First ‘Stats for Staffers’ Class Brings Statistics to the Hill

ALSO:
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JSM 2012 Session Highlights
Great Academic Prices

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17 MASTER’S NOTEBOOK
International Experiences in Statistics

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

Eric Vance graduated from the University of California at Berkeley with a triple major in math, economics, and statistics. In 2008, he earned his PhD in statistical science from Duke University and, since then, has been an assistant research professor at Virginia Tech and the director of Virginia Tech’s Laboratory for Interdisciplinary Statistical Analysis, where he leads a team of faculty and statistics students.

Eric Vance

21 SCIENCE POLICY
NJ Looking for a Few Good Statisticians

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

Contributing Editors

Gerald M. LaPorte is the acting associate director at the National Institute of Justice in the Office of Investigative and Forensic Sciences, where he provides expert analysis and advice on agency-wide programs or issues of national impact relating to forensic science. LaPorte has numerous scientific publications and has presented nearly 100 training seminars, lectures, and workshops in 13 countries.

LaPorte

David B. Fialkoff is a writer and an associate communications manager at Lockheed Martin, which operates the National Criminal Justice Reference Service. He has a BA in sociology/criminology from the University of Pennsylvania and a JD from The George Washington University Law School.

Fialkoff

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

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

‘America by the Numbers’ on C-SPAN’s Washington Journal
Each Friday, C-SPAN’s “America by the Numbers” segment features information from the U.S. Census Bureau or other agencies in the federal statistical system. The program highlights the trends and allows the public to call in or email their views. For regular updates, follow @AmstatNews on Twitter. More information about previous C-SPAN programs is available at www.census.gov/newsroom/cspan.

Make the Most of Your ASA Membership
Visit the ASA Members Only site: www.amstat.org/membersonly.

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

columns

23  175
How Can We Raise Public Awareness of 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 Editors

Amy Herring is professor of biostatistics at The University of North Carolina at Chapel Hill and past president of ENAR. She earned her doctorate in biostatistics from Harvard University and is a Fellow of the ASA.

Narayanaswamy Balakrishnan is a professor of statistics at McMaster University. He earned his PhD in statistics from the Indian Institute of Technology, Kanpur, India, and is a Fellow of the ASA and Institute of Mathematical Statistics and an elected member of the International Statistical Institute. He is editor of Communications in Statistics, and his research interests include distribution theory, ordered data analysis, censoring methodology, reliability, and survival analyses.

25  STATtr@k
Traits of a Successful Statistician

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 Editors

Gerald (Gerry) Hahn is a retired manager of statistics at the (current) GE Global Research Center, where he worked for 45 years. He is a co-author of four books and many articles, recipient of numerous awards, and Fellow of the ASA and American Society for Quality. He holds a doctorate from Rensselaer Polytechnic Institute.

Necip Doganaksoy is a principal technologist at the GE Global Research Center and an adjunct professor at the Union Graduate College School of Management in Schenectady, New York. He is a co-author of two books and a Fellow of the ASA and American Society for Quality. He holds a doctorate from Union College.

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Big Data and Better Data

Big Data is big news. It is the focus of stories in *The New York Times* and the subject of technology blogs, business forums, and economic studies. This column describes how statisticians can prepare for opportunities in Big Data and explains the distinctive value our profession can provide.

What’s Different About Big Data?

For years, statisticians have been working with large volumes of data in fields as diverse as astronomy, bioinformatics, and data mining. Big Data is different because it is generated on a massive scale by countless online interactions among people, transactions between people and systems, and sensor-enabled machinery.

Big Data is newsworthy because it promises to answer big questions. The potential of Big Data lies in innovative ways it can be linked, related, and integrated to provide more detailed and personalized information than is possible with data from a single source. These innovations make it possible for banks to introduce individually tailored services, for health care providers to offer personalized medicine, and for public safety departments to anticipate crime in targeted areas.

Big Data also is opening doors for researchers and educators. It was the focus of Mathematics Awareness Month (*www.mathaware.org*), and “Internet scale data” was a topic of Interface 2012 (*www.interfacesymposia.org/Interface2012/Interface2012.html*). The Statistical and Applied Mathematical Sciences Institute has organized a research program, starting in September, on statistical and computational methodology for massive data sets (*www.samsi.info/programs/2012-13-program-statistical-and-computational-methodology-massive-datasets*).

Recently, the Obama administration announced a Big Data research and development initiative, which includes a new solicitation supported by the National Science Foundation (NSF) and National Institutes of Health (*www.nsf.gov/funding/pgm_summ.jsp?pims_id=504767*). NSF also is convening researchers across disciplines to determine how Big Data can transform teaching, and it is encouraging research universities to prepare the next generation of data scientists at all levels.

Are We Data Scientists?

A recurring theme in Big Data stories is the scarcity of “data scientists”—the term used for people who can draw insights from large quantities of data. This shortage was highlighted in an April 26, 2012, *Wall Street Journal* article titled, “Big Data’s Big Problem: Little Talent” (*http://online.wsj.com/article/SB10001424052702304723304577365700368073674.html?mod=googlenews-wsj*). The question “What is
a data scientist?” is still being debated (see the articles with this title at Forbes.com). However, there is consensus that data scientists must be innovative problem solvers with expertise in statistical modeling and machine learning, specialized programming skills, and a solid grasp of the problem domain. Hilary Mason, chief data scientist at bitly, adds that “data scientists are responsible for effectively communicating the things that they learn. That might be creating visualizations or telling the story of the question, the answer, and the context.”

Most of these requirements read like the job description for a statistician, but, at a high level, we should view data science as a blend of statistical, mathematical, and computational sciences.

What Do We Need to Learn?

In addition to collaborating with other disciplines on Big Data problems, statisticians must be prepared for a different hardware and software infrastructure. Three developments are noteworthy for us.

First, the scale of terabyte-sized data requires that they be spread across a cluster or grid of multiple computers. Increasingly, the data are held in distributed data stores that are amenable to massively parallel processing, rather than in traditional relational databases.

Second, it is so time consuming to pull distributed data into a computing environment that it has become necessary for computational work to be distributed with the data. Google solved this problem in the context of indexing the web by introducing the MapReduce model for parallel programming. Apache Hadoop, an open-source implementation of this technology, is now widely used for Big Data applications.

Third, the cost of blade servers used in grid systems is dropping. A blade is simply a computer that shares components such as power and cooling to maximize computational ability and minimize space. Commodity blades are cost effective (around $10,000 each), and a rack of 48 blades can provide 1,152 processors, three terabytes of memory, and 20 terabytes of storage. Hundreds or thousands of blades can be added to accommodate more data.

As grid systems become prevalent in data centers and cloud computing services, many statisticians will see greater volumes of data along with rising expectations for analysis. We will need new techniques for data management and new tools for data analysis and visualization. And because so much data come from sources such as mobile phones, social networking sites, and health records, we will also need ways to acquire and analyze unstructured text data.

How Can Big Data Benefit from Us?

While we have much to learn about the domains and technology of large data, the world of Big Data has much to gain from the contributions of statistical scientists. We share many skills with data scientists, but we should proactively explain what sets us apart and why statistical thinking is critical to the process.

Like other analysts, statisticians look for features in large data—and we also guard against false discovery, bias, and confounding. We build statistical models that explain, predict, and forecast—and we question the assumptions behind our models and qualify the use of our models with measures of uncertainty. We work within the limitations of available data—and we design studies and experiments to produce data with the right information content.

If I had to summarize this in a sound bite, I would say that we extract value from data not only by learning from it, but also by understanding its limitations and improving its quality. Better data matters because simply having Big Data does not guarantee reliable answers for Big Questions.

How Should We Respond to Big Data?

Media focus on Big Data could not come at a better time, because the theme for the 2012 Joint Statistical Meetings (www.amstat.org/meetings/jsm/2012) is “Statistics: Growing to Serve a Data-Dependent Society.” Our presentations should draw attention to statistics as a dynamic discipline that is developing in response to complex, high-dimensional data, as well as new types of data.

We should also take advantage of the spotlight on Big Data to engage students in introductory statistics courses and attract students to statistical careers. And we should actively pursue the opportunities for research, projects, and work force development being created by the administration’s Big Data initiatives.

To keep up with the volume, velocity, and variety of Big Data, we need to stay on top of technological trends and gain new computational skills. This type of training should be offered in our universities and through continuing professional development provided by our association.

The era of Big Data has arrived—and we should think big!
The University of Alabama at Birmingham’s Section on Statistical Genetics will offer the second annual National Institute of General Medical Sciences (NIGMS)–funded short course, “Statistical Genetics and Genomics,” from July 9–13.

Focusing on state-of-the-art methodology to analyze complex traits, the five-day course will provide an interactive program to enhance researchers’ ability to understand and use statistical genetic methods, as well as implement and interpret sophisticated genetic analyses. Topics will include the following:

- Introduction to genetics and genomics, biostatistics
- GWAS design/analysis/interpretation
- Structural variation and human diseases
- Epigenomics methods
- Microarrays and RNAseq: Technologies and data processing
- Design and analysis of gene expression experiments
- Rare variants and exome sequencing
- Pharmacogenetics/pharmacogenomics
- Whole-genome prediction
- Integrating different data domains
- GWAS pathway-based approaches

There also will be software demonstrations on introductory R and Bioconductor; PLINK, PENNCNV, Epigenetic Analysis; IMPUTE2; ChiP Seq Software (DIME); RMANOVA and HDBSTAT; and Ingenuity Pathways Analysis (IPA).

To ensure the depth and practicality of the training program, the section will provide 10 laptops to students or student pairs in the classroom. Each computer will be loaded with the required statistical software. Participants are encouraged to bring their laptops.

Also, a limited number of travel fellowships are available for participants residing in the United States. For more information, visit www.soph.uab.edu/ssg/nigmsstatgen/second.

Speakers
Nancy Cox, The University of Chicago
Warren Ewens, University of Pennsylvania
Guilherme Rosa, University of Wisconsin-Madison
Carl Langefeld, Wake Forest University
Suzanne M. Leal, Baylor College
Shili Lin, The Ohio State University
Alison Motsinger-Reif, North Carolina State University
Atul Butte, Stanford University
Mahlet G. Tadesse, Georgetown University
Christine Duarte, University of Alabama
Gustavo de los Campos, University of Alabama
Xiangqin Cui, University of Alabama
Hemant Tiwari, University of Alabama
L. Kelly Vaughan, University of Alabama
Degui Zhi, University of Alabama
Hello, my name is Kalil Deschamps, and I am the ASA's new marketing coordinator. I came on board in January and have since been working diligently on upcoming conferences, the ASA Community, and membership services.

Born a Texan, I relocated to the Washington, DC, area at an early age with my parents and four siblings. After graduating from high school, I chose to attend Hampton University in southern Virginia, where I enjoyed my time as an HU Pirate while I earned my bachelor’s degree in marketing.

In my spare time, I love being around family and friends. I enjoy traveling, trying new food, listening to good music, and, of course, indulging in a little retail therapy. I look forward to meeting some of you at this year’s JSM and other upcoming events. Please feel free to contact me at kalil@amstat.org with any questions.
The ASA editorial search committee named Joseph Ibrahim as the next coordinating editor of the Journal of the American Statistical Association (JASA) and editor of JASA’s section on Applications and Case Studies. Ibrahim is a professor in the department of biostatistics at The University of North Carolina at Chapel Hill.

“Professor Ibrahim’s long record of research accomplishment and editorial experience uniquely qualify him for this prestigious position,” said David Banks of Duke University, who chaired the editorial search committee. “He has been a leader in the development of statistical methodology, especially Bayesian techniques, in nearly every aspect of biostatistics, from neuroimaging to longitudinal studies to genomics to missing data. He has provided extensive editorial service to the statistics profession, and we are fortunate he has agreed to accept these JASA positions.”

As coordinating editor, Ibrahim will work with the editors of JASA’s other two sections—Theory and Methods (co-editors Xuming He and Jun Liu) and Reviews (editor Alyson Wilson)—to ensure JASA publishes a balanced mix of articles.

Ibrahim previously served as an associate editor for both the JASA Applications and Case Studies section and its Theory and Methods section, as well as for Biometrics, Bayesian Analysis, and other prominent journals. Currently at UNC-Chapel Hill, he is the Alumni Distinguished Professor of Biostatistics and director of the Center for Innovative Clinical Trials.

For more information about JASA, visit www.tandfonline.com/action/aboutThisJournal?show=aimsScope&journalCode=uasa20.
American Statistical Association

2011 Audit Report for the American Statistical Association

Independent Auditor’s Report

To the Board of Directors
American Statistical Association
Alexandria, Virginia

We have audited the accompanying balance sheet of the American Statistical Association (the Association) as of December 31, 2011, and the related statements of activities and cash flows for the year then ended. These financial statements are the responsibility of the Association’s management. Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards for audits of internal control over financial reporting established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). We believe that our audit provides a reasonable basis for our opinion.

We have also performed an audit of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Association’s internal control over financial reporting. Accordingly, we express no such opinion. See Note 4.

We have also audited the change in net assets information of the Association. We designed the audit procedures for the change in net assets to provide a reasonable basis for our opinion in light of our understanding of its internal control and our evaluation of its accounting principles and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the 2011 financial statements referred to above present fairly, in all material respects, the financial position of the Association as of December 31, 2011, and the changes in its net assets and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated March 19, 2012, on our consideration of the Association’s internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the internal control over financial reporting and compliance. The report should be read in conjunction with this report. Our opinion expressed here is not a means of providing assurance on the internal control over financial reporting and compliance.

We also have audited, in accordance with Government Auditing Standards, and should be considered in assessing the results of our audit:

- The effectiveness of the Association’s compliance with any requirements concerning the use of its endowment funds that may be applicable to it.
- The association of the Association’s internal control over financial reporting and compliance with such requirements.

We have also audited the financial statements of the Association’s section for the year ended December 31, 2011. Our report dated March 19, 2012, on those financial statements expressed an unqualified opinion.

We have also issued our report dated March 28, 2011, on the Association’s 2010 financial statements. Those reports are an integral part of our audits performed in accordance with auditing standards generally accepted in the United States of America and the standards for audits of internal control over financial reporting established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). We expressed unqualified opinions on those financial statements.

McClure & Associates, LLP
Alexandria, Virginia
March 19, 2012

See Notes To Financial Statements.

American Statistical Association

Statement Of Activities
Year Ended December 31, 2011
(With Comparative Totals For 2010)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unrestricted</td>
<td>Restricted</td>
</tr>
<tr>
<td>Expenses</td>
<td>$2,393,873</td>
<td>$1,907,075</td>
</tr>
<tr>
<td>Revenue</td>
<td>6,580,429</td>
<td>5,714,040</td>
</tr>
<tr>
<td>Net change in</td>
<td>$3,186,557</td>
<td>$3,807,965</td>
</tr>
<tr>
<td>Net assets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

American Statistical Association

Balance Sheet
December 31, 2011
(With Comparative Totals For 2010)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unrestricted</td>
<td>Restricted</td>
</tr>
<tr>
<td>Liabilities</td>
<td>$2,874,345</td>
<td>$2,399,577</td>
</tr>
<tr>
<td>Net assets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

American Statistical Association

Statement Of Cash Flows
Year Ended December 31, 2011
(With Comparative Totals For 2010)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flows From Operating Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in net assets</td>
<td>$311,122</td>
<td>$909,268</td>
</tr>
<tr>
<td>Adjustments to reconcile change in net assets to net cash provided by operating activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>232,032</td>
<td>306,347</td>
</tr>
<tr>
<td>Amortization of bond issuance costs</td>
<td>6,851</td>
<td>6,851</td>
</tr>
<tr>
<td>Increases in accounts receivable</td>
<td>520,065</td>
<td>573,430</td>
</tr>
<tr>
<td>Equity in earnings from joint venture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net unrealized and realized gains (losses) on investments</td>
<td>881,257</td>
<td>1,929,169</td>
</tr>
<tr>
<td>Loss on interest rate swap contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions restricted for investment in perpetuity</td>
<td>(34,090)</td>
<td></td>
</tr>
<tr>
<td>Changes in assets and liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Increase) decrease in:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receivables</td>
<td>(189,127)</td>
<td>(189,127)</td>
</tr>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>206,863</td>
<td>206,863</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>40,789</td>
<td>40,789</td>
</tr>
<tr>
<td>Net cash provided by operating activities</td>
<td>915,187</td>
<td>969,346</td>
</tr>
<tr>
<td>Cash Flows From Investing Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from sales of investments</td>
<td>4,278,158</td>
<td>1,112,778</td>
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<tr>
<td>Proceeds from property and equipment</td>
<td>(8,677)</td>
<td></td>
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<tr>
<td>Net cash used in investing activities</td>
<td>(8,677)</td>
<td></td>
</tr>
<tr>
<td>Cash Flows From Financing Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal payments on bonds payable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions restricted for investment in perpetuity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate swap contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net cash provided by (used in) financing activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net (decrease) in cash and cash equivalents</td>
<td>(746,509)</td>
<td>86,226</td>
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<tr>
<td>Cash And Cash Equivalents</td>
<td></td>
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<tr>
<td>Beginning</td>
<td>6,122,317</td>
<td>5,102,129</td>
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<tr>
<td>Ending</td>
<td>6,868,820</td>
<td>6,188,355</td>
</tr>
<tr>
<td>Supplemental Schedule Of Cash Flow Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash paid for income taxes</td>
<td>160,200</td>
<td>169,127</td>
</tr>
<tr>
<td>Cash paid for interest expenses</td>
<td>261,527</td>
<td>254,196</td>
</tr>
</tbody>
</table>

See Notes To Financial Statements.

American Statistical Association

Note 1. Nature of Activities and Significant Accounting Policies

Valuation of long-lived assets: The Association accounts for the valuation of long-lived assets in accordance with FASB Accounting Standards Codification. As required by the Non-Profit Entities Topics of the FASB Accounting Standards Codification, Accounting for the Impairment or Disposal of Long-Lived Assets, long-lived assets and certain identifiable intangible assets are to be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of the long-lived asset is measured by comparison of the carrying amount of the asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered impaired, the impairment is to be recognized by a write-down of the carrying amount of the asset to its fair value. The amount by which the carrying amount of the assets exceeds the estimated fair value of the assets is to be charged to the statement of activities. The Association has assessed the carrying values of its long-lived assets to be $X.XX at December 31, 2011.

Board designated net assets: The Board of Directors had designated $1,235,337 at December 31, 2011, of unrestricted net assets to be used for various section activities and other board-approved projects.

Revenue and support: Membership dues are recognized ratably over the applicable membership period to which they apply. Payments for memberships, subscription sales, product sales, or services to be rendered and received in advance are deferred to the appropriate period.

Meeting revenue is recognized at the time the meeting takes place. Amounts received in advance of the meeting are shown as deferred revenue.

Publication revenue is recognized upon delivery of the material. All donor-restricted revenue is reported as an increase in temporarily or permanently restricted net assets, depending on the nature of the restriction. When a restriction expires (that is, when a specified time restriction ends or purpose restriction is accomplished), temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statement of activities as net assets released from restrictions. Temporarily restricted net assets are reported as unrestricted net assets if the restrictions are met in the same period.

Functional allocation of expenses: The costs of providing various programs and other activities have been allocated to the appropriate section and the statement of activities. Accordingly, certain costs have been allocated among the programs and supporting service benefits.

American Statistical Association

Note 1. Nature of Activities and Significant Accounting Policies

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Publication revenue is recognized upon delivery of the material. All donor-restricted revenue is reported as an increase in temporarily or permanently restricted net assets, depending on the nature of the restriction. When a restriction expires (that is, when a specified time restriction ends or purpose restriction is accomplished), temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statement of activities as net assets released from restrictions. Temporarily restricted net assets are reported as unrestricted net assets if the restrictions are met in the same period.

Functional allocation of expenses: The costs of providing various programs and other activities have been allocated to the appropriate section and the statement of activities. Accordingly, certain costs have been allocated among the programs and supporting service benefits.
Note 2. Receivables
Receivables consist of the following at December 31, 2011:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 2011</th>
<th>Amount 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other receivables</td>
<td>$136,831</td>
<td></td>
</tr>
<tr>
<td>Grants receivable</td>
<td>103,986</td>
<td></td>
</tr>
<tr>
<td>Trade accounts receivable</td>
<td>75,813</td>
<td></td>
</tr>
<tr>
<td>Due from joint venture</td>
<td>18,317</td>
<td></td>
</tr>
<tr>
<td>Less provision for doubtful accounts</td>
<td>328,746</td>
<td></td>
</tr>
<tr>
<td>Total receivables</td>
<td>$318,080</td>
<td></td>
</tr>
</tbody>
</table>

Note 3. Investments
Investments, at fair market value, consist of the following at December 31, 2011:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity mutual funds</td>
<td>$6,682,131</td>
</tr>
<tr>
<td>Fixed income mutual funds</td>
<td>4,375,666</td>
</tr>
<tr>
<td>Money market</td>
<td>73,674</td>
</tr>
</tbody>
</table>
| *Money market funds are not subject to the provisions of the fair value measurements, as they are recorded at cost.

The following summarizes investment loss for the year ended December 31, 2011:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest and dividends</td>
<td>$304,560</td>
</tr>
<tr>
<td>Realized loss</td>
<td>(256,157)</td>
</tr>
<tr>
<td>Unrealized loss</td>
<td>(141,010)</td>
</tr>
<tr>
<td>Total investment loss</td>
<td>$153,543</td>
</tr>
</tbody>
</table>

Interest, dividends, and realized losses are recorded in the applicable revenue and support line-item in the statement of activities.

Note 6. Temporarily And Permanently Restricted Net Assets
Temporarily restricted net assets were available at December 31, 2011, for the following purposes, and net assets were released from restriction by incurring expenses satisfying the restricted purpose:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cox Scholarship</td>
<td>$115,199</td>
</tr>
<tr>
<td>Wohlgemuth Award</td>
<td>69,630</td>
</tr>
<tr>
<td>Yudkin Award</td>
<td>42,014</td>
</tr>
<tr>
<td>Yudkin Scholarship Fund</td>
<td>24,819</td>
</tr>
<tr>
<td>Dering-Leake Fund</td>
<td>27,317</td>
</tr>
<tr>
<td>Willard Scholarship Fund</td>
<td>20,479</td>
</tr>
<tr>
<td>E. C. E. Ried Fund</td>
<td>25,028</td>
</tr>
<tr>
<td>Chemists' Award (ACM Software)</td>
<td>16,026</td>
</tr>
<tr>
<td>Down Award</td>
<td>15,160</td>
</tr>
<tr>
<td>Griffin-Mailing Award</td>
<td>15,345</td>
</tr>
<tr>
<td>National Memorial Fund</td>
<td>18,078</td>
</tr>
<tr>
<td>CA Scholar Award</td>
<td>7,049</td>
</tr>
<tr>
<td>Bernard G. H. H. Fund</td>
<td>7,518</td>
</tr>
<tr>
<td>Mancer-Meiner Fund</td>
<td>8,709</td>
</tr>
<tr>
<td>Walter Fund</td>
<td>5,021</td>
</tr>
<tr>
<td>Maritza Adams Scholarship Fund</td>
<td>4,058</td>
</tr>
<tr>
<td>Wilto Memorial Fund</td>
<td>5,792</td>
</tr>
<tr>
<td>Characteristic Award</td>
<td>3,245</td>
</tr>
<tr>
<td>K. E. Pearson Award</td>
<td>1,000</td>
</tr>
<tr>
<td>Access to Statistics Fund</td>
<td>3,295</td>
</tr>
<tr>
<td>Program Fund</td>
<td>2,310</td>
</tr>
<tr>
<td>Excellence in Statistics Fund</td>
<td>620</td>
</tr>
<tr>
<td>Total</td>
<td>$241,919</td>
</tr>
</tbody>
</table>

Permanently restricted net assets consisted principally of accumulated contributions for various awards, lecture series, and scholarships. These assets consist of the following at December 31, 2011:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Memorial Fund</td>
<td>$206,006</td>
</tr>
<tr>
<td>Dering-Leake Fund</td>
<td>67,000</td>
</tr>
<tr>
<td>Yudkin Award</td>
<td>61,000</td>
</tr>
<tr>
<td>E. C. E. Ried Fund</td>
<td>40,000</td>
</tr>
<tr>
<td>Wilto Memorial Fund</td>
<td>47,000</td>
</tr>
<tr>
<td>K. E. Pearson Award</td>
<td>34,000</td>
</tr>
<tr>
<td>Mancer-Meiner Fund</td>
<td>26,000</td>
</tr>
<tr>
<td>Walter Fund</td>
<td>30,000</td>
</tr>
<tr>
<td>Total</td>
<td>$328,006</td>
</tr>
</tbody>
</table>

Note 4. Equity In Joint Venture
The following schedule presents summarized financial information from the joint venture, in which the Association has equity ownership. Amounts presented for the year ended December 31, 2011, include the account of Techometrics (60 percent equity):

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributed income statement</td>
<td>$173,183</td>
</tr>
<tr>
<td>Expenses</td>
<td>123,840</td>
</tr>
<tr>
<td>Net income</td>
<td>49,343</td>
</tr>
</tbody>
</table>

Note 5. Property And Equipment
Property and equipment and accumulated depreciation at December 31, 2011, and depreciation expense for the year ended December 31, 2011, are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated losses</td>
<td>Cost</td>
</tr>
<tr>
<td>Building</td>
<td>$3,320,951</td>
</tr>
<tr>
<td>Building/land improvements</td>
<td>$1,367,050</td>
</tr>
<tr>
<td>Building renovation</td>
<td>23,100</td>
</tr>
<tr>
<td>Office equipment</td>
<td>85,235</td>
</tr>
<tr>
<td>Furniture and fixture</td>
<td>211,890</td>
</tr>
<tr>
<td>Computer equipment</td>
<td>129,230</td>
</tr>
<tr>
<td>Software</td>
<td>238,070</td>
</tr>
<tr>
<td>Total</td>
<td>$74,000,000</td>
</tr>
</tbody>
</table>

Note 6. Temporarily And Permanently Restricted Net Assets (Continued)
The Board of Directors of the Association has interpreted the Uniform Prudent Management of Institutional Funds Act (UPMIFA) as requiring the preservation of the fair value of the original gift as of the gift date of the donor-restricted endowment funds, absent explicit donor stipulations to the contrary. As a result of this interpretation, the Association classifies as permanently restricted net assets (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. The remaining portion of the donor-restricted endowment fund that is not classified as permanently restricted net assets is classified as temporarily restricted net assets, which may be expended for the purpose and subject to the limitations specified by UPMIFA. In accordance with UPMIFA, the Association considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds:

- The duration and preservation of the fund
- The purposes of the Association and the donor-restricted endowment fund
- General economic conditions
- The possible effect of inflation and deflation
- The expected total return from income and the appreciation of investments
- Other resources of the Association
- The investment policies of the Association

The Association has adopted investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to programs supported by the endowment while seeking to maintain purchasing power of the endowment assets.

All earnings of the endowment are reflected as temporarily restricted net assets until appropriated for expenditure by the various Committees of the Association. The Board of Directors has assigned a Committee to each program for the purposes of selecting and recommending individuals for awards or grants.

For the year ended December 31, 2011, the Association had the following endowment-related activities:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endowment net assets – December 31, 2010</td>
<td>$131,420</td>
</tr>
<tr>
<td>Additional income</td>
<td>488,256</td>
</tr>
<tr>
<td>Net income</td>
<td>34,000</td>
</tr>
<tr>
<td>Appropriation of endowment assets for expenditure</td>
<td>1,737</td>
</tr>
<tr>
<td>Endowment net assets – December 31, 2011</td>
<td>$328,006</td>
</tr>
</tbody>
</table>

these are the tables
American Statistical Association
Notes To Financial Statements

Note 7. Retirement Plans

The Association has a 401(k)/profit sharing plan and a money purchase plan. Both plans cover substantially all full-time employees from date of hire. Under the terms of the 401(k)/profit sharing plan, the Association will match 100 percent of the participating employee’s contributions, up to three percent of the employee’s salary. Under the terms of the money purchase plan, the Association contributes six percent of an eligible employee’s compensation to the plan. Contribution expense to the plans is as follows for the year ended December 31, 2011:

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money purchase plan</td>
<td>$175,293</td>
</tr>
<tr>
<td>401(k)/profit sharing plan</td>
<td>$2,220</td>
</tr>
</tbody>
</table>

Note 8. Related Party Transactions

The Association is a co-sponsor in one joint venture. It has a maintenance agreement with the joint venture for the year ended December 31, 2011:

<table>
<thead>
<tr>
<th>Joint Venture</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Technometrics</td>
<td>$18,316</td>
</tr>
<tr>
<td>Due to Joint Venture</td>
<td>Technometrics</td>
<td>$(428,014)</td>
</tr>
</tbody>
</table>

Maintenance Agreement Revenue:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technometrics</td>
<td>$(39,222)</td>
</tr>
</tbody>
</table>

Note 10. Interest Rate Swap Contract

The Association has an interest rate swap contract with a bank to reduce the impact of changes in the interest rates on its variable mortgage note. The swap contract was entered into for a ten-year period commencing on October 14, 2005. The nominal principal amount of the interest rate swap contract was $5,500,000 as of December 31, 2011. In accordance with the swap contract, the Association pays a fixed rate of interest of 3.99 percent and receives a variable interest rate equal to the USD-BMA municipal swap index (0.11355 percent at December 31, 2011). The Association recognized a loss of $47,158 under the interest swap contract for the year ended December 31, 2011. At December 31, 2011, the fair value of the swap contract was a liability of $250,658. The swap contract terminates in August 2015.

Note 11. Commitments

Hotel Space: The Association reserves hotel space for its conventions several years in advance. The Association pays the number of rooms to be reserved and the time period for which they are to be reserved. As of the date of this report, contracts for hotel space had been entered into through 2017. However, due to the numerous variables involved, the Association’s potential liability under these contracts cannot be determined.

Employment Agreement: The Association has entered into an employment contract with the Executive Director of the Association, which expires on August 15, 2015. The contract provides for severance payments equal to a minimum amount of up to ten months of compensation, depending on the years of service.

Note 12. Contingencies

The Association participates in a number of federally assisted grant programs, which are subject to financial and compliance audits by the federal agencies or their representatives. As such, there exists a contingent liability for potential questioned costs that may result from such an audit. Management does not anticipate any significant adjustments as a result of such an audit.

Note 13. Fair Value Measurements

The FASB Accounting Standards Codification standard on fair value measurements establishes a single authoritative definition of fair value, sets out a framework for measuring fair value, and requires additional disclosures about fair value measurements. This standard applies to all assets and liabilities that are being measured and reported on a fair value basis. The standard requires disclosure that establishes a hierarchy for measuring fair value in GAAP and expands disclosure about fair value measurements. This standard enables the reader of the financial statements to assess the inputs used to develop those measurements by establishing a hierarchy for ranking the quality and reliability of the information used to determine fair values. The standard requires that assets and liabilities classified at fair value will be classified and disclosed in one of the following three categories:

Level 1 – Quoted market prices in active markets for identical assets or liabilities
Level 2 – Observable market-based inputs or unobservable inputs corroborated by market data
Level 3 – Unobservable inputs that are not corroborated by market data

In determining the appropriate levels, the Association performs a detailed analysis of the assets and liabilities that are subject to the standard. At each reporting period, all assets and liabilities for which the fair value measurement is based on significant unobservable inputs are classified as Level 3. There were no Level 3 inputs for any assets held by the Association at December 31, 2011.

The table below presents the balances of assets and liabilities measured at fair value on a recurring basis by level within the hierarchy:

<table>
<thead>
<tr>
<th>Financial Assets</th>
<th>Total</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity mutual funds</td>
<td>$3,914,282</td>
<td>$3,914,282</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>S&amp;P 500 Index fund</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>International fund</td>
<td>$1,137,127</td>
<td>$1,137,127</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Small and mid-cap fund</td>
<td>$695,027</td>
<td>$695,027</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Global real estate fund</td>
<td>$683,391</td>
<td>$683,391</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Emerging markets</td>
<td>$135,894</td>
<td>$135,894</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>$4,985,399</td>
<td>$4,985,399</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Liabilities</th>
<th>Total</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate swap contract</td>
<td>$10,568,169</td>
<td>-</td>
<td>-</td>
<td>$10,568,169</td>
</tr>
</tbody>
</table>

Note 12. Contingencies (Continued)

The Association does not anticipate any significant adjustments as a result of such an audit. The Association is not aware of any significant events that may cause the Association to have a contingent liability for potential questioned costs that may result from such an audit. Management does not anticipate any significant adjustments as a result of such an audit.

Note 13. Fair Value Measurements (Continued)

The equity and fixed income mutual funds of the Association are publicly traded on the New York Stock Exchange and are considered Level 1 items. Money market funds of $75,674 are included in the total investments. Money market funds are not subject to the provisions of the fair value measurements, as they are recorded at cost. The Association’s interest rate swap is a pay-fixed, receive-variable interest rate swap based on the LIBOR swap rate. The LIBOR swap rate is observable at commonly quoted intervals for the full term of the swap, and is therefore, considered a Level 2 item.
First ‘Stats for Staffers’ Class Brings Statistics to the Hill
The ASA offered its first “Stats for Staffers” class on April 27 in conjunction with the Senate Office of Education and Training (OET). The class, titled “How Sound Are the Data?” was the first in the OET’s Critical Statistical Thinking series. Taught by Mary Foulkes of The George Washington University, the class lasted 90 minutes and was attended by 22 staffers from both personal and committee offices.

The class advertisement showed a picture of President Harry S. Truman with the famous newspaper headline, “Dewey Defeats Truman,” and promised an interactive discussion of questions to consider regarding the value of the data behind a claim or study and common data sources.

Foulkes, who has given two courses on statistics to journalists at the ASA, walked the staffers through the hierarchy of Green and Byar’s 1984 *Hierarchy of Evidence* (from anecdotal case reports to confirm randomized controlled clinical trials) and provided basic rules of thumb for judging the soundness of data. She also discussed the normal distribution, *p*-values, and confidence intervals.

The class received positive feedback from the staffers and enthusiasm for more classes on topics such as judging report conclusions, interpreting study results, and understanding data and graphics. Other suggested classes include survey methodology, a class on labor and economic statistics, and statistics for geographical information systems.

The original idea for such a class goes back to the 2009 congressional visits associated with the Joint Statistical Meetings that took place in Washington, DC, when 60 ASA members visited 120 offices. One of the staffers suggested statistics refresher classes and Sharon Hessney, an ASA member spending a year working in Sen. Al Franken’s (D-MN) office, met with the head of the Senate OET and sold the idea.

Foulkes was asked to give the first Stats for Staffers class because of the two successful workshops she has facilitated on statistical concepts in medicine for journalists and her support for the development of Stats for Staffers. To view her slides, visit www.amstat.org/outreach/pdfs/StatisticalCriticalThinkingFoulkes.pdf.

For more information about Stats for Staffers, visit www.amstat.org/outreach/StatsForStaffers.
W hen it comes to statistics, ASA member and IBM Chief Statistician Jing Shyr thinks of the bigger picture. “So the key is I continue to think about how statistics can be part of the bigger solution,” Shyr said. “How statistics can really solve the real problems in our society.”

This past fall, Shyr spent three weeks in Syracuse, New York, taking part in IBM’s Smarter Cities Challenge. The Smarter Cities Challenge is IBM’s largest single philanthropic program. Each participating city receives a donation consisting of the time and expertise of seasoned IBM employees who work closely with the city government to offer recommendations for a particular issue. Shyr joined four of her colleagues to work with Mayor Stephanie Miner, evaluate data about the city’s growing property vacancy problem, and propose solutions.

Shyr was inspired to participate in the Smarter Cities Challenge because of IBM’s focus on real-life solutions and innovation. “I started to really think about getting more experience, how to become part of the solution,” Shyr explained. “That is the reason why I took the opportunity to work on the Smarter Cities initiative.”

Shyr was inspired to participate in the Smarter Cities Challenge because of IBM’s focus on real-life solutions and innovation. “I started to really think about getting more experience, how to become part of the solution,” Shyr explained. “That is the reason why I took the opportunity to work on the Smarter Cities initiative.”

Shyr earned her PhD in statistics from Purdue University in 1984 after emigrating from Taiwan on a student visa. After graduating, she took a position teaching introductory statistics, probability theory, and statistics methods in the Owen Graduate School of Management at Vanderbilt University in Tennessee. While teaching at Vanderbilt, Shyr faced the challenge of teaching her students to enjoy statistics and understand how statistics applies to real-life situations.

“That was a time where I faced a really big challenge,” Shyr reflected. “MBA students have a lot of questions about why they want to learn statistics. They asked, ‘What can statistics do for me?’”

She continued, “I wasn’t offended, and I didn’t have the industry experience to come up with really good examples to inspire them. And so I felt bad and I said to myself, ‘You know, after so many years in education, maybe I should have gone to see how statistics can help to address real problems, instead of teaching somebody just the theory.’”

After two years of teaching at Vanderbilt, Shyr was recruited for a statistician job at SPSS. There, she designed algorithms for statistics software. She was eager to learn more about the company and worked closely with customers to understand their needs and how SPSS helped fulfill them. She worked as a statistical consultant for stock option traders to design statistical analyses for stock options and she was a consultant for an engineering project evaluating the survival rate of water pipes in Houston, Texas.

“In the beginning, I was really learning how to bring statistics computation into software development,” said Shyr. “So I learned so much in the beginning about software development. As I grew, I became more experienced and I started to have more and more opportunities to talk to customers, and that kind of experience inspired me to continue to contribute an idea of how to make statistics more fun in software development. It’s very good when you start something and then it becomes a bigger thing, so you try to do a better job to really make sure that the statistics you’re supposed to implement have a real meaning for the people who are using them.”

As she learned more about the company, she moved up within SPSS and eventually became a chief statistician, senior vice president of research and development, and the general manager of SPSS China Xian Software, Inc. One of her greatest accomplishments while general manager of SPSS China Xian Software, Inc., Shyr used both her strategic and technical management skills to coordinate the setup of a lab in China and helped staff its employees. As of 2009, 200 employees worked at the lab, and Shyr helped organize members of the U.S. team to help provide the offshore team with guidance.

“We were able to grow our technical staff in the United States to become leaders,” she said. “They have the experience to help mentor the junior staff in China.”

In 2009, IBM acquired SPSS and Shyr’s role changed to chief engineer at the company’s business analytics division. She also earned the title of distinguished engineer, a rare honor. “IBM has
more than 400,000 employees; there are only about 572 distinguished engineers in the company,” she explained. “Only about 13% of 572 distinguished engineers are female. It is very rare.”

Shyr has had a long and fulfilling path to success, but she didn’t expect her journey to take her to her current role. She has won many honors, including the Distinguished Alumni Award from Purdue University’s College of Science in 2000. In 2005, she won a distinguished alumna award from National Chiao-Tung University of Taiwan, her undergraduate alma mater. She has served on the advisory council of the college of science at Purdue for six years.

“I didn’t think 25 years would pass just like that,” she said. “I love math. I don’t think that the world understands math, so my challenge was ‘Could I take the math, the statistics I love the most, and can it be used in a very common language to allow people to leverage its usage and enjoy it themselves, or use it to answer questions they have in mind?’”

Shyr credits her experience working in industry for helping her gain a better understanding of statistics. “I was not satisfied at the level I was teaching. I was teaching the way that I knew statistics, and I didn’t think that when I was a student, I didn’t think that the knowledge that I learned would apply to society,” she said. “When I was teaching the same thing to them, I didn’t think I would improve this generation of education, so I decided I was going to look for a different path. I had no idea what path I was looking for, but I wanted to go work for industry so I could get real experience so I could teach better.”

She advises statisticians to think of ways to apply their knowledge to find solutions to real-life problems. She uses her experience in Smarter Cities as an example.

**If I were the mayor of Syracuse, how do I take all this information and send it into action?**

“The one thing I think statisticians should do is really take their knowledge and thinking about the real-world data and thinking about how to apply our knowledge to help solve this data and to discover this important information and help the world become better,” she explained.

“That’s what inspires me the most. In the end, when I saw the results and I was sitting there and I was thinking, ‘If I were the mayor of Syracuse, how do I take all this information and send it into action?’ And that moment makes me feel very proud. Not because I’m proud of my ability, but I’m proud that statistics is really useful.”

---

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One of the many people a publishing house has on staff is the acquisitions editor (AE). You may already have been contacted by an AE at some point in your career or have just heard the term and wondered what one does. Although the goal of an AE in simple terms is to acquire new books for his or her publisher, you’ll discover that the AE has three main roles in that process:

**Connector:** The AE is often the first contact between a potential author and a publishing house. It’s his or her job to make new connections via such actions as attending conferences or networking with the assistance of editorial boards and established authors. An AE might reach out to you as a potential author and ask you to meet at a conference or have a short phone call to discuss your research, the benefits of publishing with his or her publishing house, and how to go about completing and submitting your book proposal if you’re interested in taking that step. Once you’ve decided you’re going to write a book and have chosen the publisher(s) to which you want to submit your book proposal, you’ll begin working closely with an AE.

**Communicator:** The AE will be your main contact person at the publisher’s office once you’re a potential author. You’ll submit your proposal, hear back from the AE that he or she is sending it out for review, and then you’ll get more email when the reviewers have completed their work and the AE sends you their anonymous comments. While the review process is under way, you might also communicate with the AE to clarify how the publisher handles issues such as copy editing and marketing so you’re prepared for the next steps should you be offered a publishing contract for your book.

**Champion:** Assuming the reviewers have indicated enthusiasm for your book proposal, your AE will be the key person to champion the book to the powers that be. The AE will present your proposal and the reviews to this group of decisionmakers to encourage them to select the book for publication. The result of your combined efforts with your AE will hopefully be an offer of a publishing contract.

If a contract is offered, your AE will once again don the cap of the communicator and negotiate with you such details as royalty percentages and manuscript deadlines.

The next (or first) time you get an email or phone call from an acquisitions editor, consider taking him or her up on the offer of discussing whether your work would warrant a book project and, if so, whether it would be a good fit for the publisher the AE represents. You just might find a mutually beneficial relationship that can result in sharing your valuable research with a new or expanded audience.
I traveled an unusual path to my current position as an assistant research professor and director of LISA (Virginia Tech’s Laboratory for Interdisciplinary Statistical Analysis). Before entering the statistical science program at Duke University as an MS/PhD student, I journeyed through 67 countries. I hope you are well on your way to forging your own path in statistics, and maybe after reading about my experiences and ideas for how statistics can merge with international travel, you will begin to work/think/travel internationally.

When I graduated with an undergraduate degree in math, economics, and statistics, I had no job. I had lots of ‘interview experience’ and many friends with jobs, but I was unemployed. I did, however, have a plan, and it was not to go to graduate school. In fact, entering graduate school straight out of college had not even crossed my mind. I intended to travel throughout Europe for three months and then come home and look for employment.

I bought a one-way ticket to Europe and set off with a college friend to backpack across the Mediterranean. After two months and many beaches, trains, museums, and youth hostels, my friend flew home and I discovered that traveling alone was not so scary. Nearly everywhere I went, I found myself in a community of travelers. Sometimes, I convinced others to join me toward my next destination, but I usually headed off alone and met new friends along the way.

The more I traveled and met people who described the other wonderful and exotic places they had been, the more I wanted to travel. I spent eight and a half months traveling through Europe, eight months in Australia and New Zealand, and six and a half months in South and Southeast Asia. I traveled cheaply (e.g., three months in India cost, in total, $900), and I sent my friends and family regular postcards and the occasional email (this was just before the ubiquity of Internet cafés) to keep them updated on my adventures. These updates paid off when I ran out of money and two family members offered to loan me money to continue traveling until I was ready to come home. I figured that through these loans, 23-year-old Eric was borrowing from 26-year-old Eric, and my 26-year-old self was saying, “Keep traveling, keep traveling, keep traveling!” So I did, until after exactly 700 days, I was ready to come home.

Not So Fast
About a year later, I traveled again, this time for seven and a half months through Central and South America. Twenty-five-year-old Eric was now borrowing money from his 28-year-old self. One day while hiking the Inca Trail on the way to Machu Picchu in Peru, I had just climbed a steep mountain and was waiting for my travel buddies at the top of an ancient cloud forest. The thought occurred to me, “I will never be too old for anything.”
Right then, I made the decision to not let my age deter me from anything I wanted to do. So what that I was 25 and still hadn’t ever had a ‘real’ job. Who cared that it had been four years since I last solved an equation, did a proof, or programmed a computer? I didn’t care that if I went to graduate school I would be over 30 by the time I got my PhD. I had decided, right then, that I would never be too old for anything.

When I returned home, I studied for the GRE and hustled professors who barely knew me from classes 4–5 years earlier for letters of recommendation. I applied to six statistics PhD programs and visited five of them before leaving for my third international trip, this time to Africa for six months.

During my first full day in Africa, just minutes after I learned to never trust a man from Fez with a knife scar on his face, I stopped at an Internet café and read an email from Duke University informing me that I had been accepted into their statistics graduate program with the added bonus of a fellowship.

Statistical Consulting 101

My introduction to statistical consulting occurred at the border of Western Sahara (a former Spanish territory claimed by Morocco) and Mauritania while trying to hitch-hike a ride across the mine-filled border crossing. A Moroccan biologist studying the Saharan desert fox learned I was a future statistics graduate student and asked me about sampling methods related to his research. He drew a diagram for me on the sand, and then I tried to explain a concept to him, but I found a ride through the minefield into Mauritania before we got very far.

I learned other lessons while traveling in Africa, namely, toilets flush counter-clockwise in Timbuktu, and, more importantly, African problems require African solutions. Even if I thought the bus system in Ethiopia was absurd and could think of ways to ‘fix’ it, any solution to a problem in Africa would have to come from someone with insider knowledge.

My international travel experience also helped me learn to listen to my intuition: Get out of the car now, yes even though you’ll be stranded in the middle of nowhere. Jump back into the boat, as there’s a man-eating shark swimming right toward you! Don’t worry about not being able to breathe, just relax and move your head to a different position when you want to breathe. Seriously, do not trust men from Fez with knife scars on their faces!

Maybe most importantly, my international travel experience helped me during graduate school. During my third year at Duke, a biologist studying social relationships in a population of African elephants came into the statistical consulting center. Since I had been to Africa, the director of the consulting center figured I must like elephants and asked if I would like to work on the project. Because I was familiar with elephants and the setting of the client’s study, that project led to a collaboration, and that turned into two chapters of my dissertation on social networks in African elephants.
The Gift That Keeps Giving

International travel also has helped me in my faculty position at Virginia Tech. The many and diverse people I met while traveling has helped me be a better manager, teacher, and statistician. My experiences have given me ideas for how LISA can help expand the global impact of statistics by involving students in international research projects and educational exchange programs and building statistics capacity at universities in other countries.

The first of three international initiatives in LISA is to involve statistics students in the study design phase, the data collection phase, and the analysis and interpretation phases of data-intensive international research projects. These on-the-ground statisticians understand the research objectives, know how the data will be analyzed, and are responsible for ensuring the data are of high quality to address the research questions.

Last summer, LISA graduate student Mark Seiss spent 10 weeks in Mozambique as an on-the-ground statistician helping to design a household survey questionnaire, train local surveyors, and analyze and clean the survey data on a nightly basis to assess the effect of an economic development project to drill bore wells and install hand pumps in rural villages without access to clean water. His work was wildly successful and will be replicated next summer for the follow-up study of this impact evaluation. When more researchers with data-intensive projects hear about the value of statisticians in the field, more opportunities will be generated for students to gain this experience.

The second initiative is to exchange graduate students at Virginia Tech with universities abroad to improve the training of statisticians in communication and collaboration. The idea is that an experienced lead collaborator in LISA, who will have collaborated with 20–40 researchers at Virginia Tech, can work in an international statistical consulting center for six months while a student from the international university comes to Virginia Tech to work in LISA.

The third initiative is to help build statistics capacity in developing countries by training foreign statisticians in LISA to communicate and collaborate with nonstatisticians and support them with experienced collaborative statisticians in their home country to help local researchers design experiments, collect data, analyze data, interpret results, make decisions, and communicate the results and decisions to nonstatisticians. The idea is to identify a statistician from a developing country and train them in 21st-century statistics at Virginia Tech and LISA.

Once trained, students can return as a faculty member at their home university and advertise their services to researchers as a collaborative statistician. To support the creation of a sustainable statistical collaboration center at the university in the developing country, one or more LISA students can visit, on a revolving basis, the new collaboration center for six months to help run the it, collaborate with researchers, teach 21st-century statistics, and spread the use of statistical thinking. In subsequent years, LISA can train additional statisticians from foreign countries to help grow the newly created centers or establish new ones.
A WORKSHOP FOR EXPERIENCED TEACHERS
Sponsor: ASA-NCTM Joint Committee on Curriculum in Statistics and Probability

The ASA/NCTM Joint Committee is pleased to sponsor a Beyond AP Statistics (BAPS) workshop at the annual Joint Statistical Meetings (JSM) in San Diego, California, on August 1, 2012. Organized by Roxy Peck, the BAPS workshop is offered for AP statistics teachers and consists of enrichment material just beyond the basic AP syllabus. The course is divided into four sessions led by noted statisticians. Topics in recent years have included experimental design, survey methodology, multiple regression, logistic regression, what to do when assumptions are not met, and randomization tests.

COST:
The course fee for the full day is $50. Attendees do not need to register for JSM to participate in this workshop, although there is discount JSM registration for K–12 teachers available at www.amstat.org/meetings/jsm/2012.

LOCATION:
Hilton San Diego Bayfront, located at 1 Park Blvd., San Diego, CA 92101 near the San Diego Convention Center (workshop meeting room location to be announced)

PROVIDED:
- Refreshments (lunch on your own)
- Handouts
- Pass to enter the exhibit hall at the Joint Statistical Meetings
- Certificate of participation from the American Statistical Association certifying professional development hours
- Optional graduate credit

REGISTRATION:
More information and online registration is available at www.amstat.org/education/baps. Registrations will be accepted until the course fills, but should arrive no later than July 12. Space is limited. If interested in attending, please register as soon as possible.

QUESTIONS:
Contact Rebecca Nichols at rebecca@amstat.org or (703) 684-1221, Ext. 1877.

*The Joint Statistical Meetings is the largest annual gathering of statisticians, where thousands from around the world meet to share advances in statistical knowledge. JSM activities include statistics and statistics education sessions, poster sessions, and the exhibit hall.
NIJ Looking for a Few Good Statisticians

Forensic science R&D benefits from statistical support

For this month’s guest column, Gerald LaPorte, a physical scientist at the National Institute of Justice (NIJ), and David Fialkoff, an NIJ contract writer, describe steps NIJ has taken over the last few years to address weaknesses in forensic science identified in the 2009 National Academies Report, Strengthening Forensic Science in the United States: A Path Forward. The authors request the involvement of statisticians in solicitations for research to bolster the scientific foundations of forensic science disciplines.

~Steve Pierson, ASA Director of Science Policy

The need for increased collaboration between statisticians and forensic scientists became more focused after the National Academies published Strengthening Forensic Science in the United States: A Path Forward in 2009. This study, initiated and supported by NIJ and authored by a committee assembled by the National Research Council (NRC), gathered testimony from a cross-section of forensic science disciplines and made a number of critical recommendations. The study concluded that forensic science, as a whole, produces valuable evidence that contributes to the successful prosecution and conviction of criminals, as well as the exoneration of the innocent. The report also identified systemic weaknesses in forensic evidence and emphasized the harm done when poor forensic evidence is used in adjudicating a case.

The NRC committee made 13 recommendations designed to remove or ameliorate these systemic weaknesses. Of particular note here are recommendations three and five:

**Recommendation 3:** Research is needed to address issues of accuracy, reliability, and validity in the forensic science disciplines … in the following areas:

(a) Studies establishing the scientific bases demonstrating the validity of forensic methods

(b) The development and establishment of quantifiable measures of the reliability and accuracy of forensic analyses. Studies of the reliability and accuracy of forensic techniques should reflect actual practice on realistic case scenarios, averaged across a representative sample of forensic scientists and laboratories. Studies also should establish the limits of reliability and accuracy that analytic methods can be expected to achieve, as the conditions of forensic evidence vary. The research by which measures of reliability and accuracy are determined should be peer reviewed and published in respected scientific journals.

(c) The development of quantifiable measures of uncertainty in the conclusions of forensic analyses

(d) Automated techniques capable of enhancing forensic technologies

**Recommendation 5:** [Research is encouraged in programs] on human observer bias and sources of human error in forensic examinations. Such programs might include studies to determine the effects of contextual bias in forensic practice. In addition, research on sources of human error should be closely linked with research conducted to quantify and characterize the amount of error.

NIJ agrees with these NRC recommendations. We think research, development, and evaluation are systematic processes that build a more efficient, effective, and fair criminal justice system. We are committed to providing the knowledge and applying it to meet the rigorous scientific and technical challenges frequently encountered in the various disciplines of forensic science.

Even before the NRC released their report, NIJ was investing hundreds of millions of dollars into research and development (R&D). The great majority was allocated to DNA R&D.

Like many other disciplines, research priorities in forensic science are affected by current events and technological innovations. So, although critical research in the forensic sciences was taking place before 2009, the NRC report led to a shift in

Research funded under the “fundamental research” solicitation addresses the strengths and limitations of the following:

- Analytical procedures
- Sources of bias and variation
- Quantification of uncertainties
- Measures of performance
- Procedural steps in the analysis of forensic evidence
- Methods to continuously monitor and improve the forensic evidence analysis process

The goal was to investigate the fundamental underpinnings of forensic science disciplines that are primarily qualitative and develop more objective measures to improve current practices. NIJ has now funded 37 fundamental research grants totaling more than $15 million.

Although it is too early to fully evaluate the effect of fundamental research over the past several years, American Academy of Forensic Sciences (AAFS) President-elect Douglas H. Ubelaker wrote the following in the AAFS newsletter in 2010:

A recent major boon to research in forensic science has been the National Institute of Justice’s Office of Investigative and Forensic Sciences (OIFS), whose sole goal is to strengthen the quality and practice of forensic science. Over the past two years, OIFS has channeled over $300 million to this end, of which over $45 million directly targeted research. Support for research is channeled through three portfolios: Forensic DNA Research and Development, General Forensics (non-DNA) Research and Development, and Fundamental Research. …


With NIJ funding, researchers have contributed significantly to the evolution of DNA analysis, but research efforts in the areas of impression and pattern evidence such as fingerprints, firearms and toolmark examinations, and document examinations are challenging, since these disciplines are more qualitative and experienced based. Since 2009, NIJ has awarded more than $71 million to studies in various forensic disciplines. In past years, the largest portion has gone to forensic DNA ($24 million), but a significant amount has been allocated to friction ridge ($8.5 million), impression evidence ($7.7 million), and fire and arson investigation ($2.8 million). Overall, 67% of the funding is for applied research and 33% is for basic and fundamental research.

Like all scientific research agencies, NIJ is committed to building knowledge through interdisciplinary approaches and partnerships with other professional scientists such as anthropologists, chemists, and statisticians. At the core of our research and development program is the need for rigorous peer review. Our process involves peer reviewers who evaluate submitted proposals, and, just as important, a panel of reviewers who evaluate the completed research to provide feedback to the grantee. Currently, NIJ has more than 170 active awards, many of which are quantitative studies, and this has created a stringent demand for qualified statisticians.

The need to develop more quantifiable data in the areas of impression and pattern analysis, for example, has caused the forensic community to focus on expanding the scientific basis of the accuracy, validity, and reliability of these disciplines. And with the input of statisticians, NIJ is confident these goals can be achieved. In other words (to paraphrase a popular movie), NIJ is looking for a few good statisticians because NIJ can handle the truth.

To find NIJ’s current funding opportunities, visit www.nij.gov/nij/funding/current.htm. For more information about NIJ’s forensic R&D activities, visit www.nij.gov/nijtopics/forensics/forensic-awards.htm or send an email to forensic.research@ojp.usdoj.gov. We also invite you to the 2012 NIJ conference, to take place June 18–20 in Arlington, Virginia. For more information, visit www.nij.gov/events/niij_conference/welcome.htm.
How Can We Raise Public Awareness of Statistics?

Amy Herring and Narayanaswamy Balakrishnan

As we “Celebrate our Past, Energize our Future” we reflect on a number of exciting opportunities that expand our “big tent” organization by bringing new attention to statistics via enhanced public visibility and education.

One of the ASAs missions is to enhance statistics education at all levels. Outreach activities of the ASA have focused on educators as a means of reaching hundreds of thousands of K–12 students nationwide. Our members were critical in development of the AP Statistics exam, which was introduced in 1997 and was taken by more than 140,000 students in 2011 alone. The AP statistics course has increased the number of students who have a basic understanding of statistical concepts.

ASA members were instrumental in writing and reviewing the statistics content in the new Common Core State Standards for Mathematics, which will be adopted by most U.S. states and many territories. These standards give statistics a larger role in K–12 mathematics education and place more emphasis on statistical problem solving, conceptual understanding, and reasoning as described in the ASA’s Guidelines for Assessment and Instruction in Statistics Education (GAISE) Report: Pre-K–12 Curriculum Framework (www.amstat.org/education/gaise).

A new publication, Bridging the Gap Between Common Core State Standards and Teaching Statistics (www.amstat.org/education/btg), is designed to help educators bring statistics into elementary and middle school classrooms. The ASA also published Making Sense of Statistical Studies (www.amstat.org/education/mssis), which is a series of investigations to provide upper middle-school or high-school students valuable experience in designing and analyzing statistical studies.

In addition to the publications the ASA maintains, the website STEW, Statistics Education Web (www.amstat.org/education/stew), contains peer-reviewed lesson plans tied to the new standards.

Free webinars on K–12 statistics education topics are available at www.amstat.org/education/webinars. This series was developed as part of the follow-up activities for the Meeting Within a Meeting (MWM) statistics workshop for math and science teachers (www.amstat.org/education/mwm). The next MWM statistics workshop and the Beyond AP Statistics (BAPS) workshop (www.amstat.org/education/baps) will be held this August in San Diego, California, in conjunction with the Joint Statistical Meetings.

The U.S. version of Census at School is a free international classroom project that engages students in grades 4–12 in statistical problem solving. Students complete an online survey, analyze their class census results, and compare their class with random samples of students in the U.S. and other participating countries. A number of online webinars and other resources (www.amstat.org/censusatschool/resources.cfm) have been made available by the ASA to help educators learn more about the project and how to explore the data. These and other K–12 education efforts of the ASA are described at

Currently leading the way in heightening the public’s awareness of statistical science is the Royal Statistical Society (RSS), which is in the midst of the getstats campaign.

Getstats (www.getstats.org.uk) focuses on building the UK public’s confidence with numbers, data, and statistics. Their strongest focus has been on so-called ‘multiplier’ audiences, e.g. the media, teachers, members of parliament, and employers. Newspapers, such as The Guardian are building the concept of data journalism and exposing a wide audience to statistics through data blogs (www.guardian.co.uk/news/datablog).

“The Joy of Stats,” an award-winning one-hour documentary presented by Hans Rosling of the Karolinska Institute, has been featured multiple times on BBC4 and BBC2 and is available online at www.gapminder.org/videos/the-joy-of-stats.

David Spiegelhalter, the Winton Professor of the Public Understanding of Risk, is also active in efforts to increase statistical literacy. His website, http://understandinguncertainty.org, provides numerous useful tools for understanding and interpreting risk. With Mike Aitken at Cambridge, he has developed The Big Risk Test (www.bbc.co.uk/labuk/experiments/risk), designed to evaluate the public’s feelings about risk, knowledge of risk, and risk-taking behavior. Spiegelhalter has been featured on numerous television shows (ranging from game shows to science shows) and radio programs as part of his efforts. These efforts are critical in attracting new members to our “big tent” of individuals with interests in excellence in statistical research and practice.
The ASA also offers annual poster and project competitions (www.amstat.org/education/posterprojects) for K–12 students that offer opportunities for students to formulate questions and collect, analyze, and draw conclusions from data.

Additional efforts to target children in K–12 (and even earlier) are needed to break down the remaining cultural barriers that discourage certain children, especially young girls, from developing a lifelong love of the mathematical sciences. These efforts in statistical education, along with the upcoming educational campaign being planned (tentatively named StatSharp) will help us attract new students to explore our field further through undergraduate and graduate study.

In addition to its educational activities, the ASA is actively working to heighten public awareness of statistics. In April, Science published ASA President-elect Marie Davidian and AAAS Statistics Section retiring chair Tom Louis’s editorial, “Why Statistics?” highlighting the importance of statistics to science and society and the rapidly growing need for more statisticians. ASA is busy preparing for the International Year of Statistics in 2013 (www.statistics2013.org) and hoping for strong involvement from chapters and sections to raise awareness of our field.

The series Statistical Significance (www.amstat.org/outreach/statsig.cfm) highlights contributions that statisticians make in informing policy, improving health care, monitoring the environment, and improving national security.

The ASA has been advising Congress on climate change issues with special emphasis on the roles of statisticians in advancing science and informing policy—see Richard Smith’s congressional briefing on relevant issues at www.amstat.org/outreach/climatescience.cfm.

The recent ASA video contest, “Promoting the Practice and Profession of Statistics,” raised enthusiasm for our field; these videos have been viewed over 15,000 times on YouTube.

Members also are encouraged to join the Media Experts list (www.amstat.org/about/pdfs/ASAMediaExperts.pdf) to help journalists translate statistical results into lay language.

How can we better raise public awareness of statistics and “energize our future”? Please send your suggestions to ASA Executive Director Ron Wasserstein (ron@amstat.org). We look forward to hearing from you!
It goes without saying that a successful statistician must have strong analytical and technical skills. Clearly, you need to know and understand statistics—this is, after all, the added value that you uniquely provide. Most statisticians have master's degrees, but some—especially those who plan to go into academia—earn PhDs. Still others might hold, at least initially, an undergraduate degree only. How far to take your training is highly dependent on the specific career path you expect to follow.

You also need to be able to quickly grasp and properly apply complex technical concepts and to carefully examine, absorb, and question what is presented to you. Mathematics provides the foundation of the theory of statistics. You need to like mathematics and be good at it. In school, you will be taught the fundamentals and nitty gritty of statistical methodology. On the job, you often have to bend or extend a particular method to address the problem at hand. This frequently calls for strong mathematical skills.

Agility on the computer is a further technical skill important for successful statisticians. In addition, you will need to rapidly gain an understanding of the application area in which you become involved. Thus, the ability to learn quickly the fundamentals of a field and be conversant in it will help you immeasurably. And being an A student, although far from guaranteeing your success, will surely come in handy when you are looking for a job.

Though strong analytical and technical skills are critical, they alone are far from sufficient to ensure success as a statistician. Various strong personal skills are also needed.

**Communications and Related Skills**

Your customers, and sometimes even your management, may have little understanding and a limited idea of the potential contributions of statistics and statisticians. This requires you to teach and ‘sell’ the value of statistics—as well as of yourself.

You must speak the language of your customers—and not expect them to be proficient in yours. Statistical jargon must be avoided. You need to assess others’ statistical sophistication and calibrate what you say accordingly. You have to get across key ideas, conclusions, and recommendations succinctly and effectively in one-on-one or small-group settings, more formal presentations, and written communications.

The ability to be quick on your feet is an important part of communicating effectively. This is especially important in such situations as fielding questions from your CEO or agency or department head, or when, as an expert witness, you are under cross-examination or, as a government statistician, informing the media or the general public. And a significant part of being
A good communicator is being a good listener.

A genuine interest in others, an outgoing personality, and diplomatic skills are also highly important. So is the ability to network with colleagues with backgrounds and training that may be different from your own.

**Ability to Size Up Problems and See the ‘Big Picture’**

You need to be good at sizing up and diagnosing problems, appreciating their context and broader implications, and assessing their importance. Quoting George Box, “Statisticians must grit their teeth and also become practitioners. Only then will they discover where the truly novel problems are.”

Most problems are not well defined or articulated. Occasionally, you may be asked questions that are of little interest to anybody other than the person posing the question. (If this person happens to be your CEO or agency or department head, that automatically makes it an important question.) Or you may be called upon to give your ‘statistical blessing’ to a *fait accompli,* and an objective evaluation is less than welcome. It is important for you to appreciate such situations and act accordingly—including turning down assignments that might present ethical conflicts.

The ability to size up a problem astutely requires you to be able to rapidly gain an understanding of the underlying politics and have a good nose for gauging management interest and support. This calls for an inquisitive mind and the ability to frame—and the confidence to (politely) ask—fundamental questions that might challenge underlying and often unstated assumptions, as well as listening closely to the answers and any associated nuances. It may also require some independent digging and keen evaluation of your own.

**Flexibility**

Applied statisticians work in a dynamic environment. The strategic importance of a particular project may be downgraded (or upgraded) at any time due to, say, a change in management or business climate—and such changes are far from infrequent. (One of us worked for 17 managers in the course of a 46-year career in essentially the same organization).

You need to be prepared for things to change abruptly, to anticipate and recognize change, and to have the vigor to roll with the punches. While weighting heavily the demands of your current customers, managers, and projects, you need to frame your work to make it as robust to change as possible. This requires a good understanding of the business environment and information—and imagination—to recognize how this environment might change.

Some enjoy change and thrive on it. But it is not everybody’s cup of tea.

**A Proactive Mindset**

Merriam-Webster defines proactive as acting in anticipation of future problems, needs, or changes. The so-called “democratization of statistics”—resulting in today’s statisticians being relieved of many routine number-crunching activities—and the dynamic environment make it essential for statisticians to be proactive, and also make it easier. You need to search for opportunities for improvement and identify, assess, and communicate your potential role and contributions. This often calls for out-of-the-box thinking.

Once on a project, a proactive mindset will push you to look at things holistically—and to seek out important aspects of problems and useful and novel ways of addressing them to attain the best possible results.

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**SYSTAT Introduces Next-Generation Analytic Software**

Advise Analytics Inc., a Chicago-based scientific software company, recently launched AdviseStat, an analytics adviser. Unlike most statistics software, AdviseStat decides on the user’s behalf how best to analyze the data it’s given.

The software features an intuitive, minimalist interface to help users direct the program with plain verbs such as “predict,” “compare,” or “cluster.” Behind the scenes, the program automatically transforms the data and addresses subtle diagnostic issues before producing a whitepaper result with a customized explanation of the methodology it chose and the significant findings within the data. Interactive graphs and a full bibliography are included.

For more information and a free 30-day trial, visit [http://adviseanalytics.com](http://adviseanalytics.com).
Persistence
Statistical concepts—because they tend to be ‘different’ from the norm of deterministic thinking—often require reinforcement at strategically selected times before they take hold. Once on a project, action by others is often needed for you to be able to make meaningful contributions. For example, you typically have to rely on working partners to provide existing data or to collect new information.

You need to persist in driving toward what you believe to be in the best interest of the project and organization, not giving up easily when you are convinced you are on the right track. At the same time, you have to appreciate the fine line between persistence (or tenaciousness) and obstinacy. You must listen carefully to understand why others might think what you are advocating will not work or be practical and consider modifying your ideas while still achieving your major goals.

A Realistic Attitude
You need to focus on both the immediate requirements of the project and the long-term goals of the organization and not let marginal issues divert you. Quoting our colleague Roger Hoerl, “The best business solution is more important than the best statistical solution, and you need to know the difference.”

It might seem cool to try out a new method you learned in school, heard about recently, or even developed yourself, but you should do so only to the degree it is relevant and useful for the problem at hand. You may, for example, determine the available data are inadequate to serve the immediate needs of the project and are tempted to apply advanced modeling with the hope that this might provide a rescue. But your time and efforts might be better spent in working instead to procure improved data.

We all derive satisfaction from a job well done. However, in a results-oriented environment, you can be a perfectionist only up to a point. Cost and practical considerations dictate how far to take a project. Those who are not satisfied until they have driven a problem to its ultimate optimal solution need to learn how to

Sources for Further Information
adjust their thinking to accommodate the practical needs of the problems they encounter.

**Enthusiasm and Appropriate Self-Confidence**

A prerequisite to making others enthusiastic about what you do is for you to be enthusiastic and have a positive can-do attitude, conveying passion for your work. This calls for a high level of self-confidence.

At the same time, you need to be able to distinguish self-assuredness from arrogance. Not taking yourself too seriously and maintaining a sense of humor are helpful. So is an appreciation of the egos of others.

Even the most successful statisticians—and especially the most resourceful ones—encounter occasional setbacks. You need to be able to cope with these, learn from them, and move forward. On the other hand, if you find yourself consistently not succeeding, you need to take a close and candid look—perhaps with a trusted friend or mentor—at how you go about doing things and what changes you need to make.

**Ability to Prioritize, Manage Time, and Cope with Stress**

Statisticians frequently work on multiple projects at a time and need to respond to unanticipated crises and requests. This can result in overload situations. It makes it especially important for you to be able to manage and allocate time efficiently. Unanticipated demands can be better met, and the resulting stress reduced, by scheduling yourself to meet those demands that are known, or can be readily anticipated, with time to spare. You need to be able to prioritize tasks skillfully—based upon their importance, their deadlines, and the time required to do the work—and be ready to reprioritize as the situation changes. And you must learn how to diplomatically say “no” to work you judge unimportant or are unlikely to address successfully, either due to lack of time or technical considerations.

**Team Skills**

Statisticians frequently work as members of a project team—a mode we strongly advocate. In this capacity, you need to provide important added value to the team and be easy to work with. It might also require you to suppress some of your own aspirations for the sake of team harmony and success.

**Leadership Skills**

The democratization of statistics has opened up—and, indeed, invited exploration of—new opportunities for statisticians to exert leadership, either informally or in a specific role such as project team leader or manager of an organization. It requires you to have the strong personal, organizational, and visionary skills that characterize successful leaders.

**Passion for Lifelong Learning**

Our profession is constantly changing, as are the application areas in which you will be involved. You need to have the desire, and be able to take the time, to keep abreast of the latest developments in both.

**Concluding Remarks**

There have been numerous books and papers, as well as recent STAT@k articles, about what makes a successful statistician. It is unrealistic to expect any single individual to possess all of the important traits we and others describe. But the more of them you have, the better will be your chances of success.
Mathematics and Science Teachers

Based on the Common Core State Standards for Mathematics (corestandards.org) and Guidelines for Assessment and Instruction in Statistics Education (GAISE): A Pre-K–12 Curriculum Framework (www.amstat.org/education/gaise)

Dates: Tuesday, July 31, and Wednesday, August 1, 2012, 8:00 a.m. to 3:30 p.m.
Place: San Diego Convention Center, located at 111 West Harbor Drive, San Diego, CA 92101
(workshop meeting room location to be announced)
Audience: Middle- and high-school mathematics and science teachers. Multiple mathematics/science teachers from the same school are especially encouraged to attend. Note: Experienced AP Statistics teachers should register for the Beyond AP Statistics (BAPS) workshop. See www.amstat.org/education/baps for more information.
Objectives: Enhance understanding and teaching of statistics within the mathematics/science curriculum through conceptual understanding, active learning, real-world data applications, and appropriate technology
Content: Teachers will explore problems that require them to formulate questions; collect, organize, analyze, and draw conclusions from data; and apply basic concepts of probability. The MWM program will include examining what students can be expected to do at the most basic level of understanding and what can be expected of them as their skills develop and their experience broadens. Content is consistent with the Common Core State Standards, GAISE recommendations, and NCTM Principles and Standards for School Mathematics.

Presenters: GAISE report authors and prominent statistics educators

Format: Middle-school and high-school statistics sessions
One-day pass to attend activities at JSM* (statistics education sessions, poster sessions, JSM exhibit hall)
Activity-based sessions, including lesson plan development

Provided: Refreshments
One-day pass to attend the Joint Statistical Meetings
Lodging reimbursement (up to a specified amount) for teachers from outside the San Diego area
Handouts
Certificate of participation from the ASA certifying professional development hours
Optional graduate credit available

Cost: The course fee for the two days is $50. Please note: Course attendees do not need to register for the Joint Statistical Meetings to participate in this workshop.

Follow up: Follow-up activities and webinars (www.amstat.org/education/k12webinars)
Network with statisticians and teachers to organize learning communities

Registration: More information and online registration available at www.amstat.org/education/mwm. Space is limited. If interested in attending, please register as soon as possible.

Contact: Rebecca Nichols, rebecca@amstat.org (703) 684-1221, Ext. 1877

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

ASA ID # (if known)
Name
Preferred Name for Badge (if other than first name)
Organization
Address
City    State/Province    ZIP/Postal Code
Country (non-U.S.)
Phone
Email
In case of emergency, list the name and phone number of the person we should contact (remains confidential).
Emergency Contact’s Name
Telephone Number

Please check here if you need special services due to a disability or have food allergies/restrictions and attach a statement regarding your needs.

REGISTRATION FEES Workshop Fee (required)

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Short Courses—Monday, September 12
Add-ons to Workshop Fee: $100 each before Aug. 27; $105 each August 27–September 5
8:30 a.m.–12:00 p.m.

 SC1: Recent Adaptive Designs in Phase 2 and Phase 3: Theory and Implementation—Eva Miller, Paul Gallo, and Anastasia Ivanova
 SC2: Utility-Based Clinical Trial Design and Analysis—Peter Thall
 SC3: A Sensitivity Analysis Paradigm for Randomized Studies with Missing Data—Daniel Scharfstein

1:30 p.m.–5:00 p.m.

 SC4: Classical, Adaptive and Bayesian Clinical Trial Simulations: Concepts, Execution and Implementation—Sandeep Menon, Mark Chang, and Gheorghe Doras
 SC5: Statistical Evaluation of Diagnostic Performance Using ROC Analysis—Kelly Zou, Alicia Toledano, and Gregory Campbell
 SC6: Meta-Analysis with Multivariate Data—Christopher Schmid

TOTAL FEES: $________

MEAL PREFERENCE
Lunch on September 13 is included with your workshop registration. Please indicate the roundtable number (see back of form) for your 1st, 2nd, and 3rd choices.
1st    2nd    3rd
Lunch only    Not attending lunch

Select one of the following menu options:

☐ Regular    ☐ Vegetarian

INSTRUCTIONS
1. Print or type all information and retain a copy for your records.
2. Use a separate form for each registrant.
3. Mail form with payment to FDA–Industry Statistics Workshop Registration, 732 N. Washington Street Alexandria, VA 22314. Fax form (credit card only) to (703) 684-2037.
4. Registration form must be received by August 27, 2012, to be processed at the reduced rate. Purchase orders will not be accepted. ASA Federal ID #53-0204661.

CANCELLATION POLICY
Cancellations received by August 27, 2012, will be refunded, less a $25 processing fee and less a $50 processing fee for each short course. Cancellations received by September 5, 2012, will be refunded, less a $50 processing fee and less a $15 processing fee for each short course. Requests for refunds received after September 5 will not be honored. All cancellations must be made in writing to cheryl@amstat.org, via fax to (703) 684-2037, or mailed to FDA/Industry Statistics Workshop Registration, 732 N. Washington Street, Alexandria, VA 22314.

PAYMENT
☐ Check/money order payable to the American Statistical Association (in U.S. dollars on U.S. bank)
☐ Credit Card
☐ American Express    ☐ Discover    ☐ MasterCard    ☐ VISA
Card Number
Expiration Date    Security Code
Name of Cardholder
Authorizing Signature
Adaptive and Other Study Designs
TL1: Practical Issues with Non-Randomized Study Designs, Pablo Bonangelino, FDA/CDRH
TL2: Logistics and Implementation of Adaptive Trial Designs, Eva Miller, ICON Clinical Research
TL4: Innovated Design for First-Time in Human Study, Yu Lou, GlaxoSmithKline
TL5: Randomized Withdrawal Design, Ha Nguyen, Pfizer Inc.

Bayesian Methods and Designs
TL6: Evaluation of Type I Error in Bayesian Medical Device Trials with Informative Priors, Greg Maislin, Biomedical Statistical Consulting
TL7: Bayesian Application in Registration Trials with Confirmatory Secondary Endpoints, Yi-wen Ma, Janssen Pharmaceutical Companies of Johnson & Johnson

Biomarkers/Biosimilars
TL9: Biomarker Qualification in Drug Safety, Aloka Chakravarty, U.S. Food and Drug Administration
TL11: Selection and Validation of Biomarkers and Surrogate Endpoints, Abel Eshete, FDA
TL12: Statistical Issues in the Approval of Biosimilars, Eric Chi, Amgen Inc.

Collaboration/Guidelines
TL13: Awareness and Implementation of CDISC Standards, Vinip Arora, Abbott Laboratories
TL14: PhD, MS Statisticians: Roles and Responsibilities in the Pharmaceutical Industry, Nfit Ndikintum, PharmaNet/IC
TL16: New FDA cUTI Draft Guidance and Design Implications, Prasanna Ambati, PPDI, Inc.

Comparative Effectiveness/PROs
TL17: How Can Quantitative Methods and Tools Be Applied by Industry and Regulators to Determine a Medicine’s Value to Patients, Providers, and Patients?, Amit Bhattacharyya, GlaxoSmithKline
TL18: Industry Perspective on Practical Issues of PROs, Sheryl McCoy, Amgen

Diagnostics/Devices
TL19: Statistical Issues in Companion Diagnostics, Estelle Russek-Cohen, FDA CBER/DRB Division of Biostatistics
TL20: Statistical Design and Analysis Issues for Cardiovascular Medical Device Studies, Gary Kamer, FDA/CDRH/OSB/DBS
TL21: Evaluating Performance Measures Where Patients Contribute a Measure in a Temporal Sequence, Bipasa Biswas, FDA
TL22: Methods for Developing and Validating Diagnostic Tests, Lori Christman, STATKING Clinical Services
TL23: Design Considerations for Pivotal Clinical Investigations for Medical Devices, Alicia Toledano, Statistics Collaborative, Inc.
TL24: Diagnostic Imaging Studies, Lakshmi Vishnunavajola, FDA/CDRH
TL25: Missing Data Due to the Lack of a Reference Standard in Evaluation of Diagnostic Medical Devices, Qin Li, FDA/CDRH
TL26: Clinical Trials for Devices with Aesthetic Indications, Phyllis Silverman, FDA/CDRH

Drug Development
TL27: Innovation Session: Redesigning the Pharmaceutical R&D Process, Dennis Cosmato, ReSearch Pharmaceutical Services, Inc.
TL28: Bridging to Bridges in Vaccine Development: Managing the Drift in Multi-Serotype Vaccines, Jonathan Hartzel, Merck & Co., Inc.
TL29: Challenges and Opportunities in Small to Mid-Size Pharmaceutical Companies, Mike Coley, UCB Pharma
TL30: First-Time-in-Human Trials: Everything but the Kitchen Sink?, Sharon Murray, GlaxoSmithKline

Futility
TL31: Role of Futility Analysis in an Unblinded Interim Analysis, Peter Hu, Janssen Pharmaceutical Companies of Johnson & Johnson
TL32: Futility Analyses, Anthony Rodgers, Merck & Co., Inc.

Methodology
TL33: Practices on Benefit-Risk Assessment, Hong Laura Lu, FDA/CDRH
TL34: Missing Data: Bridging the Gap Between Industry and Academia, Herbert Thijs, Hasselt University
TL35: Statistical Issues in Oncology Clinical Trials: Progression-Free Survival and Overall Survival, Ying Wan, Janssen Research & Development LLC, Johnson & Johnson
TL36: Agreement Assessment Among Medical Devices or Raters, Lawrence Lin, Baxter International Inc.
TL37: The Actual Practice of Randomization Management, Michael Collins, ICON Clinical Research

Noninferiority
TL39: Analysis of change from baseline data in the presence of covariate-by-treatment interaction, Jihae Zhou, Allegan Pharmaceuticals Inc.
TL40: Meta-Analysis Based on Post-Hoc Selected Subgroups in Evaluating Overall Treatment Effect, Jagadish Gogate, Symiobine, Inc.
TL41: Experiences with Zero-Inflated Poisson or Negative Binomial Models in Clinical Trials or Other Types of Studies for Regulatory Submission Purposes, Stan Lin, FDA/CBER; Samir Lababidi, FDA/CBER; Ross Pierce, FDA/CDRH
TL42: What Do We Do When the Sites Are Not Poolable?, Jack Zhou, FDA/CDRH
TL43: Covariate Adjustment: Should Study Center Be Included?, Caiyan Li, Baxter Healthcare
TL44: Statistical Modeling to Evaluate Long-Term Persistence, Jason Martin, Merck & Co., Inc.
TL45: Mediators and Moderators in Randomized Clinical Trials, Christine Blaney, Concept Therapeutics and Stanford University
TL46: Issues in Clinical Trials with a Time Lag Between Randomization and Initiation of Treatment, Chunrong Cheng, FDA/CBER
TL47: Precision Study for a Qualitative Assay, Tie-Hua Ng, FDA/CBER
TL48: Sensitivity Analyses for Progression-Free Survival in Supporting Labeling Claim, Yun Wang, HHS/FDA

Propensity Scores
TL51: Subgroup Matching by Propensity Score in Randomized Trials, Xuena Wang, Amgen Inc.
TL52: Safety Assessment Using Propensity Score Methods in Observational Database Cohort Studies, Janelle Charles, U.S. Food and Drug Administration

Safety
TL53: QT/QTc Evaluation in Early Development Studies, Jaya Natarajan, Janssen R&D, Johnson & Johnson
TL54: Analysis of Safety Events of Interest in Placebo-Controlled Clinical Trials, Elena Polverejan, Janssen R&D, Johnson & Johnson

Veterinary

For additional information, please visit www.amstat.org/meetings/fdaworkshop.
The technical program for the Joint Statistical Meetings (JSM) 2012 will start on the afternoon of Sunday, July 29, and continue through the morning of Thursday, August 2. In any one of the 13 regular time slots during this period, you have well over 40 sessions to choose from, including invited sessions, organized by the JSM program committee; topic-contributed sessions, organized by participants; and contributed sessions.

In addition, there are 350 invited and contributed poster presentations. The posters, located near the exhibits, will have high visibility. Strolling through the posters is a great way to meet a few people and have a conversation about the work the presenters have done. New this year are the “video posters” that will afford a few of the presenters with a more flexible format for presentation, including dynamic graphical displays. The poster sessions run Monday through Wednesday.

Every year since 2002, JSM has featured late-breaking sessions on recent topics of broad interest. For 2012, I am pleased to include the following session in the program:

**The Role of Statisticians in Health Care Reform.**

The U.S. health care system faces many challenges, including cost, quality, access, equity, and safety. Improving the system is particularly challenging because the “system” is not a system, but rather a complex, shifting amalgam of delivery models and financing mechanisms. What can statisticians contribute to health care reform? John Adams, Marc Elliott, Arlene Ash, and others will tell us on July 30 at 2:00 p.m.

Introductory Overview Lectures (IOLs) are an always-popular offering. They provide an orientation to important and timely statistical topics. This year’s IOLs include the following:

**Causal Inference in Statistics: A Gentle Introduction** (July 29 at 4:00 p.m.)

Judea Pearl will provide a tutorial on the principles and tools of causal inference, with an emphasis on the role the counterfactual argument plays in establishing causality.

**Adaptive Design and Personalized Medicine: The Future is Now** (July 30 at 8:30 a.m.)

Don Berry will enlighten us with a description of the role adaptive trials can play in increasing the information gained from a trial and in personalizing treatment for subgroups of patients.
More Things to Do in San Diego

Following are a few more things to do in San Diego during JSM, as endorsed by the ASA local area committee. For even more, visit the convention and visitor’s bureau at www.sandiego.org.

Theater

San Diego Summer Pops
Concerts Outdoors at Embarcadero Marina Park South
July 29 - Dave Koz at the Movies
August 3–4 - Broadway Rocks!
August 5 - Burt Bacharach - What’s It All About
For more information, visit www.sandiego.org/listing/Visitors/3680 or call the San Diego Symphony at (619) 235-0804.

San Diego Civic Theater
July 24–29 - “Memphis”
For more information, call (619) 570-1100 (ticket information) or (619) 615-4000 (administration).

Moonlight Stage Productions
(45-minute drive)
July 25–August 11 - “Fiddler on the Roof”
For more information, visit www.moonlightstage.com or call (760) 724-2110.

La Jolla Playhouse
(20-minute drive)
July 10–August 5 - “The Nightingale”
For more information, visit www.lajollaplayhouse.org/nightingale or call (858) 550-1010.

Old Globe Theater
July 27–August 2 - “God of Carnage”
July 7–August 12 - “Divine Rivalry”
June 10–September 30 - “As You Like It”
June 3–September 29 - “Richard III”
June 17–September 25 - “Inherit the Wind”
For more information, visit www.theoldglobe.org.

San Diego Junior Theatre
July 27–August 5 - “Footloose”

SCUBA Diving
HMCS Yukon (destroyer escort) and others in Wreck Alley
For more information, visit www.sandiego.org/article_set/Visitors/13/103.

Various Activities
www.sandiego.org/nav/Visitors/EventCalendar?begin=2012-07-22&end=2012-08-13&category= &keywords=

Sparsity (July 31 at 8:30 a.m.)
David Donoho will tell us about the importance of sparsity in the data-rich world in which we live and how modern statistical methods capture the concept to improve analyses. We also will be treated to glimpses into a broad selection of applications.

Statistics and Climate (August 1 at 8:30 a.m.)
Peter Guttorp will provide an introduction to the methods used to assess evidence on global warming. He also will provide an introduction to basic climate models, tell us of their connection to data, and describe how the models relate to decisionmaking.

Additional highlights of the program include the following:

Memorial sessions for Martha Aliaga (July 29 at 4:00 p.m.), Tom Ten Have (July 30 at 2:00 p.m.), David Blackwell (July 31 at 8:30 a.m.), and Paul Meier (August 1 at 2:00 p.m.).

Keynote speakers: The Deming Lecturer is C. F. Jeff Wu (July 31 at 4:00 p.m.), and the COPSS Fisher Lecturer is Rod Little (August 1 at 4:00 p.m.). Also, don’t forget to see the ASA President’s Invited Address (July 30 at 4:00 p.m.) and ASA Presidential Address and Awards (July 31 at 8:00 p.m.).

Invited journal sessions; the Noether Award session; sessions organized by ASA chapters, committees, and interest groups; and several invited sessions organized by outside societies such as the Asociación de Estadística Mexicana, the International Association of Survey Statisticians, Mu Sigma Rho, and the International Society of Bayesian Analysis.

There are many other interesting and unusual sessions taking place every day and at all times. The tough part is deciding which sessions to attend and keeping track of them. Visit the JSM online program at www.amstat.org/meetings/jsm/2012/onlineprogram and use the “My Program” tool to compile your own schedule. Enjoy the meetings and when you meet session organizers and section program chairs, be sure to thank them for their hard work. Also, if you bump into ASA staff members, thank them as well for their hard work in putting the meeting together. Assembling a program with well over 600 sessions and 3,500 speakers has been complicated, but these terrific people have made it all possible.
Marie Davidian, who is full professor of statistics at North Carolina State University, was recently selected as the 2011–2012 D.D. Mason award winner. The award is made in recognition of Davidian’s years of outstanding service to the department and the statistics profession. Within the department, Davidian is especially known for her outstanding teaching and research, giving leadership to the biostatistics program, and for mentoring graduate and undergraduate students and junior faculty. More broadly, she is known for her research and innumerable contributions to serve and promote the field of biostatistics and statistics in general. Her service to the profession includes coordinating and executive editor of *Biometrics*, former president of ENAR, and current president-elect of the ASA.

The D.D. Mason Faculty Award is named for David D. Mason, who served as professor of statistics at NCSU from 1953 until he retired in 1981. For information about the award and Mason, visit [www.stat.ncsu.edu/information/admin/mason-award.php](http://www.stat.ncsu.edu/information/admin/mason-award.php).

William D. Nordhaus, Sterling Professor of Economics at Yale University, has been selected to receive the 2012 Julius Shiskin Memorial Award for Economic Statistics. This award recognizes unusually original and important contributions in the development of economic statistics or in the use of statistics interpreting the economy. Nordhaus is recognized for his contributions to the measurement of environmental-economic accounts and economic welfare and his active participation with the U.S. statistical system. Nordhaus will be honored at events hosted by the three sponsors of the award: The Washington Statistical Society, the National Association for Business Economics, and the Business and Economic Statistics Section of the American Statistical Association.

Nordhaus is best known for his work in measuring economic welfare and the impact of the environment on gross domestic product (GDP), which challenged the statistical systems in the United States and other countries to think more broadly about measurement issues. His research has had a major impact on economic statistics throughout the world by providing a conceptual and empirical basis for his measures. His 1972 monograph with the late James Tobin, “Is Growth Obsolete?” was among the first efforts to provide measures of economic welfare that differ from traditional measures of production, such as the GDP. That effort inspired substantial work to expand GDP and economic measurement to better record the effect of growth on economic welfare. In the United Nation’s (UN) 1993 System of National Accounts, satellite accounts were added to accommodate such extensions to the national accounts, and the UN published a handbook on developing integrated economic and environmental accounts.

In 1994, in “Integrated Economic and Environmental Satellite Accounts,” the Bureau of Economic Analysis (BEA) published a U.S. version of these accounts, and, in 2009, the Stiglitz-Sen-Fitoussi report on better measuring economic welfare was published, igniting another round of national and international efforts to provide measures of economic welfare. In contrast to the recommendations from some of these efforts, Nordhaus has expressed skepticism about incorporating “happiness” measures into economic accounting systems.

Building on his own work, Nordhaus chaired the 1999 National Academy of Sciences panel and co-edited its report, *Nature’s Numbers: Expanding the National Accounts to Include the Environment*, which recommended an empirical framework to integrate environmental and other nonmarket activity into GDP. He played a key role in a subsequent National Academies panel whose report, *Beyond the Market*, extended his study of environmental statistics to areas such as education and health. For a 2004 National Bureau of Economic Research (NBER) volume, *A New Architecture for the U.S. National Accounts*, he contributed an essay on applying a nonmarket account in the...
“new architecture” proposed in the volume, an essay that has already had a major impact on statistical practice on national accounting in the United States and many other countries. Most recently, in the May 2011 issue of the *American Economic Review*, he and his coauthors published “Environmental Accounting for Pollution: Methods with an Application to the United States Economy.”

Nordhaus has coupled his research with extensive involvement in and leadership of the statistical system. He currently serves as a member of the BEA Advisory Committee and served as its first chair. As chair, he was extremely active in working with BEA on innovations, including better integrated, more accurate, and timelier industry accounts; more comprehensive measures of stock options and pensions; the expansion of services data by BEA and the U.S. Census Bureau; and a wide range of new price indexes.

Nordhaus also has had significant influence on the statistical system through his work at the National Academy of Sciences. In addition to his work on environmental and nonmarket accounts, he was instrumental in the preparation of major studies on price and cost-of-living indexes and on the measurement of time use, both of which led to significant changes in federal statistical programs. The Bureau of Labor Statistics developed new ways to measure expenditures and prices for the medical sector and, in part because of his involvement in the time-use workshop, then launched the American Time Use Survey.

Nordhaus’s other work for the academy included improving environmental statistics and increasing our understanding of the economics of climate change. Nordhaus has served on academy oversight committees, such as the Committee on National Statistics and the Advisory Board for the Division on Behavioral and Social Sciences and Education, where he has worked to advance the relevance of U.S. economic statistics. In addition, he was the founder and chair of the American Economic Association’s Committee on Economic Statistics, which focuses the attention of professional economists on data issues. For example, he has been a member and senior advisor of the Brookings Panel on Economic Activity since 1972, is on the research staff of the NBER, and served on the Congressional Budget Office’s Panel of Economic Experts. Although his research has focused on economic growth and environmental accounting, he has worked on the economics of climate change. He has developed economic approaches to global warming, including the construction of integrated economic and scientific models to determine an efficient path for coping with climate change.

Nordhaus has received numerous honors for his research work and public service, including membership in the National Academy of Sciences, the American Academy of Arts and Sciences, and the Swedish Academy of Engineering. In 2004, the American Economic Association named him a distinguished fellow.

Jiann-Ping Hsu College of Public Health of Georgia Southern University (GSU) biostatistics professor and Georgia Cancer Coalition Distinguished Cancer Scholar Karl Peace was presented with the 2012 University System Board of Regents’ Hall of Fame Alumni Award during a ceremony held March 31 in Atlanta, Georgia.

Donald M. Leebern III (left), CEO of Georgia Crown Distributing, presents Karl Peace with the 2012 University System Board of Regents’ Hall of Fame Alumni Award during a ceremony held March 31 in Atlanta, Georgia.
Snehatala Huzurbazar, associate professor of statistics at the University of Wyoming, has accepted the position of deputy director of the Statistical and Applied Mathematical Sciences Institute (SAMSI) for the next two years. Huzurbazar will take a leave of absence from the University of Wyoming while she performs her duties at SAMSI, starting on July 9. She also will be a member of the research faculty at North Carolina State University in the statistics department.

“We are very impressed with Snehatala’s background and think she will bring a fresh perspective to the development of SAMSI’s programs and will be instrumental in our education and outreach efforts,” remarked Richard Smith, director of SAMSI.

In her new position, Huzurbazar will help administer SAMSI programs and help develop future programs. She also will be involved with education and outreach efforts and work on staff and personnel issues.

Huzurbazar earned her bachelor’s degree from Grinnell College in 1984, her master’s degree in economics from Vanderbilt University in 1988, and her PhD in statistics from Colorado State University in 1992. She was an assistant professor at the University of Georgia from 1992–1995 and has been at the University of Wyoming since 1995. At UW, she has been an affiliate of the Science and Mathematics Teaching Center since 2003. She was also an adjunct professor of women’s studies from 2003–2008.

Huzurbazar spent time at SAMSI last year as a visiting research fellow in the analysis of object data program. One reason she was attracted to the deputy director’s position was because SAMSI is the only National Science Foundation institute that explicitly includes a focus on statistics. She is particularly interested in encouraging young people to pursue careers in statistics and mathematical sciences.

“Making an impact on outreach is really important to me.
We often have trouble getting people into the mathematical sciences. I think we need to do a better job attracting students into mathematical sciences and inform them about various career options,” said Huzurbazar.

Much of Huzurbazar’s recent time has been spent building collaborations with colleagues in a variety of disciplines, ranging from evolutionary bioinformatics to the geosciences, broadly defined. In evolutionary bioinformatics, she is working on the statistical issues surrounding the data generation pipelines. “Genomes for various species are sequenced. Then, the data from the sequenced genomes are run through all kinds of computer programs in order to obtain what is used as the final ‘data’ that biologists model. We’ve been concerned that we are not taking into account the effects of the criteria used within these different pipelines on the final analyses and inferences that researchers obtain,” said Huzurbazar.

In the geosciences, she works with colleagues from glaciology, sedimentology, chemical and petroleum engineering, and restoration ecology. She spent 2004–2005 at the Institute of Arctic and Alpine Research in Boulder, Colorado. Some of the chemical engineering and sedimentology work involves modeling distributions of sand particles or water-in-oil emulsion particles using particle or grain-size distributions. The glaciology problems are about modeling three-dimensional data obtained from boreholes in glaciers to study how glaciers deform over time.

For more information about SAMSI, visit www.samsi.info or follow SAMSI on Twitter at @NISSSAMSI.

Obituaries

Douglas Carroll

Douglas Carroll, 72, of Warren, New Jersey, passed away on June 7, 2011. Born in Philadelphia, Pennsylvania, Carroll earned his bachelor’s degree in mathematics and psychology at age 19 from the University of Florida, Gainesville. He met his wife when they were both students at the university.

After graduating Phi Beta Kappa, he won a fellowship to Princeton, where he earned his master’s and doctoral degrees with major areas in mathematical experimental psychology and psychometrics and a minor in mathematics. At Princeton, he was elected to Sigma Xi scientific honor society.

After Carroll completed his doctorate, he started at Bell Labs, but also served on faculty as an assistant professor or adjunct professor at a number of universities, including New York University, Baruch College of the City University of New York, the University of California at Irvine and at San Diego, and the University of Pennsylvania.

Carroll retired from Bell Telephone Laboratories in 1989, after 25 years of research. He was then appointed by Rutgers University to the distinguished post of board of governors chair professor in business with a joint appointment in psychology. He also was visiting research professor at the Institute for Mathematical Behavioral Sciences, University of California at Irvine, until 1993.

Carroll served as associate editor of Psychometrika from 1973–2003, and he was on the editorial boards of the Journal of Classification and Journal of Marketing Research. He was editor of Methodika, as well as consulting editor to both the Journal of Experimental Psychology: Human Perception and Performance and Journal of Experimental Psychology: General.

In 2010, Carroll was given a lifetime achievement award at the 75th anniversary conference of the Psychometric Society. He is survived by his wife, Sylvia, and their two sons, Gregory and Stephen.

Robert S. Eckley

Illinois Wesleyan President Emeritus Robert S. Eckley died April 15. He was 90 years old.

Born in Kankakee, Illinois, Eckley grew up in Peoria, Illinois, and served in the Coast Guard Reserve as an engineering officer. He earned his bachelor’s from Bradley University, his master’s in business administration from the University of Minnesota, and a master’s and doctorate in economics from Harvard University.

Eckley served as a teaching fellow at Harvard from 1948–1949 and was an industrial economist for the Federal Reserve Bank of Kansas City from 1951–1954. He also served as manager of the business economics department of Caterpillar Tractor Co. in Peoria from 1954–1968. Eckley was president of Illinois Wesleyan from 1968–1986 and a member of the American Economic Association, National Association of Business Economists, and the ASA.

He is survived by his wife of 65 years—Nell B. (Mann) Eckley—four children, and five grandchildren. Memorials may be directed to Illinois Wesleyan University or Wesley United Methodist Church.

To read more about Eckley’s life, visit the Illinois Wesleyan website memorial page at www.iwu.edu/news/2012/04-president-eckley.html.
Bayesian Statistical Science

The Section on Bayesian Statistical Science will sponsor five invited sessions, seven topic-contributed sessions, 15 contributed sessions, five P.M. roundtables, and three Continuing Education courses during this year’s Joint Statistical Meetings in San Diego, California.

Continuing Education Courses
- Introduction to Bayesian Methods and Software for Data Analysis, taught by Bradley P. Carlin, University of Minnesota, and Laura A. Hatfield, Harvard Medical School
- Bayesian Time Series Analysis and Forecasting: Models and Methods, taught by Raquel Prado, University of California at Santa Cruz, and Mike West, Duke University
- Bayesian Clinical Trials, taught by Scott Berry and Kert Viele, Berry Consultants

Invited Sessions
- Recent Advances in Markov Chain Monte Carlo, organized by Jingchen Liu, Columbia University
- Bayesian Spatial Temporal Modeling of Large Environmental Data Sets, organized by Montserrat Fuentes, North Carolina State University
- Graphical Models: Current Developments and Future Directions, organized by Adrian Dobra, University of Washington
- New Developments in Bayesian Nonparametrics, organized by David Dunson, Duke University
- Bayesian Longitudinal Data Analysis, organized by Lurdes Y.T. Inoue, University of Washington

Topic-Contributed Sessions
- Bayesian Methods in Time-to-Event Data and Other Applications, organized by Sanjib Basu, Northern Illinois University
- Advances in Genomics, organized by Lynn Kuo, University of Connecticut
- Implementing Bayesian Methods in Drug Development, organized by Fanni Natanegara, Eli Lilly and Company
- SBSS Student Paper Competition Winners, organized by Marina Vannucci, Rice University

• Bayesian Joint Modeling of Patient-Reported Outcomes and Survival Information, organized by Bradley P. Carlin, University of Minnesota
• Bayesian Modeling: Application in Clinical Trial Design and Analysis, organized by Huyuan Yang, Millennium Pharmaceuticals
• Bayesian Methods with Applications to Health Sciences, organized by Saman Muthukumarana, University of Manitoba

P.M. Roundtables
- Bayesian Methods in the Pharmaceutical Industry, led by Vladimir Dragalin
- Bayesian Methods in Genetic and Environmental Epidemiology, led by Bhramar Mukherjee
- Bayesian Models for High-Throughput Omics Data, led by Yuan Ji
- Bayesian Nonparametrics Methods: Practical Issues and Current Frontiers, led by David Dahl
- Issues in Adaptive Bayesian Dose-Finding Designs, led by Tom Braun

Visit the JSM website at www.amstat.org/meetings/jsm/2012 for details about these sessions and to register. For section details, visit http://magazine.amstat.org/?cat=17. The section is also looking for invited session or short course ideas for JSM 2013, to be held in Montréal, Québec, Canada. Contact Peter Thall at rex@mdanderson.org if you have any.

Biometrics

The Biometrics Section will sponsor four short courses and six invited sessions during JSM 2012 in San Diego, California.

Continuing Education Courses
- Statistics Analysis with Missing Data, taught by Roderick Little and Trivellore Raghunathan
- Smoothing Splines: Methods and Applications, taught by Yuedong Wang
- Statistical Methods for Genome-Wide Association, Copy Number Variants, and Rare Variants Analysis, taught by Hongzhe Li and Wei Pan
• Design and Analysis of Biomarker Studies for Risk Prediction, taught by Tianxi Cai and Yingye Zheng

**Invited Sessions**

- Recent Methodology Developed for the Design of Early-Phase Clinical Trials, organized by Thomas Braun
- Statistical Challenges and Innovative Solutions for Correlated Data, organized by Peiyong (Annie) Qu
- Statistical Methods for High-Dimensional Complex-Structured Object Data, organized by Veera Baladandayuthapani
- Biomarkers for Risk Prediction, Disease Detection, and Treatment Effect Estimation: Statistical Issues, organized by Layla Parast
- Shrinkage Estimation: Unifying Different Perspectives, organized by Bhramar Mukherjee
- New Methodological Advances in Network-Based Analysis of Omics Data, organized by Ali Shojaie

To view the JSM 2012 online program or register for a course, visit [www.amstat.org/meetings/jsm/2012](http://www.amstat.org/meetings/jsm/2012).

The section also needs ideas for JSM 2013 invited sessions and Continuing Education courses. Anyone interested in organizing an invited session or who has ideas for one should contact Wei Sun at wsun@bios.unc.edu. Submit your ideas for short courses to Donglin Zeng at dzeng@email.unc.edu.

Invited session ideas are also welcome for the ENAR 2013 conference, which will take place March 10–13, 2013, in Orlando, Florida. Send your ideas to Daniel Scharfstein at dcharf@jhsph.edu.

For detailed section news, visit [http://magazine.amstat.org/?cat=17](http://magazine.amstat.org/?cat=17).

**Quality and Productivity**

The Quality and Productivity Section (Q&P) will offer four topic-contributed sessions and sponsor three contributed sessions at the 2012 Joint Statistical Meetings in San Diego. You can find all of the Q&P-sponsored and cosponsored sessions by searching the JSM online program at [www.amstat.org/meetings/jsm/2012/onlineprogram](http://www.amstat.org/meetings/jsm/2012/onlineprogram).

**Topic-Contributed Sessions**

- Modern Reliability and Structured Health Management
- Model Robust Design: Why Not More Impact?
- Flexible and Powerful Approaches to Process Optimization Using Bayesian Methods
- Some Current Research Problems in Statistical Process Control

**Statistics and the Environment**

Members of the Section on Statistics and the Environment have tentatively scheduled the section’s business meeting/mixer for July 30 during the Joint Statistical Meetings in San Diego, California. Catch up with old friends and meet some new. Food and drinks will be provided, along with some surprises.

If you have ideas about topics for JSM 2013 invited sessions, contact Veronica Berrocal at berrocal@umich.edu.

**Survey Research Methods**

The final section-sponsored webinar of the spring series will be presented by Frauke Kreuter of the University of Michigan this month. His topic is “Paradata to Monitor and Analyze Survey Processes.” To register, visit [www.amstat.org/sections/SRMS/webinar.cfm](http://www.amstat.org/sections/SRMS/webinar.cfm).

Additionally, the section will sponsor a number of sessions and poster presentations at JSM 2012. To view a complete list, visit the online program at [www.amstat.org/meetings/jsm/2012/onlineprogram](http://www.amstat.org/meetings/jsm/2012/onlineprogram). For detailed section news, visit [http://magazine.amstat.org/?cat=17](http://magazine.amstat.org/?cat=17).
The following events are the latest additions to the ASA’s online calendar of events. Announcements are accepted from education and not-for-profit organizations only. To view the complete list of statistics meetings and workshops, visit www.amstat.org/dateline.

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

›› Indicates events posted since the previous issue

2012

July

1–4—IMS Asia Pacific Rim Meetings, Tsukuba, Japan
For more information, visit http://ims-aprm2012.org/index.html or contact Runze Li, Department of Statistics, Penn State University, University Park, PA 16802-2111; (814) 865-1555; rli@stat.psu.edu.

3–5—Leeds Annual Statistical Research (LASR) Workshop, Leeds, United Kingdom
For more information, visit www1.maths.leeds.ac.uk/statistics/workshop/lasr2012 or contact Kanti Mardia, University of Leeds, School of Mathematics, Woodhouse Lane, Leeds, International LS9 7JT, UK; workshop@maths.leeds.ac.uk.

3–6—International Statistical Ecology Conference (ISEC) 2012, Oslo, Norway
For more information, visit www.cees.uio.no/news/2010/sec2012.html or contact Carl Schwarz, Statistics and Actuarial Science, Burnaby, British Columbia, V5A1S6, Canada; (778) 782-3376; cgschwarz@stat.sfu.ca.

3–6—Fields Institute International Symposium on Asymptotic Methods in Stochastics, in Honor of Miklós Csörgő’s Work, Ottawa, Canada
For more information, visit www.fields.utoronto.ca/programs/scientific/12-13/stochastics or contact Rafał Kulik, 585 King Edward Ave, Ottawa, International K1N6N5, Canada; rkulik@uottawa.ca.

4–6—World Congress on Engineering 2012, London, United Kingdom
For details, visit www.iaeng.org/WCE2012 or contact IAENG Secretariat, Unit 1, 1/F, 37-39 Hung To Road, Hong Kong, International HK, Hong Kong; (852) 3169-3427; wce@iaeng.org.

4–6—Statistical Inference in Complex/High-Dimensional Problems, Vienna, Austria
For details, visit www.univie.ac.at/inference2012 or contact Hannes Leeb, Department of Statistics, Universitätsstr. 5/3; Vienna, International 1010, Austria; +43 1 4277 38620; hannes.leeb@univie.ac.at.

9–12—Australian Statistical Conference 2012, Adelaide, Australia
For more information, visit www.sapmea.asn.au/conventions/asc2012 or contact Paul Sutcliffe, P.O. Box 213, Canberra, International 2616, Australia; 82988179; sutters@bigpond.net.au.
9–14—8th World Congress in Probability and Statistics, Istanbul, Turkey
For details, visit www.worldcong2012.org or contact Aycil Yesilirmak, Ayazmaderesi Cad. Karadut Sok. No: 7, Dikilitas, Istanbul, International 34349, Turkey; +90 212 381 46 00; aycilyesilirmak@figur.net.

»9–27—Summer Institute in Statistical Genetics, Seattle, Washington
For more information, visit www.biostat.washington.edu/SISG or contact Bruce Weir, Box 357232, Seattle, WA 98115; (206) 221-7947; bsweir@uw.edu.

10–13—Workshop on Algorithms for Modern Massive Data Sets (MMDs 2012), Stanford, California
For more information, visit mmds.stanford.edu or contact Alexander Shkolnik, 475 Via Ortega, Stanford, CA 94305; ads2@stanford.edu.

16–18—International Symposium in Statistics (ISS) 2012 on Longitudinal Data Analysis Subject to Outliers, Measurement Errors, and/or Missing Values, St. John’s, Newfoundland
For more information, visit www.iss-2012-sjohns.ca or contact Brajendra Sutradhar, Elizabeth Avenue, St. John’s, Newfoundland A1C5S7, Canada; (709) 864-8731; bsutradh@mun.ca.

16–20—MBI BioSciences Problem-Solving Workshop (PSW@MBI), Columbus, Ohio
For more information, visit www.mbi.osu.edu/2012/stgrdescription.html or contact Rebecca Martin, 1735 Neil Ave., Columbus, OH 43210; (614) 688-3519; rebecca@mbi.osu.edu.

16–20—27th International Workshop on Statistical Modeling, Prague, Czech Republic
For more information, visit http://wsm2012.karlin.mff.cuni.cz or contact Arnost Komarek, Sokolovska 83, Praha 8, International 18200, Czech Republic; 00420221913282; komarek@karlin.mff.cuni.cz.

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

16–24—Industrial Math/Stat Modeling Workshop for Graduate Students, Raleigh, North Carolina
For more information, visit www.samsi.info/workshop/2012-industrial-mathstat-modeling-workshop-graduate-students-july-16-24-2012 or contact Karen Jackson, 19 T.W. Alexander Drive, RTP, NC 27709; (919) 685-9324; admin@samsi.info.

23–26—Joint Meeting of y-BIS and JSPE, Lisbon, Portugal
For details, visit www.ybis-jspe.com or contact Paulo Rodrigues, Department of Mathematics, Faculty of Sciences and Technology of UNL, Caparica, International 2829-516, Portugal; 00351936110338; paulocanaas@gmail.com.

26–28—18th ISSAT International Conference on Reliability and Quality in Design, Boston, Massachusetts
For details, visit www.issatconferences.org or contact Conference Secretary, P.O. Box 1504, Piscataway, NJ 08855; rql@issatconferences.org.

*28–8/2—2012 Joint Statistical Meetings, San Diego, California
For more information, visit www.amstat.org/meetings/jsm/2012/index.cfm or contact ASA Meetings, P.O. Box 1504, Piscataway, NJ 08855; meetings@amstat.org.

August

For more information, visit www.ssp2012.org or contact Clayton Scott, 1301 Beal Ave., Ann Arbor, MI 48109; contact@ssp2012.org.

6–10—Ten Lectures on Statistical Climatology, Seattle, Washington
For more information, visit www.statmos.washington.edu/wp/?p=42 or contact Peter Guttorp, Box 354322, Seattle, WA 98195-4322; peter@stat.washington.edu.

6–17—Summer Program on Computational Advertising, Research Triangle Park, North Carolina
For details, visit www.iscb2012.info or contact Inger Lise Ravanger, Torgalmenning 1a, P.O. Box 947 Sentrum, Bergen, International 5808, Norway; +47 55553655; mail@kongress.no.

*19–23—33rd Annual Conference of the International Society for Clinical Biostatistics, Bergen, Norway
For details, visit www.iscb2012.info or contact Anabel Cordero, Landmark Center, Park Street, Boston, MA 02115; (617) 384-8692; contedu@hsph.harvard.edu.

20–22—Measurement, Design, and Analysis Methods for Health Outcomes Research, Boston, Massachusetts
For more information, visit www.amstat.org/meetings/jsm/2012/index.cfm or contact Anabel Cordero, Landmark Center, Park Street, Boston, MA 02115; (617) 384-8692; contedu@hsph.harvard.edu.

26–31—XXVIth International Biometric Conference, Kobe, Japan
For more information, visit www.ksit.org/ibc2012 or contact Anabel Cordero, Landmark Center, Park Street, Boston, MA 02115; (617) 384-8692; contedu@hsph.harvard.edu.

September

3–7—Summer School ABS12 on Stochastic Modelling for Systems Biology, Pavia, Italy
For details, visit www.mi.imati.cnr.it/abs12/ or contact Paolo Rodrigues, paulocanaas@gmail.com.
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9–12—SAMSI: Statistical and Computational Methodology for Massive Data Sets Opening Workshop, Research Triangle Park, North Carolina
For more information, visit www.samsi.info/workshop/program-statistical-and-computational-methodology-massive-datasets-opening-workshop-septemb or contact Karem Jackson, 19 T.W. Alexander Drive, RTP, NC 27709; (919) 685-9324; admin@samsi.info.

9–13—ENBIS-12, Ljubljana, Slovenia
For more information, visit www.enbis.org or contact Irena Ograjensek, University of Ljubljana, Faculty of Economics, Kardeljeva pl. 17, Ljubljana, International 1000, Slovenia; +386 1 5892 505; irena.ograjensek@ef.uni-lj.si.

19–21—WCBF’s Using Lean Six Sigma to Prevent Avoidable Readmissions, Boston, Massachusetts
For details, visit www.wcbf.com/quality/5112 or contact Selina Mirpuri, 30 S. Wacker Drive, 22nd Floor, Chicago, IL 60606; (800) 959-6549; selina.mirpuri@wcbf.com.

24–27—Structure and Uncertainty, Bristol, United Kingdom
For more information, visit www.sustain.bris.ac.uk/wss-structure or contact Andrieu C, University Walk, Bristol, International BS8 1TW, UK; c.andrieu@bristol.ac.uk.

27—19th Federal Forecasters Conference, Washington, DC
For details, visit http://ffc2012.eventbrite.com or contact Jeff Busse, 12201 Sunrise Valley Drive, MS5987, Reston, VA 20192; (703) 648-4914; jbusse@usgs.gov.

»28—Lagakos Alumnus Award Lecture, Boston, Massachusetts
For details, visit www.hsph.harvard.edu/departments/biostatistics/announcements/the-lagakos-distinguished-alumnus-award-established.html or contact Shaina Andelman, 655 Huntington Ave., Building 2, 4th Floor, Boston, MA 02115; (617) 432-7449, sandelma@hsph.harvard.edu.

October

»4–5—Fall Technical Conference Student Grants Competition, St. Louis, Missouri
For more information, visit cba.ua.edu/ftc2012 or contact Timothy Robinson, Department of Statistics, University of Wyoming, Laramie, WY 82071-3332; (307) 766-5108; tjrobin@uwyo.edu.

»5–7—International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, North Carolina
For more information, visit www.unc.edu/mat/aisc or contact Sat Gupta, 317 College Ave., Petty Building, Department of Mathematics and Statistics, Greensboro, NC 27412, (336) 334-6285; snsgupta@uncg.edu.

17–19—WCBF’s Using Lean Six Sigma to Improve Patient Safety, Miami, Florida
For details, visit www.wcbf.com/quality/5115 or contact Selina Mirpuri, 30 S. Wacker Drive, 22nd Floor, Chicago, IL 60606; (800) 959-6549; selina.mirpuri@wcbf.com.

18–20—Carthage Meeting on Statistics, Hammamet, Tunisia
For more information, visit http://rsc2012.atistat.com or contact Hlel Yemen, Institut of Statistic and Information Analysis, Ariana, International 2037, Tunisia; +216 55 313 452; rsc2012@atistat.com.

24–26—World Congress on Engineering and Computer Science 2012, San Francisco, California
For more information, visit www.iaeng.org/WCECS2012 or contact IAENG Secretariat, Unit 1 1/F, 37-39 Hung To Road, Hong Kong, International HK, Hong Kong; (852) 3169-3427; wcecs@iaeng.org.

For details, visit www.amstat.org/meetings/h2r/2012 or contact Kathleen Wert, 732 N. Washington St., Alexandria, VA 22314; (703) 684-1221; h2r2012@amstat.org.

November

7–9—WCBF’s Using Lean to Improve Hospital Bed Management and Patient Flow, Orlando, Florida
For details, visit www.wcbf.com/quality/5114 or contact Selina Mirpuri, 30 S. Wacker Drive, 22nd Floor, Chicago, IL 60606; (800) 959-6549; selina.mirpuri@wcbf.com.

8–11—AMATYC Annual Conference, Jacksonville, Florida
For more information, visit www.amaty.org or contact Frank Goulard, 12000 SW 49th Ave., Portland, OR 97219; (971) 722-4781; amaty.org.

17—Info-Metrics and Nonparametric Inference, Riverside, California
For details, visit www.amstat.org/cas/economics/info-metrics/workshop/workshop-2012-november.cfm or contact Amos Golan, American University, 4400 Massachusetts Ave., NW, Kreeger 104, Washington, DC 20016; (202) 885-3770; info-metrics@american.edu.

December

*2–7—68th Annual Deming Conference on Applied Statistics, Atlantic City, New Jersey
For more information, visit www.demingconference.com or contact Walter Young, 16 Harrow Circle, Wayne, PA 19087; demingchair@gmail.com.

27—Eighth International Triennial Calcutta Symposium on Probability and Statistics, Kolkata, India
For more information, visit http://triennial.cuttastatisticalassociation.org or contact Arindam Sengupta, 35 Ballygunge Circular Road, Department of Statistics, University of Calcutta, Kolkata, International 700019, India; +91-9433590336; caltri8@gmail.com.
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District of Columbia
- The National Committee for Quality Assurance (NCQA) seeks a director, analysis to provide day-to-day management in analysis. Responsibilities include significant operational, budgetary, and supervisory responsibility and will direct all internal analytic projects for NCQA, including accreditation and HEDIS data, as well as externally funded projects. This position will also provide statistical and methodological support for the development and refinement of NCQA projects and products. To apply: https://home2.eease.adp.com/recruit?id=2011651. NCQA recruits, hires, trains and promotes individuals, and administers any and all personnel actions, without regard to race, color, religion, creed, national origin or ancestry, sex, marital status or disability, in accordance with applicable laws.

Iowa
- Coordinator of Statistical Consulting and Director of the Survey and Behavioral Research Services. Experience with statistical consulting, statistical software packages, and managing a data service center. MS with six years experience or PhD with three years experience. Submit application letter, CV, and contact information for three references to www.iastatejobs.com, under vacancy 120347. More information at www.stat.iastate.edu. Iowa State University is an Equal Opportunity/ Affirmative Action employer.

Missouri
- Monsanto is seeking a statistician regulatory to join our team in St. Louis, MO. The statistician will provide key statistical support needed to demonstrate the efficacy and safety of Monsanto’s biotechnology and chemical agricultural products. PhD in statistics or biostatistics or MS in statistics or biostatistics required. At least one year of statistical consulting experience is needed. Visit us online at jobs.monsanto.com/statistician to apply. EOE.

New York
- Position available for master’s-level biostatistician. The successful applicant will engage in wide variety of collaborative projects with medical investigators and statisticians. Projects involve the design and analysis and publication of clinical, laboratory or cancer prevention research.
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Ohio

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

continued on p. 47
The University of Nebraska-Lincoln invites applications for the position of Professor and Chair, Department of Statistics. This is a full-time, 12-month appointment responsible for the academic leadership of the research, teaching and service activities in the Department of Statistics as well as for the professional development of the faculty and staff. In this position, you will have a primary focus on the continued development of the Department as an internationally recognized program in statistics along with the opportunity and expectation for developing a high level, internationally recognized campus-wide bioinformatics and computational biology initiative. The Department Chair reports to the Dean of the College of Arts and Sciences (CAS), and deans of the College of Agricultural Sciences and Natural Resources (CASNR) and the Agricultural Research Division (ARD) within the Institute of Agriculture and Natural Resources (IANR) on matters related to the department.

To succeed in this role, you will need an earned doctoral degree in Statistics or closely related field; must meet qualifications for appointment as a tenured professor; and have a record of excellent interpersonal, organizational, and leadership skills. Previous administrative experience is preferred.

If this sounds like the job for you, please access the web site http://employment.unl.edu. Search for requisition number 120174. Complete the faculty academic administrative information form. Attach a letter of application, curriculum vitae, and contact information for three professional references.

Review of applications will begin May 15, 2012, and will continue until the position is filled or the search is closed. The University of Nebraska has an active National Science Foundation ADVANCE gender equity program, and is committed to a pluralistic campus community through affirmative action, equal opportunity, and dual careers.
### Texas
- The Department of Preventive Medicine and Community Health at the University of Texas Medical Branch is recruiting a tenure-track professor or associate who will also serve as the director of the office of biostatistics to play an active leadership role in their teaching, research, and service responsibilities. Applicants must have a PhD in biostatistics or applied statistics. Submit letter of interest and CV to trgroh@utmb.edu. UTMB Health is an equal opportunity, affirmative action institution that proudly values diversity. Candidates of all backgrounds are encouraged to apply.

### Assistant Professor - Quantitative Applied Ecology
- PhD required in natural resources related field or in statistics with proven application to natural resources and complex biological systems. Work with faculty that have a strong emphasis in applied ecology and an international reputation in use of quantitative stochastic methods in natural resource systems. Review of applicants will begin May 1. Contact mark.wallace@ttu.edu or (806) 742-2841. Texas Tech University. EOE.

### International
- The Skolkovo Institute of Science and Technology (Skolkovo Tech) seeks candidates for tenured and tenure-track faculty positions in science, technology, and innovation to begin September 1, 2012, or thereafter. Skolkovo Tech is an innovative, new, private university located just outside Moscow, Russia. Please visit http://web.mit.edu/sktech/faculty-positions for more information. EOE.

- Tohoku University in Japan is inviting applications for a research fellow position that is for two years (no extension). All fields of statistics will be considered. There is no teaching duty for this position. Knowledge of Japanese is not required. For more information, visit www.econ.tohoku.ac.jp/econ/koubo/RF.htm. EOE.

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