, Pritam Ranjan, Rui Tuo,** and **C. F. Jeff Wu**, as well as a rejoinder by the authors.

Various aspects of computer experiments are explored in several other papers in this issue. In "Sequential Design and Analysis of High-Accuracy and Low-Accuracy Computer Codes," Shifeng Xiong, Peter Z. G. Qian, and C. F. Jeff Wu develop a methodology for multiple deterministic computer codes with different levels of accuracy. Using evaluations of the two models at a pair of nested Latin hypercube designs, an initial prediction model is estimated. Depending on the accuracy of the fitted model, the two codes are evaluated iteratively with input values chosen in an elaborate fashion so their expanded scenario sets still form a pair of nested Latin hypercube designs. The nested relationship between the two scenario sets makes it easier to model and calibrate the difference between the two sources, resulting in more accurate emulation.

In computer experiments in which simulators produce multivariate output, the common practice of specifying a Gaussian process with a separable covariance structure can lead to poor performance of the emulator, particularly when the simulator outputs represent different physical quantities. In "Multivariate Gaussian Process Emulators with Nonseparable Covariance Structures," Thomas E. Fricker, Jeremy E. Oakley, and Nathan M. Urban develop nonseparable covariance structures based on the linear model of coregionalization and convolution methods. Using two case studies, they find that only emulators with nonseparable covariances structures have sufficient flexibility to give both good predictions and represent joint uncertainty about the simulator outputs appropriately.

In the paper, "Gaussian Process Modeling of Derivative Curves," Tracy Holsclaw, Bruno Sansó, Herbert K. H. Lee, Katrin Heitmann, Salman Habib, David Higdon, and Ujjaini Alam develop a Gaussian process-based inverse method that allows for the direct estimation of the derivative of a onedimensional curve. The resultant fit is computationally efficient and more accurate than fitting a curve to the data and then differentiating. An important cosmological application is used to demonstrate the method.

In mixture experiments, two or more inputs represent a percentage contribution and are constrained to sum to 100%. The resultant correlation between input variables implies that additional care must be taken when fitting statistical models or visualizing the effect of one or more inputs on the response.

In "Global Sensitivity Analysis for Mixture Experiments," Jason L. Loeppky, Brian J. Williams, and Leslie M. Moore consider the use of a Gaussian process to model the output from a computer simulator taking a mixture input. They introduce a procedure to perform global sensitivity analysis, providing main effects and revealing interactions. The resulting methodology is illustrated using a function with analytically tractable results for comparison, a chemical compositional simulator, and a physical experiment.

The three remaining papers in the issue consider problems other than computer experiments. To provide consistently high-quality service in computer networks, several aspects of the network must be monitored, including traffic volumes on its links. As network sizes expand, such monitoring becomes increasingly resource-hungry. The paper "Network-Wide Statistical Modeling, Prediction, and Monitoring of Computer Traffic," by Joel Vaughan, Stilian Stoev, and George Michailidis, considers the monitoring of only a small subset of links, using this data to predict the traffic on other, unobserved links. Auxiliary data are used to represent important structure in the network and can significantly improve the results of prediction. An adjusted control chart methodology also is introduced, indicating a possible application of prediction results in situations where all links may be observed.

Importance sampling aids in establishing alarm thresholds for instrumentation used worldwide to deter/detect nuclear threats. In "Quantile Estimation for Radiation Portal Monitoring," **Rick Picard, Tom Burr**, and **Michael S. Hamada** review the statistical aspects of threshold determination, discuss the intuition behind the methodology, and show when simple techniques work well and when they do not. Computational efficiencies relative to ordinary simulation are improved by orders of magnitude in many cases, and the approach is easily implemented by non-experts.

The issue concludes with an extension of the lead article from the August 2012 issue. The original paper proposed a new deterministic approximation method for Bayesian computation, known as design of experiments-based interpolation technique (DoIt). A major weakness of this method is that the approximated posterior density can become negative. In the technical note "A Note on Non-Negative DoIt Approximation," V. Roshan Joseph modifies his DoIt approximation, guaranteeing non-negativity of the approximated density. The new approximation is much simpler and faster to compute.

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### JOURNAL OF COMPUTATIONAL AND GRAPHICAL STATISTICS HIGHLIGHTS JCGS Celebrates International Year of Statistics

Rich Levine and Thomas Lee



Adapted from Figure 4(b) of "Statistical Challenges in Biological Networks" by George Michailidis from the December 2012 issue of *JCGS* 

# SYSTEMS

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**F**irst, we officially welcome Thomas Lee as the new *JCGS* editor. Lee came on board July 1, 2012, handling all new manuscript submissions. Rich Levine will continue putting the *JCGS* issues together for most of the 22nd volume in 2013, changing his title to *JCGS* past editor.

### Special Issue on Networks and Their Applications

**ICGS** kicked off the International Year of Statistics early with an issue devoted to networks and network models, disseminated right before the New Year (Volume 21, Issue 4). Network data has hit the mainstream with the popularity of social media sites Facebook, LinkedIn, Twitter, and now Google+, as well as blog discussions. And with ever increasing computational power and technological innovations, analysis of graphs and inferences under graphical models have come within our grasp in a wide array of scientific applications. The issue begins with a historical review of developments by Steve Fienberg. Reviews of biological networks by George Michailidis and social networks by Dave Hunter, Pravel Krivitsky, and Michael Schweinberger highlight the issue, as well.

### Featured Discussion on InfoVis

The first official 2013 *JCGS* issue (Volume 22, Issue 1) features a discussion piece by **Andrew Gelman** and **Antony Unwin**, "Infovis and Statistical Graphics: Different Goals, Different Looks." Discussants **Steve Few, Robert Kosara, Paul Murrell**, and **Hadley Wickham**, along with Gelman and Unwin, continue the conversation about the role and place of the statistical graphics field in data visualization and as a contributor to infographics or information visualization, hugely popular in modern-day media venues. Playing off that theme, the issue also includes research articles in graphical statistics. At the risk of playing into the concerns stated therein, a visually attractive issue to start the New Year!

### Special Issue on Advances in MCMC

Changing up the promise in the Volume 21 editorial (2012 March issue), we decided to move our MCMC special issue to this 2013 celebratory volume. The issue will be dedicated to papers spun off from the top contributions at the Advances in MCMC Workshop at the International Centre for Mathematical Sciences in Edinburgh, co-organized by Mark Girolami, Antonietta Mira, and Christian Robert.

#### **JCGS Outreach**

JCGS will again host invited sessions at the Interface Symposium, to be held at Chapman University in April and JSM in August. As has become a tradition, the former session will include a potpourri of topics, "JCGS Highlights at the Interface," fitting the symposium theme of "Big Data and Analytics." The JSM session, "JCGS Selections: Lassoing the Year of Statistics into an Elastic Net," will include talks by Howard Bondell, Mark Culp, and Noah Simon from articles appearing in Volume 22 about a supervised learning and variable selection theme.

Remember, all members of the ASA, IMS, and IFNA enjoy free online access to JCGS. For details, visit *www.tandfonline. com/toc/ucgs20/current.* 

### <sup>175</sup> My Friend Statistics

hen I received a request to write a column about some of my statistical activities to help celebrate the ASA's 175 years, I reviewed the last 65 years or so. I came to one conclusion: I must thank my friend Statistics. She has opened many doors for me, as she has introduced me to so many outstanding statisticians. It has been amazing!

When I started my graduate work in the late 1940s, I did not realize she was there. But, clearly, she was at my side when I worked on my thesis. While difficult, it was fun for me, and my friend Statistics always tried to keep it that way throughout my professional career.

After I joined the mathematics faculty at Iowa in 1950, Allen Craig and I would frequently take a break in the late afternoon and have a cup of coffee; we always brought Statistics along. As she didn't drink coffee, she was a cheap date, and the two of us would talk about her, even though she was right there. She didn't seem to mind. It was the beginning of a love affair.

I realize she was guiding me all the time as I did the following in my career:

Taught, researched, and wrote—particularly the textbooks Hogg and Craig, Hogg and Tanis, and Hogg and Ledolter

Formed a department of statistics at the University of Iowa in 1965

Overcame my initial shyness and participated fully in meetings. It helped that I was program secretary for IMS through much of the 1970s

Began working on statistical education by serving on the joint ASA/NCTM committee. I was able to change the section's name from Training to Statistical Education

Found a new research partner, Ron Randles, in the 1970s with whom I worked on distributionfree robust procedures

Through the 1980s and early 1990s, I became a fan and good friend of W. Edwards Deming by my modest efforts in continuous quality improvement. I'll always remember Ed's question, "Why are we here?" and his answer, "To have fun." I practiced that!

Probably serving as president of the ASA in 1988 was by biggest professional honor. I certainly was not a great president, but I probably had more fun than most of them.

After being president, I was program chair of two excellent winter meetings: On Statistical Education in 1992 in Louisville and On Continuous Quality



Improvement in 1994 in Atlanta. There were more than 600 statisticians, including 200 students, at each. Oh, in 1992, we started the College Bowl that Bowling Green won, shocking the "big boys." More people told me one or the other was the best meeting they had ever attended. For IMS and the ASA, I really encouraged people to attend meetings.

My friend Statistics was at my side through all of this. Then, she suggested I stick with revising my texts. The 7th edition of Hogg and Craig, now with the great help of Joe McKean, and the 9th edition of Hogg and Tanis, now with Dale Zimmerman, will appear in 2014.

But Statistics noted I was alone in my personal life as my first wife, Carolyn, died in 1990. Statistics encouraged me to go out some. I met Ann, fell in love, and we married in 1994. (I might say it is tough dating when you are 69 years old. Ann preferred to marry a man in his sixties, rather than one in his "eighth decade," so we were married just before my 70th birthday.) My three ladies— Statistics, Carolyn, and Ann—have been most important to me. Of course, my four children and eight grandchildren are among the top as well.

As I look back on my professional life, I have my love, Statistics, to thank for all whom I've interacted with. These included (and on a first-name basis) C.R. Rao, David Cox, John Tukey, George Box, Stu Hunter, Eric Lehmann, Ingram Olkin, Brad Efron, Frank Graybill, Fred Mosteller, Oscar Kempthorne, Gerry Hahn, Myles Hollander, H. O. Hartley, Manny Parzen, Richard Savage, Jerzy Neyman, P.K. Sen, Xihong Lin, Jack Kiefer, and David Blackwell. I'm sorry if you know me well and I didn't list you, but you should be pleased you are still alive, as many on this short list are dead.

Back in the 1940s, I never dreamed I would know people like these! I hope all of you love Statistics half as much as I do. With that, I close with one verse of my version of Bob Hope's song:

Thanks for the memories, Statistics started with a bang, While her praises I often sang, But now it's time to part, So I thank her with all my heart, How lovely she is! ■

### STATtr@k Statisticians' Place in **Big Data**

Sherri Rose

B ig Data has become the new buzz phrase in the world of information collection and analysis. The experiments we conduct and the observational data we collect continue to grow in size, due to rapidly expanding technology.

Large data sets also have drawn the attention of young people, with undergraduate and graduate students choosing computer science, engineering, and statistics for their programs of study. Each of these disciplines brings something unique to the table when discussing the challenges of Big Data, and interdisciplinary collaborations are becoming increasingly common.

Statisticians have a distinct and essential role to play in this new world of Big Data. The multidisciplinary teams statisticians are a part of may include medical doctors, political scientists, economists, or lab scientists. We, as young statisticians, are likely to repeatedly work in new and different application areas as our careers continue. Regardless of the subject matter, we need to have a key position throughout each entire study, not just after the data has been collected.

Even as a graduate student, I encountered multiple situations in which I was approached by potential collaborators who had already implemented their study design and spent countless dollars gathering data. Sometimes this will work. However, in my experiences, important variables weren't collected or certain types of subjects were mistakenly excluded because a statistician wasn't involved from the beginning. In the worst scenarios, they could not answer their main research questions with the data at hand.

I know I am not alone in these experiences, and I often recollect the famous R. A. Fisher quote: "To call in the statistician after the experiment is done may be no more than asking him to perform a post-mortem examination: He may be able to say what the experiment died of."

This brings us to one of our first responsibilities as new statistician members of interdisciplinary teams. Defining the research question is a collaborative effort, and statisticians play a critical part in translating the scientific question into a statistical question. This includes carefully describing the following:

- Data structure
- Everything we know about the underlying system that generated the data (the model)
- What we are trying to assess (the parameter or parameters we wish to estimate)

My introduction to statistical models as an undergraduate was in the context of parametric models, which make strong assumptions about the form of the underlying system that generated the data. However, in very large data sets, our background knowledge may not support these assumptions. Fortunately, we can instead make fewer assumptions about the probability distribution that generated the data using so-called nonparametric or semiparametric models, incorporating all appropriate background knowledge. Similarly, our parameter of interest for effect questions need not necessarily be a coefficient in a parametric regression model. We can define different features of our probability distribution, depending on our research question.

Our next major role is the estimation of our parameter(s). This may require implementing commonly used methods, developing a new method, or integrating techniques from other fields to answer our problem. In many cases, Big Data will not be served well by "off the shelf" methods that work in lowdimensional, less complicated settings. Our work as statisticians does not stop there; we must be involved in the dissemination of the results, including accurate interpretations of what our estimates mean.

In an article I wrote for *Significance* ("Big Data and the Future," Volume 9, Issue 4), I highlighted several areas that create high-dimensional data in which statisticians are becoming immersed in scientific research teams. These included neuroimaging, post-market safety analysis, celiac disease, and air quality. The main theme in these seemingly disparate fields is that they are producing large amounts of data, requiring tailored statistical methods and statisticians who have a deep understanding of the science.

While we may be trainees, our background in the fundamentals of statistics provides us with many tools to contribute immediately. As junior faculty, principal investigators, mathematical statisticians, and in other starting positions across academia, industry, and government, we will join collaborative teams as statistical specialists. We need to take the time to understand the science behind our projects before applying and developing new methods. The importance of defining our research questions will not change as methods progress and technology advances. A firm basis in statistical tenants will allow us to both adapt as techniques improve and incorporate new approaches. Thus, we must also embrace the incorporation of computer scientists, engineers, and researchers in our collaborative teams to reach effective solutions.

### MASTER'S NOTEBOOK My Climb Up the Corporate Ladder: Lessons Learned

o you remember being asked what you wanted to be when you grew up? My answers varied from veterinarian to nurse to civil engineer. I can say with certainty I never once muttered "statistician."

In hindsight, I do see why I am now a statistician. I have always loved science first and math second. My path in life fortuitously led me to a successful career that I find extremely rewarding. I routinely use both science and math! As a bonus, I get to live in North Carolina, an area that is diverse for my outdoor hobbies, allows me to be close to family, and helps keeps balance in my life.

At St. Olaf College, I was a nursing major for my freshman and sophomore years. When I began rotations in the clinic, I quickly recognized I may not have picked a suitable profession for me so I changed to a biology major with a concentration in Asian studies. This change made sense since I still loved science and Asian culture was a new pursuit I found fascinating and wanted to learn more about.

I worked in various immunology and molecular research labs for nearly six years before statistics found me. During this time, I realized that summarizing data at the end of experiments was always enjoyable for me. An insightful, but informal, mentor suggested the field of statistics.

Although I deliberately made a long-term goal to make a career change, it was still a risk. I moved my family from upstate New York to Iowa in hopes of being able to get another laboratory job while I took the prerequisite math and statistics courses needed to apply to the Iowa State University statistics graduate program. It was worth the risk. With a lot of hard work, study teams, and long hours, I completed my MS in statistics while working in a veterinary pathology lab.

Since completing my MS more than 15 years ago, I have worked with several organizations, including Wake Forest University Medical School, a CRO, and GlaxoSmithKline (GSK). These opportunities enabled me to gain diverse experiences in clinical trials (phases 1–4), observational family genetic studies, and consulting in distinctly different settings. My experiences in therapeutic disease have included oncology, HIV, cardiovascular, and respiratory.

I was asked to write this column about "climbing the corporate ladder" as a MS-level statistician. Now you know where I've been. Where am I now? I am a director of statistics at GSK in the early development of oncology medicines. I manage a group of nine statisticians who support more than 20 oncology compounds in various clinical trials, biomarker analyses, and companion diagnostics critical for the drug development of targeted therapies.

I spent years working on later-phase studies and regulatory submissions. My time these days is spent in many meetings discussing long-term drug development plans, reviewing documents (e.g., protocols, analysis plans, reports summarizing clinical trial results, manuscripts, abstracts), and hopefully being a valuable team member and manager of my staff.

There are some principles I believe have been key to what I consider a successful career thus far. Let me explain what they are and how I think they enhanced my career.

**Keep Learning.** Drug development is a competitive business. The strides science, study designs, and ways of summarizing complex data have made in targeted therapies are exciting! But, to keep competitive, you have to be eager to continue learning and willing to seek help. I've always made it a priority to understand not just statistics, but the disease area I'm working on.

I had to proactively seek some learning; however, much of it has been from others on the job. I have never been afraid to ask questions or too proud to say I don't understand something. As I'm newer to early development, some of my staff has more experience than me on Bayesian and other adaptive designs that are more common in phase 2 studies than later-phase studies, where most of my personal experience has been. Although a bit overwhelmed at first, I'm enjoying learning these designs more than I ever anticipated! My knowledge base has grown, and is diverse because of this simple approach: Ask a lot of questions and learn daily.

Always Be Engaged. I am a contributing member of many teams. My contributions include offering ideas about approaching tasks, listening, learning from others, accessibility, explaining statistics or summarizing data in a way the entire team can understand, and delivering my tasks on time with quality. Putting high value on the teams I work with is further demonstrated by respect, integrity, clear communication, sharing praise, and squarely accepting accountability.

**Work Hard.** Nothing can replace hard work. Everyone expects me to be a competent statistician. I have always worked diligently at delivering on this expectation, but, to me, that is only what makes me a satisfactory employee. Taking the extra steps such as understanding the other disciplines I routinely work with, volunteering to take on an extra project when a team is under extreme stress, and offering my time and effort to things outside of my immediate job remit (e.g., company committees, mentoring, outside organizations, etc.) is what can separate the good from the great employee.

**Embrace Change.** It sounds like a cliché, I know. Recognizing change as an opportunity has helped me diversify. Sometimes, change can be in the process used regularly, the structure of an organization, an approach to an analysis or design, or the loss of a critical team member. Like most, I can be uncomfortable with change, but I have always tried to understand why the change is taking place, look at the opportunity within that change, and focus on those aspects. Change can be a worthwhile risk. Beyond that, I just make the best of it and keep a positive attitude!

Find Mentors and Be a Mentor. Cultivating mentoring relationships is extremely rewarding. I seek out people whom I respect, have a wide knowledge base, and are strong leaders. I watch, listen, and ask questions of these people. Most times, these are informal mentoring relationships. These mentors have been beneficial in helping me make long termgoals and model myself into a better leader. They also have opened doors to new opportunities.

I volunteer to be a mentor to others via several organizations, as I get as much out of being a mentor as I do from using one.

A Successful Career Should Be Rewarding and Enjoyable. As applied statisticians, we apply statistics to real data. For me, these data are based in the science of medicine and oncology. Since we picked statistics as a career, I assume we all have an interest in the field of statistics (with some skills in math). My interest and prior experience in science really allowed me to connect with clinicians through a common language and fully understand the data we analyze. I enjoy applying statistics to science.

And, as far as rewarding, there is nothing like experiencing an approval of a new drug you worked on for years! Seeing that drug become available to a population of patients who have few other options in the treatment of their disease brings me great pride and satisfaction.

**Balance Life and Work.** Although I do work hard, I also play hard. I value my time off doing the extracurricular pursuits I enjoy with the people I love. It is true, my career is more than a job to me, but my family and friends are highly important as well. Balance in my life keeps me energized for my career.

A BS, MS, or PhD in statistics gives us a foundation of skills we can work to develop throughout our career. Although I recognize there are careers that may be limited by a degree, I've been fortunate in finding a path by welcoming change, learning, mentoring, working hard, and being a leader. These behaviors launched opportunities for me that have resulted in advancing my career. I'm excited to think what I'll have experienced 10 years from now! ■



### International Year of Statistics Kicks Off Jeffrey A. Myers, ASA Public Relations Coordinator

The ASA and more than 1,400 organizations in 109 countries last month kicked off the International Year of Statistics (Statistics2013), a worldwide initiative promoting the contributions of the statistics field to finding solutions to global challenges. The goals of this awareness campaign are to do the following:

Increase public understanding of the power and impact of statistics on all aspects of society

Nurture statistics as a profession, especially among highschool and college students

Promote creativity and development in the sciences of probability and statistics

Statistics2013 participants include national and international professional societies, universities, schools, businesses, government agencies, and research institutes in countries ranging from Algeria to Iran and North Korea to Vietnam. These groups are helping millions of people around the world understand the value of statistical science through seminars, workshops, and outreach to students and the media.

The campaign's primary message to lay audiences is that statistics is much more than numbers on sports pages. "Statistical science has powerful and far-reaching effects on everyone, yet most people are unaware of how it improves their lives," says ASA Executive Director Ronald L. Wasserstein.

"For most people, statistics is an invisible science," continues Wasserstein. "Through this yearlong, worldwide awareness campaign, we will remove the veil that cloaks statistics from the public consciousness."

In addition, the campaign is targeting high-school and college students with the message that statistics is a growing, diverse, and rewarding career field. "Our world is increasingly data-rich and data-dependent and therefore all types of businesses and government agencies need statisticians to analyze this data," explains Wasserstein. "As a result, the demand for statisticians is growing by leaps and bounds and the trend shows no sign of weakening.

"Throughout 2013, we will introduce students to careers in statistics and open their eyes to the bountiful opportunities that await them," says Wasserstein.

Central features of the campaign are its website—*www. statistics2013.org*—and an informative two-and-a-half-minute video—"Why Statistics Is Important to You"—that explains how statistics improves the lives of the world's 7 billion people.

The public website, launched Jan. 1, includes the following:

*What Is Statistics?*—An explanation in layman's language

*Stats2013AtSchool*—A statistics quiz for students

*Statistics as a Career*— Information about the work of statisticians and careers in statistics

*Educational Resources*— Teaching aids for elementary and high-school teachers, including the Census At School program

Informational Resources—A downloadable flyer and posters

*Participant Area*—A dedicated section with a calendar of activities, roster of participating organizations, and other helpful resources

The launch of Statistics2013 was hailed in social media circles by ASA members and other statisticians around the world. "Who says that statisticians are never certain about anything? I'm 100%

sure 2013 is the International

Year of Statistics!" wrote akc1970 on Twitter.

The ASA joins the Institute of Mathematical Statistics, International Biometric Society, International Statistical Institute (and the Bernoulli Society), and Royal Statistical Society as founding organizations of Statistics2013.

Go to the "Statisics2013 Global Supporters" section at *www. statistics2013.org* to learn how to get involved in promoting statistics in your community.

# The Sri Lankan Journal of Applied Statistics

P. Wijekoon, Chief Editor

The *Sri Lankan Journal of Applied Statistics (SLJAS)*, published by the Institute of Applied Statistics in Sri Lanka (IASSL), welcomes critical reviews, including conceptual discussions, opinions, and book reviews.

A refereed journal, *SLJAS* publishes the results of original work on applications of statistics and theoretical and methodical aspects of statistics.

The official language of the journal is English. The preferred form of typesetting is Microsoft Word, but papers in LaTeX are accepted. Keep the number of pages to fewer than 16 in B5 size.

The paper should contain title, authors' names, affiliation/address, emails, an abstract, up to six keywords, introduction, materials and methods, analysis and results, conclusions and recommendations, acknowledgements, and references. However, a paper may contain other sections as appropriate.

Each paper is reviewed by experts in the particular subject area of the paper, selected from an international panel of reviewers. Papers recommended by at least two reviewers are accepted for publication. The review process is carried out independently and anonymously.

Papers and a letter of submission should be sent electronically in .pdf or .doc format to the editor of the journal at *editor@iappstat.lk*.

Instructions to authors are available at the IASSL website, www.iappstat.lk/journal/ojs/Instructions-toauthors.pdf. Go to the Online Submission page of the IASSL website, www.iappstat.lk/journal/ojs/index.php/ sljap/index.

# Call for Proposals for Late-Breaking **JSM Sessions**

Bhramar Mukherjee, JSM 2013 Program Chair

#### Note from the JSM 2013 Program Committee Chair

I would first like to thank the many speakers, organizers, and members of the JSM program committee for contributing to an exciting and diverse program for JSM 2013. From Big Data to the history of statistics, the JSM 2013 program features topics that range from the contemporary to the classic. Additionally, there are several wonderful theme sessions celebrating the spirit of the International Year of Statistics.

#### **Sponsoring Organizations and Partner Societies**

American Statistical Association\* • Institute of Mathematical Statistics\* • International Biometric Society (ENAR and WNAR)\* • International Chinese Statistical Association • International Indian Statistical Association • International Society for Bayesian Analysis • Korean International Statistical Society • Statistical Society of Canada\*

\*Indicates founding societies of JSM

#### International Conference on **Health Policy Statistics**



#### Chicago, Illinois • October 9-11, 2013

The International Conference on Health Policy Statistics (ICHPS) will focus on creating interfaces between methodologists and sophisticated health service researchers, health economists, and policy analysts so they can exchange and build on ideas that they will disseminate to the broader health policy community.

#### Abstracts will be accepted from February 26-April 11, 2013

See www.amstat.org/meetings/ichps/2013 for details.



lanning for the JSM 2013 program began last July, so most of the technical sessions have already been organized. While advance planning is needed to organize such a large meeting, it prevents us from scheduling sessions on recent developments of great interest in which statistical issues are relevant. Thus, there are two invited session slots reserved for late-breaking issues, and any member of the sponsoring organizations or partner societies can propose such a session.

A late-breaking session must cover one or more technical, scientific, or policy-related topics that arose in the one-year period prior to JSM 2013. Proposals for late-breaking sessions must be emailed to JSM 2013 Program Chair Bhramar Mukherjee at bhramar@umich.edu with a copy to the ASA Meetings Department meetings@amstat.org by at

April 15. The proposal must include the following:

Session description, including a title, summary of statistical and scientific content, an explanation of the subject's timeliness, and comments about the target audiences

Format of the session (e.g., a chair and four panelists; a chair, two or three speakers, and a discussant)

Names, affiliations, and contact information for the session organizer, chair, and all participants (speakers, panelists, discussants)

A title for each presentation in the session

Web links to relevant technical reports or news reports, if applicable

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

Two late-breaking sessions will be selected from the proposals received by the deadline (subject to approval by the ASA Committee on Meetings). Proposals will be judged on statistical and scientific quality, novelty, and timeliness of the subject matter; potential audience appeal; and completeness. A description of the late-breaking sessions and other special sessions will appear in a future issue of Amstat News. Please submit your proposals and help us put this final touch on the impressive JSM 2013 program. ■

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## Gosset Plaque Erected in Honor of 'Student'



The new plaque honoring statistician William Sealy Gosset is displayed at the Saint Patrick's Boys National Primary School in Dublin, Ireland.

n October 16, 2012, the 75th anniversary of William S Gosset's ("Student's") death, a plaque was erected on Saint Patrick's Boys National (Primary) School, Holly Park, Blackrock County, Dublin, Ireland, as a reminder that Gosset lived in Hollyville Park between 1913 and 1935, when he was employed at Guinness Brewery. The dwelling house, which stood on the site of the school, was demolished in the early 1960s.

The erection of the plaque was a joint venture between the Irish Statistical Association and Dun Laoghaire Rathdown County Council, the local authority.

It is carved on a piece of smoothly textured purple/ blue slate from Valentia Island, County Kerry, which is in the southwest of Ireland.

The inscription is in both Irish and English, and the inscribed curves are based on Diagram II of Gosset's March1908 *Biometrika* paper, "The Probable Error of a Mean."

The logos of the Irish Statistical Association and the school are incorporated into the plaque, in addition to that of the county council.

A poster outlining the life and work of Gosset, which incorporates period photographs of him with his brothers and children, him with his fellow Guinness employees, and the original house, as well as a reproduction of the first two pages of the March 1908 *Biometrika* paper was presented to the principal of Saint Patrick's School, Helen Kelly. The poster has been put on display in the school.

The University of Florida (UF) has named leading statistics researcher, **Peihua Qiu**, the founding chair of its department of biostatistics.

Qiu is currently a professor at the University of Minnesota's School of Statistics. He will begin heading the new department, which is administered jointly by the UF College of Public Health and Health Professions and the College of Medicine, on July 1.

"The position was attractive to me for several reasons," Qiu said. "I feel the environment at the UF Health Science Center is very supportive of the biostatistics department, especially the top administrators, who recognize the importance of biostatistics. With six health colleges and several institutes at UF, there are enormous resources and collaboration opportunities for the department. There is great potential for the biostatistics department to grow."

Qiu is a Fellow of the American Statistical Association and the Institute of Mathematical Statistics and an elected member of the International Statistical Institute. He also was named editor of *Technometrics* for a threeyear term beginning this year.

UF's department of biostatistics was created in 2010 and brings together biostatistics faculty from the colleges of public health and health professions and medicine. For more information about the UF Department of Biostatistics, visit www.biostat.ufl.edu.

#### CORRECTION

ASA member Marc G. Genton was inadvertently left off the list of new AAAS Fellows that appeared in the January issue of *Amstat News*. We regret the error. **C. F. Jeff Wu** is the 2012 recipient of the U.S. Army Wilks Award, presented during the Army Conference on Applied Statistics held last October in Monterey, California.

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."

Wu was honored for his many pioneering and landmark contributions to the advancement of statistical theory and practice spanning the fields of survey sampling, EM algorithm, asymptotics, resampling methods, experimental design, computer experimentation and data synthesis, robust parameter design, and industrial statistics. Specific to Army problems, his early research on sequential designs for quantal response models addressed critical issues of how to conduct sensitivity experiments efficiently when testing is destructive and expensive.

Related contemporary research results, exploiting recent developments in representing intricate physical processes, have promoted fast surrogate model techniques for accurately approximating sophisticated simulations and have spawned a number of innovative design and analysis methodologies with broad applicability.

After earning his PhD in statistics from the University of California at Berkeley in 1976, Wu began his academic career at the University of Wisconsin-Madison (1977–1988, including Army Mathematics Research Center affiliation). Subsequently, he moved to the University



C. F. Jeff Wu

of Waterloo (1988–1993), University of Michigan (1993– 2003), and Georgia Institute of Technology (2003–present).

He is an elected member of the National Academy of Engineering and a Fellow of the Institute of Mathematical Statistics, American Statistical Association, American Society for Quality, and Institute for Operations Research and Management Sciences. His publications include 150 refereed papers, one research monograph, and two widely acclaimed textbooks on modern experimental design.

Wu is only the fourth person to have received both the Committee of Presidents of Statistical Societies' awards-the Presidents' Award, presented to the best statistician under the age of 40, and the Fisher Lecture Award, venerating accomplishments in the advancement of statistical theory and applications. Other notable honors include the Frank Wilcoxon Prize, Brumbaugh Award, Jack Youden Prize (twice), John Wiley Award in Probability and Statistics, Jerome Sacks Award for **Outstanding Cross-Disciplinary** Research, Pan Wen-Yuan Distinguished Research Award, Shewhart Medal, and Einstein Chair Professorship. ■

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

### Obituaries

#### **Charles Louis Kincannon**

Longtime ASA member and former U.S. Census Bureau Director Charles Louis Kincannon passed away on December 14.

Kincannon was born an only child in Waco, Texas, in December of 1940, right on the cusp of World War II. His father traveled often due to his work for a company that owned furniture stores. As a result, Kincannon's family moved frequently when he was a child. He was enrolled in three schools each year from first through third grades, which made it challenging for him to form friendships.

When Kincannon was in the fourth grade, his family moved to Corpus Christi, Texas, where they remained through Kincannon's senior year of high school. He graduated in 1959 and went on to major in economics at The University of Texas at Austin.

In December of 1962, during his senior year of college, Kincannon received a telegram from Don Fay, then chief of the personnel division of the employee relations branch. In the telegram, Fay asked him if he would be interested in a job in economic statistics or computer programming. Kincannon, who had never taken a statistics class before, took classes in both subjects during his last semester and found he preferred statistics to computer science.

In June of 1963, Kincannon packed his bags and moved to Washington, DC, a city he had never visited before his move.

After a few years as a statistician in the industry division, Kincannon was encouraged by Bob Nealon to sign up for an internship offered by the U.S. Census Bureau. He interviewed with a panel of executives and was then placed on an assignment in the population division, where Max Shor advised and mentored him.

During his internship, he had an assignment in the Office of Business Economics near Dupont Circle, where he worked on input/output tables from the 1963 business census. After his internship ended in the early 1970s, he returned to the industry division, then the population division, before joining the staff of the Office of Management and Budget (OMB) in 1975. While at OMB, he worked on statistical and regulatory policy during the Ford Administration and then served as the statistical liaison to Vice President Nelson Rockefeller's office.

In September of 1981, Kincannon returned to the Census Bureau and was appointed deputy director and chief operating officer in January of 1982 by Bruce Chapman, President Reagan's first director of the bureau. Kincannon also served as acting director from July 1983 to March 1984 and again in 1989. During that time, he directed the final preparations for the 1990 census.

In 1992, Kincannon and his wife, Claire, moved to Paris after he was appointed as the first chief statistician in the Organisation for Economic Co-operation and Development (OECD). He coordinated the organization's statistical programs and advised the OECD secretary general on statistical policy. In June of 2000, Kincannon returned to the United States. More than a year later, President George W. Bush nominated him for director of the Census Bureau.

Kincannon applied for the directorship in the spring of 2001 and went through many interviews with Congress and the White House. The process was delayed after the 9/11 terrorist attacks occurred. The Senate confirmed him unanimously on March 13, 2002, and he served as the director of the Census Bureau until his retirement in January of 2008. He served the longest of any director since the Eisenhower administration.

Of all his accomplishments during his career, Kincannon once said he was most proud of his work on the American Community Survey.

"We had done planning and good formal testing of the ACS by the time I was named director," he said. "I knew about the program and thought it was the most sensible thing to stop sending out the long form of the census when people are distracted by so many things. ... I was convinced of its utility and was convinced it would be a miraculous improvement to have data for smaller areas once a year instead of just every decade."

During his long career at the Census Bureau, Kincannon was honored with numerous awards, including the Presidential Rank Award of Meritorious Executive, the Special Award for Excellence of the Interagency Committee on Information Resources Management, and the Commerce Department's highest civil service honor, the Gold Medal.

To learn more about Kincannon's career, you can read an oral history given by Kincannon in 1992 at www.census.gov/history/www/ reference/oral\_histories/c\_louis\_ kincannon.html.

#### **Thomas Lester Bratcher**

Thomas Lester Bratcher, from Cranfills Gap in Bosque County, Texas, passed away November 3, 2012.

A graduate of Southern Methodist University, Bratcher specialized in Bayesian methods and formed the PhD program at Baylor University, which he directed for more than 20 years. He also was the primary organizer of the Conference of Texas Statisticians, now in its 32nd year.

Condolences may be sent to *www.lawsonfuneralhome.net*.

#### Jeanne E. Griffith Mentoring Award

Nominations for the Jeanne E. Griffith Mentoring Award will be accepted until April 5, and the Award Committee will make its determination of the award winner by April 30. The award will consist 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 arranged by the cosponsors in June.

The winning mentor(s) will be selected for his or her efforts in supporting the work and developing 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 writ-

ing, 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 staff members from other agencies, professional associations, training courses, and conferences
- Motivating junior staff and building self-confidence through feedback on their efforts, being a listener when that is needed, and creating a caring and supportive environment
- Serving as a role model for junior staff through professional expertise; information and insights; 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

2013 Mortimer Spiegelman Award

The Statistics Section of the American Public Health Association (APHA) invites nominations for the 2013 Mortimer Spiegelman Award honoring a statistician, 40 years of age or younger, who has made outstanding contributions to health statistics, especially public health statistics.

The award was established in 1970 and is presented annually at the APHA meeting. The award serves three purposes: to honor the outstanding achievements of both the recipient and Spiegelman, to encourage further involvement in public health of the finest young statisticians and to increase awareness of APHA and the Statistics Section in the academic statistical community. More details about the award including the list of the past recipients and more information about the Statistics Section of APHA may be found at *http://sites.google.com/site/aphastatistics/benefits/spiegelman*.

To be eligible for the 2013 Spiegelman Award, a candidate must have been born in 1973 or later. Please send electronic versions of nominating letter and the candidate's CV to the 2013 Spiegelman Award Committee Chair, Nilanjan Chatterjee (*chattern@ mail.nih.gov*). Please state in the nominating letter the candidate's birthday. The nominator should include one to two paragraphs in the nominating letter that describe how the nominee's contributions relate to public health concerns. A maximum of three supporting letters per nomination can be provided.

Nominations for the 2013 Award must be submitted by April 1, 2013.

memorandum summarizing the nominee's actions that support and encourage junior staff in the federal, state, or local statistical community in developing their careers. Nominations may be accompanied by up to six supporting letters, which should be attached to and submitted with the nomination. Photo copies 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 wellqualified even though I had some doubts," "encourages staff members to seek out positions that will increase their visibility and stretch their professional capabilities." These are more explicit and unique to the mentor than generic statements such as "the mentor is a coach ... a teacher."

Nomination packages should be mailed or emailed to The Jeanne E. Griffith Mentoring Award Committee, c/o The American Statistical Association, 732 N. Washington St., Alexandria, VA 22314-1943.

The Jeanne E. Griffith Mentoring Award was established to honor Griffith, who died in August 2001 after working for more than 25 years in the federal statistical system. Throughout her career, and especially in her later senior management positions at the National Center for Education Statistics and the National Science Foundation, one of Griffith's highest priorities was to mentor and encourage younger staff members to learn, grow, and recognize and seize career opportunities as they came along.

For more information about the nominating process, visit www.amstat.org/sections/sgovt/ JEGform13.doc or www.amstat. org/sections/sgovt/JEGform13.pdf. If you have questions about the award, contact Rick Peterson at *rick@amstat.org* or Kevin Cecco at *kevin.cecco@irs.gov*.

#### Mary G. and Joseph Natrella Scholarship

The Quality and Productivity Section announces the 2013 Mary G. and Joseph Natrella Scholarship, which supports student participation in the Quality and Productivity Research Conference (QPRC). Winners will receive a \$3,500 grant, \$500 stipend toward travel and housing expenses, and complimentary registration for the conference and pre-conference tutorial. In addition, winners will give a presentation on their research at the QPRC, which will be held in Niskayuna, New York, from June 5–7.

#### Eligibility

Application is open to students who are pursuing a master's or doctoral degree full-time in an accredited college or university. Students must have a demonstrated interest in quality applications as evidenced by course work, research topic, prior work experience, etc. Applicants should be prepared to make a presentation of their research at the 2013 Quality and Productivity Research Conference. Applicants will receive equal consideration regardless of age, color, creed, disability, ethnicity, gender, marital status, military status, race, or sexual orientation.

#### **Important Dates**

The application deadline is March 1. Scholarship recipients will be selected by March 22, and scholarships will be awarded at the QPRC banquet on June 5. Application materials consist of an application at *www.amstat-online.org/ sections/qp/Natrella\_Scholarship\_ Application.pdf* and reference form at *www.amstat-online.org/sections/ qp/Natrella\_Scholarship\_Reference\_ Form.pdf*. If you have questions, please contact a member of the scholarship committee at *natrella.scholarship.committee* @gmail.com.

#### **Scholarship Background**

The scholarship, funded by the Mary G. and Joseph Natrella Scholarship Fund and the Quality and Productivity Research Conference, was initiated by a contribution to the ASA Quality and Productivity Section by Joseph Natrella at the time of Mary Natrella's death to honor her many contributions to the advancement of statistical methodology and sound statistical practice in engineering and the physical sciences. The Natrellas always maintained a strong mutual interest in quality applications of statistics.

Mary was a staff member of the Statistical Engineering Division of the National Institute of Standards and Technology (NIST). Joe's career was primarily with the Department of Defense and NASA as a mathematician in charge of data processing and computations. Mary's most important publication, *NBS Handbook 91: Experimental Statistics*, is one of NIST's bestselling publications. ■

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

March 1, 2013 ASA Fellows

March 9, 2013 ASA Statistics in Chemistry Award

March 15, 2013 ASA W. J. Dixon Award for Excellence in Statistical Consulting

March 15, 2013 ASA Founders Award

March 15, 2013 ASA W. J. Youden Award in Interlaboratory Testing

March 15, 2013 ASA Waller Education Award

March 15, 2013 Karl E. Peace Award for Outstanding Statistical Contributions for the Betterment of Society

April 1, 2013 ASA Gertrude M. Cox Scholarship

April 1, 2013 ASA Outstanding Statistical Application Award

April 1, 2013 ASA Edward C. Bryant Scholarship

April 1, 2013 ASA Excellence in Statistical Reporting Award

April 1, 2013 ASA Samuel S. Wilks Memorial Medal Nominations accepted online at www.amstat.org Questions: David L. DeMets, demets@biostat.wise.edu

Philip J. Ramsey, pjrstats@aol.com

Nominations: Pam Craven, *pamela@amstat.org* Questions: Mani Y. Lakshminarayanan, *Mani\_Lakshminarayanan@merck.com* 

Nominations: Pam Craven, *pamela@amstat.org* Questions: Robert N. Rodriguez, *bob.rodriguez@sas.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: Margaret A. Nemeth, *margaret.a.nemeth@ monsanto.com* 

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

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

Edited by Feifei Wei, Biometrics Section Publications Officer

The Biometrics Section would like to introduce the current members of the section's executive committee.

Jianwen Cai-Section chair

Mike Daniels—Chair-elect

Yu Shen—Secretary/treasurer

Wei Sun—JSM program chair

Doug Schaubel—ENAR program chair

Page Moore—Council of Sections representative

Scarlett L. Bellamy—Council of Sections representative
Note: N

Limin Clegg—Council of Sections representative

Donglin Zeng—Continuing Education chair

Rosyln Stone—Strategic Initiatives Committee chair

Feifei Wei—Publications officer

Gerald Beck—Online associate editor and webmaster

Want to get more involved in JSM? Chairing a session is an important responsibility and a great way to meet your colleagues. If you are interested, contact Wei Sun, at *weisun@email.unc.edu*.

To read the complete section report, visit *http://magazine.amstat.org/?cat=17*.

#### **Quality and Productivity**

The 30th ASA Quality and Productivity Research Conference (QPRC) will be held at GE Global Research, Niskayuna, New York, from June 5–7. The goal of the conference is to stimulate interdisciplinary research among statisticians, scientists, and engineers in quality and productivity, industrial needs, and the physical and engineering sciences. You are invited to contribute papers on these topics for presentation at the conference. The deadline for abstract submission is March 1. Follow the submission instructions at the conference website, *www.qprc2013.com*.

Scholarships for participation in the conference include the Mary G. and Joseph Natrella Scholarship and QPRC student scholarships. For more information, visit www.amstat-online.org/sections/qp/Natrella\_ Scholarship.html.

For more information about the conference, visit *http://magazine.amstat.org/?cat=17* or contact the conference chair, Martha Gardner, at *Martha. Gardner@ge.com.* 

#### Survey Research Methods

The Survey Research Methods Section (SRMS) plans to sponsor short courses and multiple technical sessions during this year's Joint Statistical Meetings (JSM) in Montréal, Québec. Also, check the program for the SRMS business meeting and mixer; section members and nonmembers are welcome to attend and learn more about the section's activities, as well as provide ideas for and input into future activities.

Additionally, SRMS is planning a series of webinars. For information, visit the section's website at *www.amstat.org/sections/SRMS*.

Another new development is the launch of the *Journal of Survey Statistics and Methodology (JSSAM)*. The journal will begin publishing in 2013 and aims "to publish cutting edge scholarly articles on statistical and methodological issues for sample surveys, censuses, administrative record systems, and other related data." Information about *JSSAM* is available at *www.oxfordjournals.org/our\_journals/jssam*.

As a supporter of the International Year of Statistics, the section is interested in ways to increase the visibility of our profession or promote new developments in our field. Share your ideas and suggestion(s) with members of the SRMS Executive Committee at *asa.srms@gmail.com*. Details about the International Year of Statistics are available at *www.statistics2013.org*.

Visit *http://magazine.amstat.org/?cat=17* to read a message from the section's incoming chair, Jill Montaquila, and about this year's activities.

### chapternews Connecticut

The 11th Annual Connecticut Chapter Mini-Conference, "Maximizing Information from Clinical Trials," will be held March 27 on the Bristol-Myers Squibb campus in Wallingford, Connecticut.

Invited speakers for the conference are Ming-Hui Chen of the University of Connecticut, Neal Thomas of Pfizer, Inc., Tom Trikalinos of Brown University, José Pinheiro of Johnson & Johnson, and Joan Buenconsejo of the U.S. Food and Drug Administration.

Additionally, a contributed poster session will be held.

Visit the conference website at *www.amstat. org/chapters/Connecticut/home/MiniConference/ miniconf\_index\_2012.htm* for more information and to obtain a registration form. ■

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

#### calendar of events

#### March

#### »4–6—SAMSI-SAVI Workshop on Environmental Statistics, Research Triangle Park, North

**Carolina** For more information, visit www.samsi.info/workshop/ samsi-savi-workshop-environmental -statistics-march-4-6-2013 or contact Jamie Nunnelly, 19 T. W. Alexander Drive, Research Triangle Park, NC 27709; (919) 685-9300; info@samsi.info.

#### 5–7—New Techniques and Technologies for Statistics (NTTS 2013), Brussels, Belgium

For details, visit *www.ntts2013. eu* or contact NTTS 2013 Secretariat, Unit B1, Luxembourg, International L-2920, Luxembourg, 00352430138327; *ESTAT-NTTS@ ec.europa.eu.* 

#### »7-8—Conference on Advanced Statistical Methods for Underground Seismic Event Monitoring and Verification,

Arlington, Virginia For more information, visit *stat.rutgers.edu/conferences/monitoringandverification2013* or contact Minge Xie, Department of Statistics, 110 Frellinghuysen Road, Piscataway, NJ 08854; (848) 445-2690; *mxie@stat.rutgers.edu.* 

#### 13–15—IAENG International Conference on Data Mining and Applications, Hong Kong

For details, visit *www.iaeng.org/ IMECS2013/ICDMA2013.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.* 

#### »18–23—3rd Joint Statistical Meeting Deutsche Arbeitsgemeinschaft Statistik, Freiburg, Germany For details,

visit *dagstat2013.uni-freiburg.de* or contact Jan Beyersmann, Eckerstr. 1, Freiburg, International 79104, Germany; *dagstat2013@imbi. uni-freiburg.de*.

#### »27—Connecticut Chapter 2013 Mini-Conference, Wallingford,

**Connecticut** For more information, visit www.amstat.org/chapters/ Connecticut/home/MiniConference/ miniconf\_index\_2012.htm or contact Dan Meyer, 445 Eastern Point Road, MS 8260-2510, Groton, CT 06340; (860) 441-5094; daniel. meyer@pfizer.com.

### April

#### »12—Conference on High-Dimensional Statistics, Philadelphia, Pennsylvania

For details, visit www.fox.temple.edu/ support-pages/high-dimensional -statistics-conference or contact Sanat Sarkar, 1810 North 13th St., Philadelphia, PA 19122; sanat@ temple.edu.

#### 22–25—7th Meeting of the Eastern Mediterranean Region International Biometric Society, Tel Aviv, Israel For details, visit event.pwizard.com/ims or contact

*event.pwizard.com/ims* or contact Ilana Lobel, The Gertner Institute

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

\* Indicates events sponsored by the ASA or one of its sections, chapters, or committees

» Indicates events posted since the previous issue

for Epidemiology and Health Policy Research, Tel Hashomer, International 52621, Israel; 972-3-5305390; *ilanal@gertner.health.gov.il.* 

#### »26—Philosophy of Information: The Value of Information, Washington, DC

For more information, visit www. american.edu/cas/economics/infometrics/workshop/workshop-2013 -spring.cfm or contact Amos Golan, 4400 Massachusetts Ave, NW, Kreeger 104, Washington, DC 20016; (202) 885-3770; info-metrics@american.edu.

### **Biopharmaceutical Symposium** to Offer Tutorials, Short Courses

The 20th anniversary meeting of the Biopharmaceutical Applied Statistics Symposium (BASS XX) will be held November 4–7 at the Double Tree (by Hilton) Hotel in downtown Orlando, Florida.

At least 16 one-hour tutorials on diverse topics pertinent to the research, clinical development, and regulation of pharmaceuticals will be presented by speakers from academia, the pharmaceutical industry, and the Food and Drug Administration (FDA).

Two parallel one-day short courses will be presented November 6–7, and the keynote address will take place on November 5, with a reception following. The FDA biometrics session will be the morning of November 6.

BASS is a nonprofit entity, sponsored by the department of biostatistics at Virginia Commonwealth University and the Jiann-Ping Hsu College of Public Health at Georgia Southern University. Its purpose is to raise funds for graduate fellowships in biostatistics.

To date, 50 graduate students have been supported by funds raised by BASS.

For more information, visit *www.bassconference.org*, contact the BASS registrar at *rewhitworth@georgiasouthern.edu*, or contact Karl E. Peace at (912) 478-7905 or *peacekarl@frontier.com*.

meetings and

www.amstat.

org/dateline.

workshops, visit

#### »28-30—Kansas State **University Conference on Applied Statistics in Agriculture,** Manhattan, Kansas For details,

visit www.dce.k-state.edu/conf/ To view applied-stats or contact Teresa the entire list Zerbe, 101 Dickens Hall, Manhattan, KS 66506; (785) 532of statistics 6883; aqconf@ksu.edu.

#### »12–17—Workshop on Statistical Genomics and Data Integration for Personalized Medicine, Ascona, Switzerland

For details, visit www.cbg.ethz.ch/ news/ascona2013 or contact Niko Beerenwinkel, Mattenstrasse 26, Basel, International 4058, Switzerland; ascona2013@bsse. ethz.ch.



#### 6th Annual Conference on Statistical Issues in Clinical Trials April 17, 2013 **Topic: Dynamic Treatment Regimes**

Leading scientists will make presentations and lead open discussions about state-of-the-art and developing methods in new designs for evaluating treatment strategies when regular time varying adaptive changes in treatment are expected. Participants from academic institutions, industry, and governmental agencies with an interest in contributing to these discussions are encouraged to register.

Conference co-sponsors: American Statistical Association and the Society for Clinical Trials

FACULTY	TENTATIVE TOPICS
Phil Lavori, Stanford	Introduction to Dynamic Treatment Regimes and SMART Designs
Eric Laber, NC State	Estimation of Optimal Dynamic Treatment Regimes
Bibhas Chakraborty, Columbia	M-out-of-n Bootstrap: A Pragmatic Inference Tool for Dynamic Treatment Regimes
Linda Collins, Penn State	SMART: An Integral Component of Multiphase Optimization Strategy (MOST): Screening, Refining, Confirming
Kevin Lynch, U Pennsylvania	Two- and Three-Stage Adaptive Treatment Regimens in Substance Abuse Research
Erica Moodie, McGill	Adaptive Dose Finding: Optimal Strategies in a PK/PD Trial for Cardiovascular Use of Warfarin
Kelley Kidwell, Michigan	SMART Designs in Cancer Research: Learning from the Past, Current Limitations, and Issues for the Future

PANELISTS Keaven Anderson (Merck); Rick Chappell (U Wisconsin); Christy Chuang-Stein (Pfizer); Estelle Russek-Cohen (FDA); Dean Follman (NIAID); Marshall Joffe (UPenn) and Michael Kosorok (UNC)

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 Sheraton University City is located within easy walking distance. Many alternative hotels in Center City, Philadelphia, are also a short distance from the UPenn campus. Registration is limited to 220 participants. Registration deadline is April 4, 2013, or when conference sells out. Conference fee (includes breakfast, lunch, breaks): \$200 Industry, \$120 Academic & Government. For information, visit http://www.cceb.med.upenn.edu/ biostat/conferences/ClinTrials13. For further information, contact Marissa Fox at (215) 573-2728 or mfox@mail.med.upenn.edu.

#### »13–17—SAMSI Undergraduate Modeling Workshop, Research Triangle Park, North Carolina

For more information, visit www.samsi.info/workshop/ undergraduate-modelingworkshop-may-13-17-2013 or contact Jamie Nunnelly, 19T. W. Alexander Drive, Research Triangle Park, NC 27709; (919) 685-9350; nunnelly@niss.org.

#### » 15–17—Conference on **Applied Statistics in Ireland** (CASI) 2013, Co Kildare, Ireland

For details, visit www.casi.ie or contact Caroline Brophy, Department of Mathematics & Statistics, National University of Ireland Maynooth, Maynooth, International Co Kildare, Ireland; +35317083914; caroline.brophy@ nuim.ie.

#### »20-8/16-MBI Undergraduate **Research Program, Columbus,**

Ohio For details, visit www. mbi.osu.edu/eduprograms/ *undergrad2013.html* or contact Stella Cornett, 1735 Neil Ave., Columbus, OH 43210; (614) 292-9870; stella@mbi.osu.edu.

#### »\*20–22—36th Annual Midwest **Biopharmaceutical Statistics** Workshop (MBSW), Muncie,

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

#### »23-24—3rd International **Conference: Quantitative and Qualitative Methodologies** in the Economic and Administrative Sciences (Q.M.E.A.S. 2013), Athens,

Greece For more information, visit users.teiath.gr/cfragos/ *index\_files/Page1327.htm* or contact Christos Frangos, Agiou Spyridonos Street, Athens, International 122 10, Greece; +30 6944162376; cfragos@teiath.gr.

#### »26-29-41st Annual Meeting of the Statistical Society of Canada, Edmonton, Alberta

For details, visit www.ssc.ca or contact Rhonda Rosychuk, 3-524 Edmonton Clinic Health Academy, 11405 87 Ave. NW, Edmonton, AB T6G 1C9, Canada; (780) 492-0318; ssc2013@ssc.ca.

#### June

#### »\*2–5—49th SRCoS Summer **Research Conference**, Burns, Tennessee For details, visit

louisville.edu/sphis/bb/srcos-2013 or contact Don Edwards, Dept. of Statistics, University of South Carolina, Columbia, TN 29205; (803) 479-4814; *edwards@stat. sc.edu.* 

#### »3–7—Workshop on Compositional Data Analysis (CoDaWork 2013), Vorau,

Austria For more information, visit www.codawork2013.com or contact Peter Filzmoser, Wiedner Hauptstr. 8-10, Vienna, International 1040, Austria; +43 1 58801 10733; P.Filzmoser@ tuwien.ac.at.

#### »4–14—SAMSI Summer Program: Neuroimaging Data Analysis, Research Triangle Park, North Carolina For more infor-

mation, visit www.samsi.info/ programs/summer-2013program-neuroimaging-dataanalysis-june-4-14-2013 or contact Jamie Nunnelly, P.O. Box 14006, RTP, NC 27709; (919) 685-9350; admin@samsi.info.

#### » 6–8—BISP8: 8th Workshop on Bayesian Inference in Stochastic Processes, Milano, Italy

For details, visit *www.mi.imati.cnr. it/conferences/BISP8* or contact Antonio Pievatolo, Via Bassini 15, Milano, International 20133, Italy; *bisp8@mi.imati.cnr.it.* 

#### »7–8—MedicReS International CME Conference, Istanbul, Turkev

For more information, visit www. ic2013.medicres.org or contact Burak Akicier, Mariahilferstrasse 123 3, Vienna, International 1060, Austria; +436769783898; burak. akicier@medicres.org.

»9–12—Joint Statistical Conference by the International Chinese Statistical Association (ICSA) and the International Society for Biopharmaceutical Statistics (ISBS), Bethesda, Maryland For details, visit www. icsa.org/2013 or contact Aiyi Liu, 6100 Executive Blvd., Rockville, MD 20852; (301) 435-6962; *liua@ mail.nih.gov.* 

#### 10–12—4th Nordic-Baltic Biometric Conference, NBBC13, Stockholm, Sweden

For more information, visit *nbbc13.* org or contact Marie Jansson, Box 281, Stockholm, International SE-17177, Sweden; +46 8 52486150; *Marie.Jansson@ki.se.* 

#### »10–28—SAMSI: Modern Statistical and Computational Methods for Analysis of Kepler Data, Research Triangle Park,

North Carolina For more information, visit www.samsi.info/ workshop/summer-2013-modernstatistical-and-computational-analysis-kepler-data-june-10-28-2013 or contact Karem Jackson, 19 T. W. Alexander Drive, RTP, NC 27709; (919) 685-9350; admin@samsi. info. ■



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.

#### California

■ San Francisco VA Medical Center and NCIRE have an immediate opening for a statistician. Qualified applicant will have master's degree in statistics, biostatistics, epidemiology, or equivalent, and 3+ years experience in statistical analysis, data modeling, and advanced programming skills. SAS experience and ability to work with large national administrative datasets, such as VA and CMS datasets, highly preferred. Apply at *www.ncire.org* referring to job 2012-1888. EOE

#### Maryland

■ The University of Maryland School of Medicine seeks an experienced biostatistician to be the Director of the Division of Biostatistics and Bioinformatics, and Biostatistics Shared Service at the Greenebaum Cancer Center. Candidates should have leadership skills and experience in collaborative and methodologic research. Please send cover letter, CV, 3 references to: *sholt@som.umaryland. edu.* Go to *medschool.umaryland.edu/ epidemiology/employ.asp* for info. The University of Maryland, Baltimore is an Equal Opportunity, Affirmative Action Employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply.

#### Massachusetts

■ The Department of Mathematics and Statistics of Mount Holyoke College invites applications for a visiting position in statistics at the assistant professor level. The position is for one year, to begin in fall, 2013. Qualifications include a PhD in statistics (completed or anticipated) and a commitment to teaching and scholarship in a liberal arts environment. For further information about the department see: www.mtholyoke.edu/acad/math/ AA/ EOE. ■ Parexel International is hiring! Senior/ principal statistical programmers (full time/permanent/remote). Input into and negotiate statistical programming timelines. Coordinate and lead a statistical programming team to successful completion of a study within given timelines and budget. Interact with sponsors as the key contact with regard to statistical programming issues. Proficiency in SAS. Clinical trial industry experience. To apply: please send CV to *heather.polston@parexel.com* EOE.

#### Minnesota

■ The Biostatistics Division, School of Public Health, University of Minnesota seeks applicants for associate/full tenured/ tenure-track faculty position. Especially interested in 1.) academic/research records in survival analysis 2.) methods for survey sampling small area estimation or 3.) SEM, causal analysis, and other methods accounting for latent factors in observational data. Applicants should submit: cover letter, CV, names of references at: http://employment.umn.edu/applicants/ Central?quickFind=107994. www.sph. umn.edu/biostatistics. EOE.

#### Nevada

■ The Department of Mathematical Sciences at the University of Nevada Las Vegas invites applications for a full-time, 9-month, tenure-track assistant professor position in statistics, starting fall 2013. The successful candidate is expected to teach effectively at the undergraduate and graduate levels, publish in refereed research journals, pursue external funding, and supervise graduate students. For complete job description, visit *http://jobs. unlv.edu* or call (702) 895-2894. EEO/ AA Employer.

#### **New York**

New York University Stern School of Business Statistics Group, tenure-track assistant professor appointment in statistics. Candidates should have evidence of boundary-spanning interests across fields that reflect significant interfaces of statistics with areas of relevance in a Business School. Expected that candidate will be productive researcher and effective teacher at both undergraduate and gradu-

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

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ate levels. See http://www.stern.nyu.edu/ experience-stern/about/departmentscenters-initiatives/academic-departments/ ioms/faculty-staff/position-openings/ statistics/index.htm for full details, including information on application procedure. www.stern.nyu.edu/ioms. New York University is an Affirmative Action/Equal Opportunity Institution.

#### North Carolina

Assistant professor. Posting number: 940687. East Carolina University invites applications for a tenure-track assistant professor position in statistics beginning August 12, 2013. PhD required in statistics or closely related area and commitment to teaching, research, and service to the university, community, and profession is expected. Screening will begin January 15, 2013 and continue until the position is filled. Visit this job posting at *ecu.peopleadmin.com/applicants/ Central?quickFind=70523*. AA/EOE.



Register\* your organization today at www.statistics2013.org.

\*Registering your organization does not obligate you; it simply indicates you support the goals of the International Year of Statistics.



### Position Description for the Position of President of Frontier Scienceand Technology Research Foundation (FSTRF)

The Board of Directors is seeking candidates for the position of President (& CEO) of FSTRF as a successor to Dr Marvin Zelen who founded FSTRF and has served as President since its beginning. Dr Zelen has announced his desire to step down as President while remaining as Chairman of the Board of Directors for FSTRF.

FSTRF is a not-for-profit foundation established in New York State in 1974, and now has offices in Boston MA, Amherst NY, Madison WI, Kincraig Scotland and Athens Greece. A Tokyo office is in the planning stages. The international offices are all independent legal entities in their respective countries, but with a degree of oversight by the FSTRF Board. The mission of FSTRF is to advance the applications of statistical science in biomedical science, healthcare and education by developing and providing educational and research opportunities for investigators and students pursuing research which combines statistics, empirical science, mathematics, computer science and other related disciplines. FSTRF collaborates with investigators and institutions on the quantitative and management aspects of the planning, monitoring and analysis of research studies, particularly clinical trials, targeted at finding more beneficial therapies for the treatment of disease as well as studies leading to a better understanding of the natural history and epidemiology of these diseases.

The President reports to a Board of Directors, made up of statistical scientists, clinical investigators, the Foundation's attorney and the directors of the individual offices. The President is the operational head of the organization, taking the lead in the efforts to expand FSTRF's project base, providing broad oversight of activities in all the Frontier offices and ensuring that the Board's policies are communicated to the FSTRF offices. Each of the individual offices has a director who reports to the President while being responsible for day to day operations of his/her individual offices.

FSTRF currently has close to 400 employees, the majority of whom are located in either Boston or Amherst. FSTRF staff is engaged in a wide range of activities with a very large number of collaborators and clients worldwide. FSTRF serves as the data management center for three major NIH funded clinical trial networks, the Eastern Cooperative Oncology Group (ECOG), the AIDS Clinical Trial Group (ACTG) and the IMPAACT. The annual FSTRF budget is approximately \$50M of which \$10M is <sup>3</sup>Pass-through funds<sup>2</sup> given to ECOG institutions. The primary sources of funding are from two National Institutes of Health (NIH) institutes, the National Cancer Institute (NCI) and the National Institute for Allergy and Infectious Disease (NIAID), as well as several pharmaceutical companies The major strengths of FSTRF are its not-for-profit status, and its philosophy to function as an independent clinical trials organization.

This philosophy promotes FSTRF<sup>1</sup>s independence from a project or trial sponsor. It also means that FSTRF does not take on business purely for financial reasons, but also considers the scientific validity of the project. This aspect of FSTRFs operations is critical, providing a focus that many other organizations do not share. This philosophy should continue to form the cornerstone of FSTRF<sup>1</sup>s business model.

Desirable qualifications for this position would include, but are not be limited to, an accomplished career having achieved stature and recognition, an advanced degree in a field related to FSTRF's mission, some experience in a senior management role with financial oversight in either an academic or industry medical research environment, demonstrated leadership and vision plus a successful track record in attracting new funded research projects including but not limited to federal and industry sources.

Submit resume & cover letter to jobs@fstrf.org and include PRES in the subject line. Those unable to use email may mail their material to

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NORC at the University of Chicago is an independent research organization headquartered in downtown Chicago with additional offices on the University of Chicago's campus, in the D.C. Metro area, Atlanta, and Boston. With clients throughout the world, NORC collaborates with government agencies, foundations, educational institutions, nonprofit organizations, and businesses to provide data and analysis that support informed decision making in key areas including health, education, economics, crime, justice, energy, security, and the environment. Learn more about NORC's leadership and experience in data collection, analysis, and dissemination at:

#### www.norc.org.

NORC is actively seeking statisticians, survey methodologists, statistical programmers, data managers, survey directors, and social scientists with advanced training or experience in survey research or survey operations. New staff will be based in our Chicago, IL or Bethesda, MD offices. To apply for employment, please visit our website at:

#### http://norccareers.silkroad.com

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

#### **University of Kentucky**

Tenured/Tenure-Track positions in statistics, beginning 8/15/13. All research areas in statistics/probability welcome, including mathematical statistics.

Applicants at associate/full level expected to have record of external funding and doctoral dissertations directed; applicants at assistant level expected to aspire to the same. Experience/interest in online teaching and/or developing new graduate courses is a plus.

Selection begins 1/15/13 and continues until positions are filled. Email (stromberg@uky.edu) CV, teaching and research statements and have three letters of reference sent to Dr. Arnold J. Stromberg, Chair, University of Kentucky, Department of Statistics, 725 Rose Street, Lexington, Kentucky 40536-0082.

Visit our website at http://stat.uky.edu.

Positions subject to budgetary approval. EOE: To enrich education through diversity, the University of Kentucky is an affirmative action, equal opportunity employer.

#### www.westat.com

### Statisticians

EOE

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

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

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

We are currently recruiting for the following statistical positions:

#### Senior Statistician

#### Statistician

Westat is currently seeking statisticians with experience analyzing a variety of environmental, health, and complex survey data. Responsibilities include multivariate analyses, time series analyses, and working with censored data. Individuals will be active members of an interdisciplinary team and will communicate study findings to clients and other interested parties. Must have excellent analytical and writing skills; and the ability to multitask. Additional areas of useful expertise include sample size calculation, spatial analysis, Bayesian methods, big data, and climate change. A master's degree in statistics or biostatistics and at least 3-10 years of experience with Federal Government agencies such as EPA, CDC, and NIH involving the collection and analysis of data are required. A Ph.D. is preferred.

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



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#### 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 2013. More info is available at *www. math.wright.edu*, and application is online at *https://jobs.wright.edu/postings/6039*. WSU is an affirmative action/equal opportunity employee..

The Department of Quantitative Health Sciences at the Cleveland Clinic is recruiting for faculty and master's-level positions. Many areas are being sought, including biostatistics, health economics, health status measures, analysis of population-based registries, diagnostic test assessment, ROC analysis, and psychometrics. Details for all positions, as well as application instructions, are on our website: *www.lerner.ccf.org/qhs/jobs/.* Cleveland Clinic is an AA/EOE.

#### Pennsylvania

Possible teaching-track position. Collegial environment emphasizing disciplinary and cross-disciplinary research and teaching. Position emphasizes teaching, program administration, curriculum development. Joint appointments possible with other units at CMU. See http:// www.stat.cmu.edu (email: hiring@stat. cmu.edu). Send CV, teaching statement, relevant transcripts, and three recommendation letters to: Faculty Search Committee, Statistics, Carnegie Mellon University, Pittsburgh, PA 15213, USA. Application screening begins immediately, continues until positions closed. Women and minorities are encouraged to apply. AA/EOE.

# Looking for a **Job?**

The ASA JobWeb is a targeted job database and résumé-posting service. **www.amstat.org/jobweb** 

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

■ The Statistics Department at Temple University seeks tenure-track and nontenure track candidates at the assistant, associate and/or full professor levels, starting in September 2013. Candidates must have a PhD in statistics, a record or potential of publishing in top-tier journals, evidence of teaching, and strong theory/application background. Apply electronically to Dr. William Wei, *stat. recruiting@temple.edu*, with cover letter,



#### Director, Division of Biostatistics and Bioinformatics and Director, Cancer Center Biostatistics Shared Services

The University of Maryland School of Medicine invites applications from experienced biostatisticians to serve as the Director of the Division of Biostatistics and Bioinformatics in the Department of Epidemiology and Public Health, as well as the Director of the Greenebaum Cancer Center's Biostatistics Shared Service. We are seeking a research leader with a track record of multidisciplinary biostatistics research in cancer—evidenced by productivity in collaborative and methodologic publication, as well as successful grant funding. Those with a primary interest in cancer informatics and/or with data coordinating center expertise are also encouraged to apply. Resources include funding to promote faculty growth, reward productivity, and hire additional faculty members.

The Department of Epidemiology and Public Health has six divisions with 51 full-time faculty members. It is #1 in NIH funding among departments of its type in public schools of medicine and second among all medical school departments of its type.

Details: http://medschool.umaryland.edu/epidemiology/employ.asp

Requirements: Ph.D. (or equivalent) in the statistical sciences currently holding the rank of Associate Professor or Professor, with demonstrated leadership ability.

To Apply: Please send a cover letter, CV, research statement, and contact information for 3 references to: *sholt@som.umaryland.edu* 

The University of Maryland, Baltimore is an Equal Opportunity, Affirmative Action Employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply.

## A Spectrum of Short-Term Research Opportunities in Statistics

**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: <http://www.census.gov/hrd/www/jobs/stu\_temp.html>.

**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: <http://www.census.gov/hrd/www/jobs/prp.html> or contact <tommy.wright@census.gov>.

**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>.



The Census Bureau is an Equal Opportunity Employer.

### FRED HUTCHINSON CANCER RESEARCH CENTER

A LIFE OF SCIENCE

#### FACULTY POSITION AT THE FRED HUTCHINSON CANCER RESEARCH CENTER

The Clinical Research Division of the Fred Hutchinson Cancer Research Center (FHCRC) invites applications for a biostatistician at the Assistant Member /Associate Member level to provide collaborative statistical support for the clinical research activities of the division and the affiliated Cancer Consortium with the University of Washington. Independent research in statistical methodology is strongly encouraged. Requires Ph.D. in statistics or biostatistics and excellent communications skills. Prior experience in a biomedical research environment is highly desirable. Possibility of joint appointment with the Division of Public Health Sciences at the FHCRC. Position to remain open until filled.

Please send curriculum vitae, a letter describing research interests, and the names of four references to

#### Barry Storer, PhD, Director of Clinical Statistics

Fred Hutchinson Cancer Research Center, 1100 Fairview Ave. N, D5-360, PO Box 19024, Seattle, WA 98109-1024 or *bstorer@fhcrc.org*.

The Fred Hutchinson Cancer Research Center is an affirmative action, equal opportunity employer. It is dedicated to the goal of building a culturally diverse and pluralistic faculty and staff committed to teaching and working in a multicultural environment and strongly encourages applications from women, minorities, individuals with disabilities and covered veterans.

#### www.westat.com

### 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

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

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



CV, teaching evidence & three recommendation letters. *www.fox.temple.edu/ dept/statistics/.* Temple University is an Equal Opportunity/Affirmative Action Employer.

#### International

The National Academy of Sciences seeks scientists to fill two biostatistics positions at the Radiation Effects Research Foundation (RERF) in Hiroshima, Japan. Primary responsibilities are statistical consulting on the design of radiation research protocols and analysis of research data in consultation with RERF epidemiologists, clinical researchers, and laboratory scientists, with additional independent research on related statistical methodologies and applications. Please visit http://tbe. taleo.net/NA4/ats/careers/requisition. jsp?org=NAS&cws=1&rid=7342. EOE, M/F/D/V.

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Northwestern University p. 25
Penn State World Campusp. 33
University of Michigan p. 21

#### professional opportunities

Fred Hutchinson Cancer Research Center p. 47
Frontier Science and Technology Researchp. 44
NORC p. 45
University of Kentuckyp. 45
University of Maryland p. 46
U.S. Census Bureaup. 43, 46
Westatp. 45, 47

#### software

Cytel Inc p. 41
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