WSS NEWS

WASHINGTON STATISTICAL SOCIETY

January 2005

Electronic Voting Is Coming

In November, members of the WSS Board of Directors participated in a test of the electronic voting system that will be used in the 2005 WSS annual election this spring. Developed by our webmaster, Dan Jacobs, with direction from a committee of Board members, the new system will allow WSS members to cast their ballots from a website in much the same way that they do for ASA elections. As a cost-saving measure, electronic voting will replace paper ballots except in special circumstances. We hope that this easy-to-use system will increase election participation beyond the 10 to 15 percent turnout that we have experienced in recent years.

Reminder About Electronic Newsletter

The WSS currently mails paper copies of its monthly newsletter to about half of the Society members while transmitting an electronic version (both as text and an attached pdf) to the remainder. Because of the high and growing cost of mailing a monthly newsletter (which exceeds a member's annual dues), we plan to eliminate the paper newsletter except as a special option once we resolve some remaining issues. We have asked that those who currently receive a paper newsletter and wish to continue receiving the paper version should notify the WSS secretary while those who want to switch to the electronic newsletter immediately should contact Vince Massimini and provide an email address and ASA member number. To date, only 12 current paper recipients have indicated that they wish to continue to receive the paper newsletter, but most of the rest have not yet asked to be switched to the electronic version. When the electronic version becomes the default option, we will mail paper copies only to those who have indicated that they wish to continue receiving the paper version. Electronic newsletters will be sent to the email addresses in our records. Members for whom we lack valid email addresses will not receive either the print or electronic version. If you do not currently receive the electronic version, you may need to contact Vince (svm@mitre.org) to ensure that your receipt of the newsletter is not interrupted.

WSS and Other Seminars
(All events are open to any interested persons)

January		
10	**Mon.**	**Signal Extraction: How (in)efficient are Model-Based Approaches? An Empirical Study based on TRAMO/SEATS and Census X-12-ARIMA**
19	**Wed.**	**Machine Learning Methods for Text Classification**
26	**Wed.**	**Credit Report Accuracy and Access to Credit**
27	**Thur.**	**Discussion of Nonresponse on the 2001 National Household Travel Survey**
February		
17	**Thur.**	**Accumulated Respondent Burden on NASS Surveys**

Also available on the Web at the following URL: http://www.science.gmu.edu/~wss

Announcements

SIGSTAT Topics

January 12, 2005 : Resampling Methods (http://www.resampling.com/)

Peter Bruce, developer of Resampling Stats software, will give an introduction to resampling methods and their history. He will discuss William Gossett's original simulations that led to the development of the t-distribution and work by Fisher and Pittman (all in the early part of the last century), as well as the development of the bootstrap. The talk will include illustrations of the main resampling methods: the bootstrap and permutation procedures. This will be an overview, suited to those who are not experienced resamplers, not an in depth technical talk.

February 9, 2005 : Graphics with R (http://www.r-project.org/)

The ease of making graphs in R is one of its strongest attractions. Some examples of making graphs were discussed in Part I. In this second part, the topics of making graphs which are annotated with equations, of putting multiple graphs on a single page, and of using polygons will be discussed. Mike Fleming will be the speaker.

March 9, 2005: PROC UCM - Unobserved Component Models (http://www.sas.com)

Unobserved Component Models are very general time series models that incorporate trends, seasonality, cycles, regression effects, and autoregressive effects. Trends and seasonality can be allowed to change randomly. UCMs can be considered as generalizations of ARIMA and smoothing models. The basics of UCMs will be covered as well as some examples. PROC UCM is new in SAS/ETS version 9. Charlie Hallahan will be the speaker.

April 20, 2005: PROC ROBUSTREG - Robust Regression Methods (http://www.sas.com)

The experimental ROBUSTREG procedure in SAS/STAT version 9 provides resistant (stable) results in the presence of outliers by limiting the influence of outliers. ROBUSTREG provides four robust methods: M estimation by Huber (1973), Least Trimmed Squares (LTS) estimation by Rousseeuw (1984), S estimation by Rousseeuw and Yohai (1984), and MM estimation by Yohai (1987). Charlie Hallahan will be the speaker.

May 11, 2005: PROC QLIM - Qualitative and Limited Dependent Variable Models (http://www.sas.com)

The QLIM (Qualitative ans Limited dependent variable Model) procedure analyzes univariate and multivariate limited dependent variable models where dependent variables take discrete values or dependent variables are observed only in a limited range of values. This procedure includes logit, probit, tobit, and general simultaneous equations models. The simultaneous equations model can contain discrete choice and limited endogenous variables as well as continuous endogenous variables. Charlie Hallahan will be the speaker.

SIGSTAT is the Special Interest Group in Statistics for the **CPCUG**, the Capital PC User Group, and **WINFORMS**, the Washington Institute for Operations Research Service and Management Science. All meetings are in Room S3031, 1800 M St, NW from 12:30 to 1:30. Enter the South Tower & take the elevator to the 3rd floor to check in at the guard's desk. First-time attendees should contact Charlie Hallahan, 202-694-5051, hallahan@ers.usda.gov, and leave their name. Directions to the building & many links of statistical interest can be found at the **SIGSTAT website, http://www.cpcug.org/user/sigstat/**.

Program Announcement

Title: **Signal Extraction: How (in)efficient are Model-Based Approaches? An Empirical Study based on TRAMO/SEATS and Census X-12-ARIMA**

Speaker: Marc Wildi, Institute for Data Analysis and Process Design, University of Technical Sciences, Zurich, Switzerland

Discussant: Tucker McElroy, U.S. Census Bureau

Chair: David Findley, U.S. Census Bureau

Date/Time: Monday, January 10, 2005 / 12:30 – 2:00 p.m.

Location: BLS Conference Center Room 1. To be placed on the seminar attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to wss_seminar@bls.gov (underscore after 'wss') by noon at least 2 days in advance of the seminar or call 202-691-7524 and leave a message. Bring a photo ID to the seminar. BLS is located at 2 Massachusetts Avenue, NE. Use the Red Line to Union Station.

Sponsor: WSS Economics Section

Abstract: Estimation of signals at the current boundary of time series is an important task in many practical applications. In order to apply the symmetric filter at current time, model-based approaches typically rely on forecasts generated from a time series model in order to extend (stretch) the time series into the future. In this paper we compare performances of concurrent filters based on TRAMO, X-12-ARIMA and on the DFA, a new efficient estimation method which does not rely on forecasts. We show that both model-based procedures are subject to heavy model misspecification related to false unit root identification at frequency zero and at seasonal frequencies. Our results strongly suggest that the traditional model-based approach should not be used for problems involving multi-step ahead forecasts such as, e.g., the determination of concurrent filters.

Note from the WSS NEWS Editor

Items for publication in the March WSS NEWS should be submitted no later than January 26, 2005. E-mail items to Michael Feil at michael.feil@usda.gov.

Program Announcement

Title: **Machine Learning Methods for Text Classification**

Speaker: William Winkler, U.S. Census Bureau

Discussant: Daniel Gillman, Bureau of Labor Statistics

Chair: Alvan Zarate, Centers for Disease Control and Prevention

Date/Time: Wednesday, January 19, 2005 / 12:30 - 2:00 p.m.

Location: BLS Conference Center, Room 1. To be placed on the seminar attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to wss_seminar@bls.gov (underscore after 'wss') by noon at least 2 days in advance of the seminar or call 202-691-7524 and leave a message. Bring a photo ID to the seminar. BLS is located at 2 Massachusetts Avenue, NE. Use the Red Line to Union Station.

Sponsor: WSS Methodology Section

Keywords: Bayesian network, multinomial, training data

Abstract: Textual information consisting of words can be used for areas such as classification of documents into categories (e.g., industry and occupation coding), queries in web and library searches, and the record linkage of name and address lists. To use text effectively, the text might possibly be cleaned to remove typographical error and documents (records) be given a mathematical representation in a probabilistic model. This talk describes an application of Bayesian networks to classify a collection of Reuter's newpaper articles (Lewis 1992) into categories (Nigam, McCallum, Thrun, and Mitchell 2000, Winkler 2000). The results are indirectly compared with the current best-performing methods such as Support Vector Machines (Vapnik 1995, 2000) and Boosting (Freund and Schapire 1996, Friedman, Hastie, and Tibshirani 2000). For text classification, until seven years ago, the best methods in computational linguistics outperformed the best machine learning methods. Without the need to build complicated semantic or syntatical representations, the best machine learning methods now outperform the best methods in computational linguistics with a large number of widely used test decks. These make the methods much more language independent and can make them more application dependent.

Program Announcement

Title: **Credit Report Accuracy and Access to Credit**

Speaker: Robert B. Avery, Paul S. Calem, and Glenn B. Canner, Federal Reserve Board

Discussant: Mike Staten, Credit Research Center, Georgetown University McDonough School of Business

Chair: Linda Atkinson, Economic Research Service, USDA

Date/Time: Wednesday, January 26, 2005 / 12:30 – 2:00 p.m.

Location: BLS Conference Center Room 9. To be placed on the seminar attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to wss_seminar@bls.gov (underscore after 'wss') by noon at least 2 days in advance of the seminar or call 202-691-7524 and leave a message. Bring a photo ID to the seminar. BLS is located at 2 Massachusetts Avenue, NE. Use the Red Line to Union Station.

Sponsor: WSS Economics Section

Abstract: Data that credit-reporting agencies maintain on consumers' credit-related experiences play a central role in U.S. credit markets. Analysts widely agree that the data enable these markets to function more efficiently and at lower cost than would otherwise be possible. Despite the great benefits of the current system, however, some analysts have raised concerns about the accuracy, timeliness, completeness, and consistency of consumer credit records and about the effects of data problems on the availability and cost of credit.

The analysis expands on available research by quantifying the effects of credit record limitations on the access to credit. Using the credit records of a nationally representative sample of individuals, we examine the possible effects of data problems on consumers by estimating the changes in consumers' credit history scores that would result from "correcting" the problems in their credit records. Results for consumer groups are segmented by strength of credit history (credit history score range), depth of credit history (number of credit accounts in a credit record), and selected demographic characteristics

Program Announcement

Title: **Discussion of Nonresponse on the 2001 National Household Travel Survey**

Speakers: Mark Freedman, Gary Shapiro and David Cantor, Westat

Chair: Lee Giesbrecht, Bureau of Transportation Statistics

Date/Time: Thursday, January 27, 2005 / 12:30 - 2:00 p.m.

Location: Bureau of Labor Statistics, Conference Center Room 3. To be placed on the seminar list attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to wss_seminar@bls.gov (underscore after 'wss') by noon at least 2 days in advance of the seminar or call 202-691-7524 and leave a message. Bring a photo ID to the seminar. BLS is located at 2 Massachusetts Avenue, NE. Use the Red Line to Union Station.

Sponsor: WSS Methodology Section

Abstract: This presentation explores several aspects of nonresponse associated with the 2001 National Household Travel Survey, including the methods that were implemented to improve response rates and reduce nonresponse bias and the results of a wide range of analyses to help understand the characteristics of nonrespondents.

It is well documented that response rates for traditional household travel surveys using random digit dial (RDD) telephone survey methods have been declining for some years. The public has become wary of unfamiliar callers conducting surveys, polls or telemarketing and is generally less willing to devote their time for important official surveys. This is especially true for multi-stage, contact/re-contact travel surveys where each household must be contacted at least two or three times in order to complete the survey. Such procedures provide many opportunities for household, person and item nonresponse. It was clear from the earliest planning stages that special measures were needed to maximize the likelihood of response at the household and person levels for the 2001 NHTS. The first presentation describes a number of procedures that were used in the NHTS. NHTS response rates are also presented and compared to a similar regional household travel survey conducted during the same field period as the NHTS.

The second presentation will examine correlates of nonresponse for the 2001 NHTS by comparing nonrespondents to respondents to the survey. The analysis makes comparisons for the overall nonresponse rate, as well as for the screener interviewing stage and for the extended interviewing stage. Most characteristics that are examined show wide ranges in response rates, implying that the potential exists for high bias due to nonresponse.

The third presentation discusses the effects of two design features on nonresponse and nonresponse error. The first analysis addresses whether the scheduling algorithm used to initially contact households should target households with certain characteristics. The second analysis assesses whether the short time window required to complete the travel interview results in nonresponse for certain types of respondents. Both analyses find that there are characteristics that are correlated with each design feature. The implications for scheduling screening and travel interviews are discussed in light of these results.

Program Announcement

Title: **Accumulated Respondent Burden on NASS Surveys**

Speakers: Suzette Qualey, NASS

Chair: Kathy Downey, Bureau of Labor Statistics

Date/Time: Thursday, February 17, 2005 / 12:30 - 2:00 p.m.

Location: Bureau of Labor Statistics, Conference Center Room 1. To be placed on the seminar list attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to wss_seminar@bls.gov (underscore after 'wss') by noon at least 2 days in advance of the seminar or call 202-691-7524 and leave a message. Bring a photo ID to the seminar. BLS is located at 2 Massachusetts Avenue, NE. Use the Red Line to Union Station.

Sponsor: Methodology Section, WSS

Abstract: USDA's National Agricultural Statistics Service (NASS) provides statistical information and services to farmers, ranchers, agribusinesses and public officials. Most of the data published is derived from surveys of farmers across the country, which is a relatively small population. Many producers are contacted repeatedly and the survey respondent burden placed upon farmers is an important issue to NASS. Respondent burden consists of many factors, including the interview length and question difficulty. Burden is accumulated over time when a respondent is in a panel study or selected for multiple surveys. Accumulated respondent burden, therefore, also includes the number of surveys a participant is selected for and the length of time between interviews. Respondent burden is often linked in discussions with response rates, and one common theory is that greater respondent burden is correlated with lower response rates.

This discussion presents results summarizing responses from many of NASS' major agricultural surveys conducted from January 2000 through December 2003. Survey response data were combined from 184 surveys and included over 2.2 million survey records with 579,531 farming operations. Response rates were evaluated by the number of surveys operations were in during the four-year study period. In addition, prior respondent burden was compared between participants and non-participants for several individual surveys.

CDC/ATSDR Symposium

CDC/ATSDR SYMPOSIUM COMES TO WASHINGTON AREA

"Statistics and Public Health Policy" is the theme of the Tenth Biennial CDC and ATSDR Symposium on Statistical Methods, to be held March 1 to 2, 2005, in Bethesda, Maryland. This marks the first time that the Atlanta-based Centers for Disease Control (CDC and the Agency for Toxic Substances and Disease Registry (ATSDR) will hold their Symposium in the Washington area, providing a great opportunity for Washington area statisticians and health policy analysts to get acquainted with recent research in an area of growing importance nationally. A one-day short course, "Dealing with Frame Error and Nonresponse in Surveys," taught by William Kalsbeek of the University of North Carolina, will precede the Symposium. As in 2003, the WSS is cosponsoring the Symposium, and WSS members will receive discounted registration fees for both the Symposium and the short course. There is an additional discount for students. Registration for both events is free to CDC employees.

The program for the Symposium will feature four invited paper sessions, an invited panel session, nine contributed paper sessions (three concurrently), and more than a dozen contributed posters. The first invited paper session, on "Sampling, Surveys and the Role of Observational Data in the Development of Public Health Policy," will include presentations by Robert Groves, Graham Kalton, and Nathaniel Schenker. The second invited paper session, "Determining the Effects of Public Health Interventions," will feature presentations by Monroe Sirken and William Kalsbeek. The third invited paper session, on "Bioterrorism, Biometrics and Security," will have presentations by Joe Scanlon, Martin Kulldorff, and Henry Rolka. The fourth invited paper session, "Evaluating Causation," will include presentations by Susan Murphy and Alan Zaslavsky. The invited panel session, organized by the Center for Discrete Mathematics and Computer Science (DIMACS) at Rutgers University, will feature a discussion of "Statistical Issues in Public Health Surveillance for Bioterrorism Using Multiple Data Streams." Participants will include Howard Burkom, Gregory F.Cooper, Martin Kulldorff, David Madigan, and Henry Rolka.

The Bethesda Marriott site, located on Pooks Hill Road off of Rockville Pike, has extensive parking and is accessible by Metro rail. The hotel operates a shuttle to the Medical Center station. Taxi cabs are available at Medical Center and the adjacent Grosvenor and Bethesda stations.

A registration form for both the Symposium and the short course is included in this newsletter. You are encouraged to register as soon as possible, as space is limited. Registration for the short course will be capped at 200 while registration for the Symposium will be limited to 400. Openings will be filled on a fist come, first served basis. Note, too, that registration fees will increase on February 1. Further information on the Symposium and short course can be obtained from the Symposium web site, which can be reached through the WSS web site, under Courses.

Symposium

Title

First Interdisciplinary Symposium on Statistical Challenges and Opportunities in Electronic Commerce Research

Location and Date

May 22-23, 2005, Robert H. Smith School of Business, University of Maryland, College Park

Chairs

Wolfgang Jank and Galit Shmueli

Steering Committee

Stephen Fienberg (CMU), Donald Rubin (Harvard), Chrysanthos Dellarocas (University of Maryland), Erik Brynjolfsson (MIT), Joni Jones (University of South Florida)

Abstract Deadline
February 28, 2005

Website
www.smith.umd.edu/dit/statschallenges/

Contact
Wolfgang Jank wjank@rhsmith.umd.edu

Description

Electronic commerce produces an increasing amount of data-related questions and problems. Modern web-crawling technologies, which allow for a convenient collection of data from the Internet, result in huge databases. The openness of online marketplaces allows competitors to observe each others moves.

Traditional statistical models are not designed for the amount of data found on the web. They are also not suited to take into account the dynamics of online transactions as competitors react to each others moves in real time. This workshop focuses on identifying problems and research questions related to empirical research in electronic commerce by bringing together researchers from Information Systems, Statistics and related fields to help better understand how these various lines of work connect to one another and how, together, they can contribute to the modernization and enhancement of empirical research methods for electronic commerce and our digital society at large.

From the AAAS

Missing paternal demographics: A novel indicator for identifying high risk population of adverse pregnancy outcomes

(http://www.biomedcentral.com/1471-2393/4/21/abstract) One of every 6 United Status birth certificates contains no information on fathers. There might be important differences in the pregnancy outcomes between mothers with, versus those without partner information. The object of this study was to assess whether and to what extent outcomes in pregnant women who did not have partner information differ from those who had. We carried out a population-based retrospective cohort study based on the registry data in the United States for the period of 1995-1997, which was a matched multiple birth file (only twins were included in the current analysis). We divided the study subjects into three groups according to the availability of partner information: available, partly missing, and totally missing. We compared the distribution of maternal characteristics, maternal morbidity, labor and delivery complications, obstetric interventions, preterm birth, fetal growth restriction, low birth weight, congenital anomalies, fetal death, neonatal death, post-neonatal death, and neonatal morbidity among three study groups. There were 304466 twins included in our study. Mothers whose partner's information was partly missing and (especially) totally missing tended to be younger, of black race, unmarried, with less education, smoking cigarette during pregnancy, and with inadequate prenatal care. The rates of preterm birth, fetal growth restriction, low birth weight, Apgar score <7, fetal mortality, neonatal mortality, and post-neonatal mortality were significantly increased in mothers whose partner's information was partly or (especially) totally missing. Mothers whose partner's information was partly and (especially) totally missing are at higher risk of adverse pregnant outcomes, and clinicians and public health workers should be alerted to this important social factor.

Visualization and exploratory analysis of epidemiologic data using a novel space time information system

(http://www.ij-healthgeographics.com/content/3/1/26) Recent years have seen an expansion in the use of Geographic Information Systems (GIS) in environmental health research. In this field GIS can be used to detect disease clustering, to analyze access to hospital emergency care, to predict environmental outbreaks, and to estimate exposure to toxic compounds. Despite these advances the inability of GIS to properly handle temporal information is increasingly recognised as a significant constraint. The effective representation and visualization of both spatial and temporal dimensions therefore is expected to significantly enhance our ability to undertake environmental health research using time-referenced geospatial data. Especially for diseases with long latency periods (such as cancer) the ability to represent, quantify and model individual exposure through time is a critical component of risk estimation. In response to this need a STIS – a Space Time Information System has been developed to visualize and analyze objects simultaneously through space and time. In this paper we present a "first use" of a STIS in a case-control study of the relationship between arsenic exposure and bladder cancer in south eastern Michigan. Individual arsenic exposure is reconstructed by incorporating spatiotemporal data including residential mobility and drinking water habits. The unique contribution of the STIS is its ability to visualize and analyze residential histories over different temporal scales. Participant information is viewed and statistically analyzed using dynamic views in which values of an attribute change through time. These views include tables, graphs (such as histograms and scatterplots), and maps. In addition, these views can be linked and synchronized for complex data exploration using cartographic brushing, statistical brushing, and animation. The STIS provides new and powerful ways to visualize and analyze how individual exposure and associated environmental variables change through time. We expect to see innovative space-time methods being utilized in future environmental health research now that the successful "first use" of a STIS in exposure reconstruction has been accomplished.

Women - the Invisible Victims

(http://www.ipsnews.net/new_nota.asp?idnews=26439) Latin America and the Caribbean have up-to-date statistics on inflation, trade, GDP growth and other economic indicators. But there are few to no hard figures on violence against women, a problem that reportedly affects as many as four or five women out of 10 in the region. With a few exceptions like Mexico and Chile, there is a ”blackout” surrounding the issue, Sonia Montaño, the head of the Economic Commission for Latin America and the Caribbean's (ECLAC) Women and Development Unit, told IPS. That is because ”violence against women is hidden, and is not a priority for the public and political agendas, except on days like today,” she said, referring to the fact that Nov. 25 is the International Day for the Elimination of Violence Against Women. According to the few official statistics available, based on different methodologies, around 70 women are killed as a result of domestic violence in Chile every year, while there are roughly 300 fatalities in Colombia. In the cities of Mexico City and Sao Paulo, Brazil, the annual average is 100 and 80, respectively. In Colombia, United Nations officials reported that the number of complaints of domestic violence against women rose from 50,000 a year to 60,000 between 2000 and 2003, although the number of court cases involving spousal abuse actually declined, from 8,000 to 4,000.

Number of Women Living with HIV/AIDS Increases in Each Region of the World

(http://www.unaids.org/NetTools/Misc/DocInfo.aspx?LANG=en&href=http://gva-doc-owl/WEBcontent/Documents/pub/Media/Press-Releases02/PR_EpiLaunch_23Nov04_en.pdf) Close to half of 37.2 million adults living with HIV are women, according to new UNAIDS/WHO Report

A new report released today shows that the number of women living with HIV has risen in each region of the world over the past two years, with the steepest increases in East Asia, followed by Eastern Europe and Central Asia. In East Asia there was a 56% increase over the past two years, followed by Eastern Europe and Central Asia with 48%. Women are increasingly affected, now making up nearly half of the 37.2 million adults (aged 15-49) living with HIV worldwide. In sub-Saharan Africa, the worst-affected region, close to 60% of adults living with HIV are women - or 13.3 million. These latest findingd were published in *AIDS Epidemic Update 2004*, the annual report by the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO). The joint report was released today in advance of World AIDS Day, commemorated worldwide on the first of December. Here is a description of how UNAIDS and WHO come by their figures here: http://www.unaids.org/Unaids/EN/Resources/Epidemiology/How+do+UNAIDS_WHO+arrive+at+estimates/

Employment

As a service to local statisticians, WSS News provides notification of employment opportunities and description of those seeking employment here in the Washington, DC, area. Readers are encouraged to take advantage of this feature of the newsletter. The deadline for inserting notices is five (5) weeks before the publication date. Those interested should email or call Anne Peterson, at apeterson@insightpolicyresearch.com or (703) 387-3032.

WESTAT

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

Our company was founded in 1961 by three statisticians. The current staff of more than 1,700 includes over 60 statisticians, as well as research, technical, and administrative staff. In addition, our professional staff is supported by data collection and processing personnel situated locally and in field sites around the country. The work atmosphere is open, progressive, and highly conducive to professional growth.

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

Survey Sampling Statistician (Job Code WSS/DRM/5001)

Three or more years of relevant experience in sample design and selection, frames development, weighting, imputation, and variance estimation. Must have a master's or doctoral degree in statistics and have excellent writing skills. Coursework in sample survey design highly desirable.

Senior Biostatistician (Job Code WSS/HS/5402):

We are seeking a senior biostatistician to work as a statistical leader in multidisciplinary team efforts to design and carry out health and health-related research. The position involves collaboration with physicians, laboratory scientists, epidemiologists, and computer scientists on the design, implementation, and analysis of clinical, laboratory, and observational studies. A doctoral degree in biostatistics with 10 plus years of relevant postdoctoral experience is required. Demonstrated experience in team collaboration, significant participation in analytical scientific manuscripts, familiarity with standard statistical computer packages, and strong interpersonal and communication skills are all critical. Demonstrated record of responses to government or commercial requests for proposals is desirable.

Westat offers excellent growth opportunities and an outstanding benefits package including life and health insurance, an Employee Stock Ownership Plan (ESOP), a 401(k) plan, flexible spending accounts, professional development, and tuition assistance. For immediate consideration, please send your cover letter, indicating the Westat Job Code, and resume by one of the following methods to:***[Job Code is REQUIRED to apply]*** Westat, Attn: Resume System, 1650 Research Boulevard, Rockville, MD 20850-3195; Email: resume@westat.com ; FAX: (888) 201-1452. We are an Equal Opportunity Employer.

DIVISION OF SCIENCE RESOURCES STATISTICS
National Science Foundation, Arlington, VA

NSF's Division of Science Resources Statistics (SRS) is seeking a qualified candidate for Senior Scientist Resources Analyst for the Science and Engineering Indicators Program. This position is responsible for developing quantitatively based analyses on Asian S&E policies, patterns and trends, often in comparison with the United States and the European Union.

Appointment to this position may be on a permanent basis, a one or two year Visiting Scientist appointment or a Federal Temporary appointment, with a salary range of $72,108 to $113,597. Applicants must have a Ph.D. or equivalent experience in social science, economics or statistics plus four or more years of research, research administration, and/or managerial experience conducting quantitative analyses or managerial experience pertinent to the position.

Announcements E20050014 and E20050015-Rotator, with position requirements and application procedures, are located on the NSF Home Page at www.nsf.gov/jobs. Applicants may also obtain the announcements by contacting Yvonne Woodward at 703-292-4386 (Hearing impaired individuals may call TDD 703-292-8044).

NSF is an Equal Opportunity Employer

Careers at the Social Security Administration

The Office of Research, Evaluation, and Statistics provides the Social Security Administration with economic and statistical analyses of retirement, disability, and income support programs and conditions. We use detailed survey and administrative record data to develop and apply large-scale micro-simulation models. Our research informs policymakers of expected outcomes under current law and proposed Social Security reforms. We publish our results in the Social Security Bulletin, academic journals, and various agency publications.

We have three or more openings in Washington, D.C., and Baltimore, MD, for economists, statisticians, and other social scientists and public policy analysts at the Masters level or higher to carry out statistical analyses of survey and administrative data. Responsibilities may include managing interagency research and data-sharing agreements and third-party research contracts. For one vacancy, familiarity with Medicare will receive special consideration.

We have two openings in Washington, D.C. for Ph.D. economists with expertise in public finance, microeconomics, and econometrics to study tax incidence, use tax analysis to evaluate various means of future financing of the Social Security system, and develop and apply sophisticated micro-simulation models using survey data such as SIPP, CPS, and HRS. For all positions, strong applied research and communications skills and the ability to work well with other analysts are required.

Job postings are expected in the near future. Applicants should submit a resume and a recent research paper. Please identify which position you are interested in. U.S. citizenship is required. An equal opportunity employer. CONTACT: (1) email (preferred): OP.Jobs@ssa.gov (2) fax: 202-358-6079; or (3) mail: Ms. Monique Fisher, Office of Policy Jobs Coordinator, Social Security Administration, 500 E Street S.W., Eighth Floor, Washington D.C. 20254.

Assistant Professor

Area: Health Sciences/Health Services Research/Health Policy/Health Economics

Employer: Boston University School of Medicine, Possible joint appointment in the Department of Biostatistics in BU's School of Public Health would involve teaching one course

Description: Our health services research unit resides in a Section of General Internal Medicine, with links to other local and national research groups. Our research agenda is wide-ranging and flexes to accommodate the interests/skills of current multidisciplinary team members. Research areas include quality of care, cost-effectiveness analysis, health care financing and organization, access to care, technology assessment and health education.

Job expectations: participate in interdisciplinary research teams to plan and carry out health services research studies; develop (within 2-3 years) into a principal investigator of such studies. Job activities: participate in ongoing studies; work with physician Research Fellows to develop and conduct their research projects; (with others) develop funding proposals, prepare reports and papers for publication; present findings at national meetings.

Requirements: A doctoral level degree in health services research, public health, economics, epidemiology, statistics, health policy or a related discipline. In-depth knowledge in one or several areas which may include: statistics, cost-effectiveness analysis, health economics, health policy analysis. Experience with important health care/health cost relevant data sources (e.g. Medicare) is a plus. Good quantitative skills are a must; programming skills, particularly SAS, are highly desirable. The successful applicant will be able to and interested in working in a multidisciplinary team.

Boston University is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

Applicants should send a curriculum vitae to Prof. Arlene Ash, Ph.D., Chair, Search Committee
Health Care Research Unit, Boston University Medical Center, 720 Harrison Ave, Suite 1108, Boston, MA 02118 or e-mail jeanne.speckman@bmc.org

Research Assistant/Associate

Area: Health Sciences/Health Services Research/Health Policy

Employer: Boston University Medical Center

Description: The Health Care Research Unit, Section of General Internal Medicine at Boston University Medical Center is an academic interdisciplinary team that studies the factors that affect who gets what kinds of health care services and to what effect. Research assistant/associate responsibilities include managing and cleaning data and constructing analytic files from large databases. (With supervision) conducting and interpreting statistical analyses, and summarizing results in text, graphs and tables; assisting in planning, conducting & analyzing surveys and designing experiments; conducting literature searches and internet surveillance for funding opportunities. Responsibilities also include assisting in preparation of manuscripts and presentation materials for meetings, as well as guiding physician Research Fellows with research projects.

Essential requirements: Master's degree in a relevant discipline. A logical and inquiring mind and "team member" mentality. Also needed: strong conceptual and analytical skills; programming ability in SAS (or similar) statistical software; ability to set priorities while managing several projects simultaneously; good written and oral communication skills. Highly
desirable: At least one year of experience with health care data/health policy issues. Experience with UNIX systems a plus.

Boston University is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

Applicants should send a curriculum vitae to Prof. Arlene Ash, Ph.D., Chair, Search Committee
Health Care Research Unit, Boston University Medical Center, 720 Harrison Ave, Suite 1108, Boston, MA 02118 or e-mail jeanne.speckman@bmc.org

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