WSS NEWS

WASHINGTON STATISTICAL SOCIETY

May 2004

MESSAGE FROM THE PRESIDENT

May 17th is 50 years since the Supreme Court's landmark Brown v. Board of Education ruling outlawing segregated "separate but equal" school systems. Leading up to that decision and since then, there have been a series of studies done using statistics to clarify the effects on education of segregation and the success or failure of desegregation efforts. Statistical evidence has also been regularly used by both sides in ongoing court cases regarding busing, magnet schools, and in higher education affirmative action. I'd like to urge everyone to attend a fascinating seminar we have planned for May 17th where the use of statistics on this topic will be debated by researchers with very different viewpoints. Our two discussants will be the current Commissioner of NCES, Bob Lerner, and the first Commissioner, Emerson Elliott. We will have refreshments following the session so plan on staying a bit longer than usual to talk with the participants. While we will videoconference this session, you may want to attend this session in person. More details can be found inside this newsletter. If you enjoyed our October seminar on "40 Years Since the I Have A Dream Speech, The Role of Statistics in Achieving the Dream," you are sure to like this one as well.

Annual Election for Board of Directors

An election ballot for the 2004-2005 program year of the Washington Statistical Society Board of Directors is enclosed in this issue. Biographical information on the candidates is also provided in this issue. Ballots must be received by Friday, June 4, 2004 to be counted. Results will be announced at the WSS Annual Dinner on June 15, 2004.

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

May 5	**Wed.**	**Combining Filter Design with Model-Based Filtering (A Model-Based Perspective)**
6	**Thurs.**	**Theory of Median Balanced Sampling**
17	**Mon.**	**50 Years Since Brown v. Board of Education - The Role of Statistics in Desegregation**
18	**Tues.**	**Technology Enabling Practical Mobile Data Collection**
20	**Thurs.**	**Operational Examples of Balanced Sampling**
27	**Thurs.**	**Modification of Chernikova's Algorithm and Error Localization in Linear Editing**
June 21	**Mon.**	**Third Annual Seminar of the Funding Opportunity In Survey and Statistical Research**
24	**Thurs.**	**Quantifying What a Representative Sample Is**

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

Announcements

2004 Annual Dinner

The WSS Annual Dinner will be held Tuesday, June 15, at Maggiano's Little Italy Restaurant located on Wisconsin Avenue in Washington, DC across the street from the Mazza Gallerie. Please see the enclosed flyer for details and a reservation form .

This is a great opportunity to join with friends, meet colleagues, and make new acquaintances!

All are invited. We look forward to seeing you there!

SIGSTAT Topics for Spring 2004

April 14, 2004: PROC MIXED - Postponed until June 9.

May 5, 2004: Introduction to using Enterprise Guide for Statistical Analysis (http://www.sas.com)

This demo begins with a quick tour through the layout and purpose of Enterprise Guide (EG) as a menu-based interface to SAS procedures. Emphasis will be on the statistical capabilities of EG. In particular, a set of data will serve as a case study for performing exploratory data analysis, estimating a multiple regression model, and examining graphical diagnostics for the model fit. The demo will show how code generated by EG can be customized, stored, and rerun, and custom reports saved with the Document Builder.

June 9, 2004: PROC MIXED - Part 6: Generalized Linear Models & Generalized Linear Mixed Models (http://www.sas.com)

Continuing the topic begun in October 2003, the difference between general linear models and models using generalized estimating equations (GEE's) is covered. The available correlation structures in PROC GENMOD are discussed and GENMOD is used to fit a longitudinal data model. Finally, the concepts behind generalized linear mixed models are discussed and a longitudinal data model is fit using the GLIMMIX macro.

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/**.

Note from the WSS NEWS Editor

Items for publication in the Summer 2004 WSS NEWS should be submitted no later than July 9, 2004. E-mail items to Michael Feil at michael.feil@usda.gov.

Program Announcement

Title: **Combining Filter Design with Model-Based Filtering (A Model-Based Perspective)**

Speaker: Agustin Maravall, Bank of Spain

Discussant: Thomas M. Trimbur, U.S. Census Bureau

Chair: David F. Findley, U.S. Census Bureau

Date/Time: May 5, 2004, Wednesday, 12:30 - 2:00 p.m.

Location: Bureau of Labor Statistics, Postal Square Building (PSB), Conference Center, Room 1, 2 Massachusetts Ave., N.W., Washington, D.C. Please use the First Street entrance to the PSB. To gain entrance to BLS, please see notice at the end of this announcement.

Sponsor: WSS Methodology Sections

Abstract: Filters used to estimate unobserved components (UC) also called "signals" in economic time series are often designed on a priori grounds, so as to capture the frequencies that should be associated with the signal. We shall refer to them as a priori designed (APD) filters; basically, their design is independent of the particular series at hand. It is well known that a limitation of APD filters is that they may produce spurious results (a trend, for example, could be extracted from white noise).

The spuriousness problem can be, in principle, avoided if the filter is derived following a model-based approach. The series features are captured through an ARIMA model, models for the components are derived, and the Wiener-Kolmogorov filter is used to estimate the components; we shall refer to this approach as ARIMA-model-based (AMB) filtering. AMB filtering also presents some drawbacks. First, it may provide components that display poor band- pass features. Second, parsimony of the ARIMA models typically identified for economic series implies little resolution in terms of UC detection, so that the AMB decomposition cannot go much beyond the standard "trend-cycle + seasonal + irregular" decomposition. Thus, it would be nice to combine a higher resolution in order to obtain components with the desirable features, with lack of spuriousness and consistency with the structure of the overall observed series. The problem of business-cycle estimation is treated in two steps: application of a filter to produce a trend-cycle or seasonally adjusted series, and application of the Hodrick-Prescott filter to extract a cycle component. Advantages of applying an AMB filter at the first step are seen both theoretically and in an application.

* To attend seminars at BLS, you need to email your name, affiliation, and title of the seminar to wss_seminar@bls.gov (underscore between "wss" and "seminar") by noon at least two days in advance, or call 202-691-7524 and leave a message. Bring a photo id to the seminar. A new list begins April 1, 2004. Once you are on the list you need not contact BLS for seminars through June 30, 2004. BLS is located at 2 Massachusetts Ave NE. Take the Red Line to Union Station.

Program Announcement

Title: **Theory of Median Balanced Sampling**

Speakers: Susan Hinkins, NORC, University of Chicago
Patrick Baier, NORC, University of Chicago
Yan Liu, Ernst and Young LLP

Chair: Fritz Scheuren, NORC, University of Chicago

Date/Time: Thursday, May 6, 2004, 12:30 - 2:00 p.m.

Location: Bureau of Labor Statistics, Postal Square Building (PSB), Conference Center, Room 9, 2 Massachusetts Ave., N.W., Washington, D.C. Please use the First Street entrance to the PSB. To gain entrance to BLS, please see notice at the end of this announcement.

Co-Sponsors: WSS Methodology and Computing Sections

Abstract: There are many ways to obtain “good” samples, given that you can avoid really bad ones. We describe several of these, focusing initially on median balancing when engaged in stratified sampling, first for two strata, then for three strata, and then in general. This is done initially when the unit of sampling is a population element, then for other units including IID replicates that collectively make up the total sample. Asymptotic results are provided that prove in some settings that the limiting distribution is normal or even better than normal. By “better than normal,” we mean that the variance of the variance is less than would exist if the distribution were normal. As we will cover, this characteristic of the balanced samples we use is an especially attractive property in small samples, like those common to some business applications.

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Program Announcement

Title: **50 Years Since Brown v. Board of Education - The Role of Statistics in Desegregation**

Speakers: Stephan Thernstrom, Harvard University
Sean Reardon, Penn State University

Discussants: Robert Lerner, Commissioner National Center for Education Statistics
Emerson Elliott, Former Commissioner National Center for Education Statistics

Chair: David Marker, Westat

Date/Time: Monday, May 17, 2004, 12:30 - 2:30 pm

Location: Bureau of Labor Statistics Conference Center, 2 Massachusetts Ave. NE, Washington, D.C. Please use the First St., NE, entrance to the PSB. To gain entrance to BLS, please see "Notice" at the end of this announcement.

Abstract: May 17th is 50 years since the Supreme Court's landmark Brown v. Board of Education ruling outlawing segregated "separate but equal" school systems. Leading up to that decision and since then, there have been a series of studies done using statistics to clarify the effects on education of segregation and the success or failure of desegregation efforts. Statistical evidence has also been regularly used by both sides in ongoing court cases regarding busing, magnet schools, and in higher education affirmative action. Our two speakers have worked in this area, supporting different solutions based on their research and the work of others in the field. Our discussants are the current and former Commisioners of NCES. We look forward to a very lively discussion. Please attend the session in person and stay afterwards to talk with the presenters over light refreshments (note the extended time for this session).

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Program Announcement

Title: **Technology Enabling Practical Mobile Data Collection**

Speaker: David Hill, Westat
Richard Huey, Westat

Organizer: Jonaki Bose, Bureau of Transportation Statistics

Date: Tuesday, May 18, 2004, 12:30 - 2:00 p.m.

Location: Bureau of Labor Statistics, conference rooms 7 and 8, 2 Massachusetts Ave., N.W., Washington, D.C. Please use the First Street entrance to the PSB. To gain entrance to BLS, please see notice at the end of this announcement.

Sponsor: Data Collection Methods Section, WSS

Abstract: Emergent mobile electronic hardware and software technologies are enabling new methods of field data collection. This includes computerized platform units, such as tablet PCs and better handhelds (PDAs), and more peripherals, such as GPS receivers, digital cameras, and audio devices. This presentation will survey current practical platforms and peripherals, with examples of these devices in use by Westat, including brief demonstrations. The impacts on project operations and general data quality will be discussed. We will highlight useful future trends.

Notice

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.

Program Announcement

Title: **Operational Examples of Balanced Sampling**

Speakers: Yan Liu, Ernst and Young LLP
Ali Mustag, NORC, University of Chicago
Hongwei Zhang, NORC, University of Chicago

Date/Time: Thursday, May 20, 2004, 12:30 - 2:00 p.m.

Location: Bureau of Labor Statistics, Postal Square Building (PSB), Conference Center, Room 9, 2 Massachusetts Ave., N.W., Washington, D.C. Please use the First Street entrance to the PSB. To gain entrance to BLS, please see notice at the end of this announcement.

Co-Sponsors: WSS Methodology and Computing Sections

Abstract: The operational details of how to avoid bad samples and get good ones instead are covered in this seminar, with examples drawn from practice. Deep stratification, the current best practice, is compared for two “typical” populations with several variants of median balanced selection where the median balancing is done initially with the actual population elements as the sampling units. The use of balanced sampling of replicates or IID subsamples is also covered. Replicate balancing is shown, for the kinds of populations commonly encountered in business applications, to be quite an advance. The case where one variable is used to stratify and a second variable or even a third to balance on is also taken up, albeit more theory still remains to be developed here.

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Program Announcement

Title: **Modification of Chernikova's Algorithm and Error Localization in Linear Editing**

Speaker: Stanley Weng, National Agricultural Statistics Service, U.S. Dept. of Agriculture

Discussant: William E. Winkler, U.S. Census Bureau

Chair: Dale Atkinson, National Agricultural Statistics Service, U.S. Dept. of Agriculture

Date/Time: Thursday, May 27, 2004, 12:30 - 2:00 p.m.

Location: Bureau of Labor Statistics, Postal Square Building (PSB), Conference Center, Room 9, 2 Massachusetts Ave., N.W., Washington, D.C. Please use the First Street entrance to the PSB. To gain entrance to BLS, please see notice at the end of this announcement.

Sponsor: WSS Methodology Section

Abstract: In automatic linear editing by the Fellegi-Holt methodology, error localization is a core issue. Chernikova's algorithm has been used to generate extreme vectors for error localization, as solving a cardinality constrained linear program. However, Chernikova's algorithm is computationally inefficient, largely due to a nonlinear procedure in the algorithm, as a rule to check for extreme vectors. The inefficiency has limited the usefulness of the algorithm in practice.

This paper proposes another rule, called rank rule, for identifying extreme vectors, based on the polyhedral theory. The rule takes explicit form and is computationally straightforward. This modification to Chernikova's algorithm appears promising to considerably improve the efficiency of the algorithm. This paper also discusses the polyhedral projection interpretation of the Fellegi-Holt theory to linear editing, which promotes the view that Chernikova's algorithm represents a proper way for error localization in linear editing.

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Program Announcement

Title: **Third Annual Seminar of the Funding Opportunity In Survey and Statistical Research**

Organizers: Robert Fay (robert.e.fay.iii@census.gov) and Monroe Sirken, Research Subcommittee of the Federal Committee on Statistical Methodology

Chair: Katherine Wallman, Chief Statistician OMB

Date/Time: Monday, June 21, 2004, 9:00 A.M.- 4:00 P.M. (NOTE SPECIAL TIME)

Sponsors: Washington Statistical Society, and Washington DC/Baltimore Chapter AAPOR

Location: Bureau of Labor Statistics, Postal Square Building (PSB), Conference Center, Rooms 1,2, and 3,2 Massachusettes Ave. N.W., Washington, D.C. Please use the First Street entrance to the PSB. To gain entrance to PSB, please see the notice at the end of this announcement.

Abstract: Since 1998, 12 Federal statistical agencies in collaboration with the National Science Foundation with support of the Federal Committee on Statistical Methodology have been funding and administrating The Funding Opportunity in Survey and Statistical Research, a problem oriented research grants program oriented to the needs of the Federal Statistical System. The Third Annual Seminar of the Funding Opportunity features the reports of the principal investigators of 4 research projects that were funded in 2002.
1. "Identifying Causal Mechanisms Underlying Nonignorable Unit Nonresponse Through Refusals to Surveys" by Robert Groves, Mick Couper, Elinore Singer, and Stanley Presser.
2. "Testing for Marginal Dependence Between Two or More Multiple-Response Categorical Variables" by Thomas M. Loughin and Christopher R. Bilder.
3. "Theory and Methods for Nonparametric Survey Regression Estimation" by Jean D. Opsomer and F. Jay Breidt.
4. "A Comparison of RDD and Cellular Telephone Survey" by Charlotte Steeh.
Federal agency statisticians and survey methodologists will be discussants of each report

Notice about Seminars at the Bureau of Labor Statistics

To attend seminars at BLS, you need to email your name, affiliation, and title of the seminar to "wss_seminar@bls.gov" by noon at least two days in advance, or call 202-691-7524 and leave message. Bring photo to the seminar.

Program Announcement

Title: **Quantifying What a Representative Sample Is**

Speakers: Mary Batcher, Ernst and Young LLP
Susan Hinkins, NORC, University of Chicago
Chris Moriarity, U.S. General Accounting Office

Chair: Fritz Scheuren, NORC, University of Chicago

Date/Time: Thursday, June 24, 2004, 12:30 - 2:00 p.m.

Location: Bureau of Labor Statistics, Postal Square Building (PSB), Conference Center, Room 10, 2 Massachusetts Ave., N.W., Washington, D.C. Please use the First Street entrance to the PSB. To gain entrance to BLS, please see notice at the end of this announcement.

Co-Sponsors: WSS Methodology and Computing Sections

Abstract: In this last seminar in the series, we return to Royall's original formulation and attempt to describe what it means to have a "representative balanced sample." Intuitively the extent to which a sample may be said to be "representative" is a function of many factors -- including the size of the sample, the sample's design and the nature of the population. The use of mass imputation is employed to focus on where the sample is "representative." Formally we expand Royall's original idea to quantify the degree to which a given sample is representative. The way we approach this is to massively employ nearest-neighbor imputation to connect the balanced sample drawn with the population elements by matching the two together on the frame variables. The degree to which a close match can be said to exist is then taken to be a measure of the sample's representativeness. This formulation focuses the sampler on the portion of the population not being "covered" or not closely matched, and exposes the need in a very explicit way to engage in model-based inference. In our formulation the blend between conventional sampling inference and modeling is being determined by data, not by theoretical arguments. It is conjectured that conventional sampling inference is best employed only for that part of the population that can be "covered" by the matching.

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Biographical Information Of Candidates For The 2004 - 2005 WSS Board Of Directors

Two Candidates for President-Elect (Vote for 1):

LAWRENCE H. COX is Associate Director for Research and Methodology for the National Center for Health Statistics. Previously, he served as a senior mathematical statistician for the Environmental Protection Agency and the Bureau of the Census and as Director of the Board on Mathematical Sciences of the National Academy of Sciences. Dr. Cox is a Fellow of the American Statistical Association, an Elected Member of the International Statistical Institute and a member of the OMB Federal Committee on Statistical Methodology. He holds a Ph.D. in Mathematics from Brown University and a B.Sc. in Mathematics from Manhattan College. His service to the ASA includes: chair of the Committee on Privacy and Confidentiality; Chair of the Computer Review Group; member of the ASA Board of Directors and chair of the Budget Committee; chair of the Section on Statistical Graphics; and chair of the Section on Statistics and the Environment. Dr. Cox has published and lectured extensively on topics in statistical methodology and environmental statistics. He is best known for his work on statistical disclosure limitation and since 1996 has taught a JPSM course on this topic. Dr. Cox has contributed to ASA scientific programs as chair of the Statistical Graphics Track, 1987 ASA Winter Meeting; organizer, chair, and presenter at numerous invited and topic contributed JSM sessions; organizer of the first two JSM Expositions of Statistical Graphics; JSM luncheon speaker; and, invited speaker, discussant, and panelist at a number of WSS methodology seminars. He recently completed two terms as Chair of the ISI Committee on Statistics and the Environment and is active in efforts to create an ISI Section on Environmental Statistics. In that capacity, Dr. Cox is organizing the Theme Day on Environmental Statistics for the 2005 ISI meetings in Sydney, Australia.

CLYDE TUCKER has been at the Bureau of Labor Statistics for over 20 years and is currently serving as the Senior Survey Methodologist at the Bureau. Previously, Dr. Tucker was Director of the Behavioral Science Research Center in the Office of Survey Methods Research and a Mathematical Statistician in the Office of Prices and Living Conditions. He has led efforts to redesign the Consumer Expenditure Diary to improve reporting and the Point-of-Purchase Survey to increase the timeliness of information needed to update the Consumer Price Index. He led the interagency research effort to redesign the methodology for collecting information on race and ethnicity in all Federal surveys, including Census 2000. He served as a statistical consultant to the bipartisan Congressional Commission assessing the impact of the Family and Medical Leave Act. He is the chair of the committee that oversees the design of the Current Population Survey. Dr. Tucker began his career as the Assistant Manager of CBS News Polls, where he consulted on the design and analysis of exit polls. His research interests include telephone survey design, survey nonresponse, and measurement error. He has a M.S. in statistics and a Ph.D. in political science, both from the University of Georgia, and he is an elected Fellow of the American Statistical Association (ASA). He is a past chair of the Government Statistics Section of ASA, and he has held numerous positions on the board of the American Association for Public Opinion Research.

Two Candidates for Methodology Chair (Vote for 1):

JONAKI BOSE is a statistician in the Office of Survey Programs of the Bureau of Transportation Statistics (BTS). Previously, she was at the National Center for Education Statistics for about eight years and was detailed at the Office of Management and Budget. Her education includes a Master of Science in Survey Methodology (statistical science emphasis) from the Joint Program in Survey Methodology at the University of Maryland. She is the Social Statistics Section program chair for American Statistical Association's 2004 program committee, and is the chair for the Data Collection Section of the Washington Statistical Society. Her interests include disclosure review, nonresponse bias, and longitudinal surveys.

VINCENT G. IANNACCHIONE is a senior research statistician in the Washington office of RTI International. Since receiving an M.S. in Statistics in 1978 from the University of Arkansas, he has spent most of his career working as a sampling statistician. Currently, he directs statistical operations for national surveys on health care, drug abuse, and military studies. His research interests include the use of dual-frame calibration to improve of the efficiency of surveys with a nonresponse follow up and the use of residential mailing lists for in-person household surveys.

One Candidate for Treasurer (Vote for 1):

JOHN FINAMORE is a mathematical statistician in the Demographic Statistical Methods Division of the U.S. Bureau of the Census. He has acted as the lead mathematical statistician on multiple demographic surveys during his seven years at the Bureau. His responsibilities on these surveys have included sampling, estimation, variance estimation, imputation, nonresponse analysis, sample design documentation, and statistical support of operational tasks. In addition, he chaired a workgroup responsible for calculating the sampling information used in the Census 2000-based demographic surveys sample redesign effort. He is also involved in the preliminary planning for the Census Bureau's 2010 demographic surveys sample redesign effort. Mr. Finamore holds a B.S. in Mathematics from James Madison University and an M.S. in Statistics from the University of Connecticut.

Four Candidates for Representative-at-Large (Vote for 2):

JOHNNY BLAIR is a survey methodologist who has conducted research in a number of areas, including sampling for rare populations, measurement error in proxy reporting, data quality in converted refusal interviews and, most recently, the design and the analysis of cognitive interviews for pretesting. His publications include "Assessing Protocols for Child Interviews," "Survey Pretesting: Do Different Methods Produce Different Results?" (with Stanley Presser), the book *Designing Surveys: A Guide to Decisions and Procedures* (with Ronald Czaja), "Expanding Cognitive Laboratory Methods to Test Self-Administered Questionnaires" (with Susan Schechter), "Aspects of Data Quality in Cognitive Interviews: the case of verbal reports" (with Frederick Conrad), and "Using Network Sampling in a Phone Survey to Locate Non-Telephone Households" (with Nadra Garas). He currently serves on the ASA committee on energy statistics and the Design and Analysis Advisory Committee to the Educational Testing Service (ETS) for the National Assessment of Educational Progress (NAEP) since 1996.

RICHARD BOLSTEIN is Chair of the Department of Applied & Engineering Statistics at George Mason University. He is also founder and director of their Statistical Consulting Center. He currently serves as secretary of the Southern Regional Council on Statistics. Previously, he served as an associate editor of the *Journal of the American Statistical Association*, as Representative at Large to WSS (1993-95), as President of the Washington Operations Research & Management Science Council. Dr. Bolstein earned a Ph.D. in mathematics from Purdue University in 1967. His research interests have spanned mathematics, operations research, and statistics and are currently focused on survey sampling, compliance measurement, and categorical data analysis. He is an active consultant to government agencies and private sector firms, including the U.S. Customs Service and the Environmental Protection Agency where he developed sampling designs to measure compliance with U.S. laws.

MICHAEL D. SINCLAIR recently joined the Department of Labor as the Director of Statistical Analysis for the Office of Federal Contract Compliance Programs. In this position he conducts research into analytical methods to identify discriminatory personnel practices among federal contractors. Dr. Sinclair received his Ph.D. in statistics from George Washington University (GWU) in 1994 and has more than 17 years of experience from both private industry and the Federal Government in designing and conducting statistical studies. Previously, Dr. Sinclair served as a senior statistician at Mathematica Policy Research in Princeton, New Jersey. In this capacity, Dr. Sinclair designed and conducted surveys for the U. S. Department of Agriculture's Food Stamp and Free and Reduced Price Lunch Program, the Centers for Medicare and Medicare Studies' National Medicare Education Program, the Teach-for-American and Ready-to-Learn education programs, and the Community Tracking Study, a household health insurance and physician study conducted the Robert Wood Johnson Foundation. Prior to MPR, Dr. Sinclair spent six years at the U.S. Census Bureau in Suitland, Maryland designing and conducting studies to evaluate Census programs. His work focused on the assessment of response, measurement, and other nonsampling errors in the Bureau's data collection activities. He has recently published work in *Jurimetrics*, the *Journal of the American Statistical Association*, and *Survey Methodology* and is now completing his term as president of the Princeton-Trenton New Jersey Chapter of the American Statistical Association.

LESLIE WALLACE is a senior statistician at Westat with 17 years of experience in survey research. Since 1989, Ms. Wallace has worked on the National Assessment of Educational Progress (NAEP), a large ongoing, congressionally mandated survey of the knowledge and skills of students in various subjects, primarily in grades 4, 8, and 12. Other large studies with which she has been involved include the Programme for International Students' Assessment and the National Employer Health Insurance Survey. Her areas of experience include sample design, data weighting, imputation, and variance estimation. She has presented papers at the ASA Joint Statistical Meetings and at the Second International Conference on Establishment Surveys. She served as the SRMS newsletter (co)editor from July 2000 to January 2004. Ms. Wallace holds a Master's degree in statistics from Texas A&M University and a Bachelor's degree in mathematics from the College of William and Mary.

Spring Research Conference

11th Annual Spring Research Conference on Statistics in Industry and Technology:
"Statistics on Data Streams for Scientific Research and mplementation"

May 19-21, 2004
National Institute of Standards and Technology, Gaithersburg, Maryland

The Spring Research Conference (SRC) is an annual conference jointly sponsored by the Institute of Mathematical Statistics and the Section on Physical and Engineering Sciences of the American Statistical Association. The SRC provides a continuing forum for promoting statistics in engineering, technology, industry, information and physical sciences. The conference presentations are aimed at statisticians and researchers from corporations, government laboratories, and academic institutions, who use statistics in these disciplines.

Plenary Speakers

James Filliben, NIST, "The World Trade Center Collapse: The Critical Role of Statistics"
Robert L. Jacobsen, Lawrence Berkeley National Laboratory, "Statistical Issues in Particle Physics Experiments"
Vijayan N. Nair, University of Michigan, "Statistical Issues in Network Tomography"
Donna F. Stroup, Centers for Disease Control, "Measuring the Burden of Disease and Disability"
Edward Wegman, George Mason University, "Visualization in Statistics"

Short Course

Barry I. Graubard, National Cancer Institute, "Analysis of Complex Surveys"
Tuesday, May 18, 2004, 1:00 pm – 5:30 pm
Short course registration ($140) does not require conference registration and includes a copy of "Analysis of Health Surveys," by E.L. Korn and B.I. Graubard (retail price $105).

Registration and Additional Information

Registration for the conference is $185 for non-students and $70 for students. The registration fee covers handouts, coffee breaks, lunches on Wednesday and Thursday, and social events. To register, or for more information, please visit http://www-math.cudenver.edu/SRC2004/, email SRC@math.cudenver.edu, or contact one of the Conference Chairs:

Program Chair:
Karen Kafadar
University of Colorado at Denver
kk@math.cudenver.edu
303-556-2547

Contributed Papers Chair:
Thomas Loughin
Kansas State University
loughin@stat.ksu.edu
785-532-0522

Local Arrangements Chair:
Will Guthrie
NIST
will.guthrie@nist.gov
301-975-2854

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@insightpolicy.com or (703) 387-3032.

RESEARCH STATISTICIAN
www.rti.org

The Statistics Research Division of RTI International seeks a research statistician for its Rockville, MD office. Desired qualifications include training in statistics or biostatistics at the MS level with 5+ years or PhD level with 0-2 years of experience in the areas of public health, medical or epidemiological studies, or clinical data.

Candidates must have strong technical aptitude, SAS programming experience, integrity, an excellent work ethic, and exceptional communication and organization skills. Experience in contract research, SUDAAN programming, or project management is desirable

RTI offers a comprehensive package including 4 weeks paid time off, 10 paid holidays, tuition reimbursement, medical/dental benefits, and a generous retirement plan.

EOE/AA/M/F/H/C. Apply on line at: www.rti.org
(job number: DS10654)

BIOSTATISTICIAN

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Becker & Associates Consulting, Inc. is a leading healthcare consulting firm providing strategic scientific consulting services to commercial clients in support of the development, marketing, and stewardship of innovative healthcare products. We offer challenging work, state-of-the-art resources, and talented colleagues.

Biostatistician

The Biostatistician is required to work independently with project teams, consultants, and/or clients, to plan clinical research projects, to develop statistical sections of protocols and statistical analysis plans, and to conduct data analyses and prepare reports. As appropriate, the biostatistician will provide statistical consultations to clinical teams and contractors and play a key role in preparing data and research materials for regulatory submissions. The Biostatistician is also responsible for oversight of data and statistical tasks performed by contractors, including definition of schedules and staff requirements for data management.

Demonstrated knowledge of applied clinical research statistics in support of medical device or pharmaceutical product development is required. Attention to detail, accuracy, initiative, and excellent verbal and written communication skills are essential. Advanced knowledge of application and interpretation of SAS inferential procedures, strong independence to take responsibility with high quality and efficiency, and proficiency in basic SAS programming is required (eg, DATA steps, basic SAS procedures). Knowledge of SQL, EXCEL, and SAS Graphics is a plus.

The position requires a masters-level degree in Statistics/Biostatistics with at least 3 years experience.

The firm is located in Washington, DC and offers competitive salary and benefits. Please submit a cover letter with salary expectations and a resume to: hr@becker-consult.com. Becker & Associates Consulting is an equal opportunity employer.

Biostatistician/Product Manager
Cytel Software Corporation

Cytel is currently seeking a talented biostatistician to lead our growing business in the area of analytical services for design and conduct of clinical pharmaceutical trials. If you have a Ph.D. in statistics or biostatistics, with 3 to 5 years of clinical trials experience, and possess an entrepreneurial spirit we want to talk to you. At Cytel, you will have the opportunity to build and manage a training and consulting business around clinical trials as well as to participate in the development of breakthrough software that is helping leading companies, government agencies and research centers change the way clinical trials are designed and conducted.

Cytel's software products, East®, StatXact® and LogXact®, are unique, award winning design and analysis tools used by almost every major bio-pharmaceutical company, as well as academic research sites and the FDA. As a leader, you will be responsible for providing training to clients on the use of East software; designing and monitoring clinical trials for clients using existing group sequential and adaptive methods; developing new group sequential and adaptive statistical methods where none currently exist for the client's problem; managing projects; managing client relationships; and recruiting and developing talented staff

The right candidate will be an entrepreneur with excellent consulting instincts as well as technical and communication skills, who is excited by the statistical and managerial challenges of this position, and motivated to succeed through a reward structure that includes equity ownership, a competitive salary, and the opportunity to influence clinical practice by providing superior new software tools and services that speed up the entire process of drug development.

Competitive salary + bonus and equity
To apply, please send a resume and cover letter to careers@cytel.com with subject line: Biostatistician. Email applications only, please.

DISCLOSURE LIMITATION RESEARCH POSITION

Applications and nominations are invited for one permanent position in the Statistical Research Division at the U.S. Census Bureau in the Washington, D.C. area. This position is an integral part of a research program aimed at identifying, testing, and implementing statistical disclosure control strategies, in order to effectively protect the confidentiality of survey and census participants. The principal duties include the development of statistical approaches and computational algorithms to identify disclosure risk. The development of data retrieval and data integration approaches will be a key component of the work. These approaches must be incorporated in easy-to-use software. Other responsibilities include data analysis, documentation, and the presentation of results in scientific journals and at meetings.

Requirements: At least a masters degree in a relevant field such as Statistics, Mathematics, or Computer Science. Experience in computer programming including knowledge of Java, C++, or C is required. Must be able to create and design user-friendly software. Excellent communication and interpersonal skills are necessary. The salary range is $46,175 to $73,546 depending on qualifications and experience. U.S. citizenship is required.

For further information or to start the application process for this position in Disclosure Limitation, apply on-line at http://www.census.gov/hrd/www/vacancy/nmathst2.html. Follow the instructions for electronic applications, and submit your resume and transcripts to 1-800-601-8952. If you have questions, please contact the Census Bureau's Recruitment Branch at 1-800-638-6719. The Census Bureau Is an Equal Opportunity Employer.

Data Analyst/Programmer

Caliber Associates, Inc. is a dynamic, employee-owned consulting firm specializing in the social and behavioral sciences. We are growing and seek a Data Analyst/Programmer.

The Data Analyst/Programmer will play a Technical Lead role in the collection and analysis of data for large-scale automated report generation projects. Responsibilities will include developing analysis and reporting tools, analyzing quantitative and qualitative data, and producing reports suitable for multiple audiences. The Data Analyst Programmer will also act as liaison between research staff and the Information Technology Group.

Master's Degree with 3 or more years experience required, including extensive experience with data analysis, data handling, and computer programming. Experience using Visual Basic for Applications (VBA) for OLE (Object Linking and Embedding) Automation strongly preferred. The successful applicant should have statistical experience as well as experience with SPSS and strong database design skills. Experience using the SPSS Scripting facility is preferred. The Data Analyst must be able to apply a variety of data collection and analysis methods and have experience using theory-based approaches to evaluation and research. Strong methodological, communication, conceptual, and organizational skills, together with the ability to work in a team environment, are required. Caliber offers a supportive work environment and an opportunity to develop professionally alongside experts in the field. Compensation is competitively matched to qualifications with excellent benefits. If interested, please forward a cover letter and resume to:

Caliber Associates, Attn: HR-Data Analyst/Programmer, 10530 Rosehaven Street, Suite 400, Fairfax, VA 22030. Email: careers@caliber.com Fax: 703 218-6930. Website: www.calib.com EOE

RESEARCH ANALYST – HEALTH POLICY

The American Institutes for Research, a research and development organization with diverse specialization in the behavioral sciences, seeks a Research Analyst with a strong background in statistics for its Health Program in Silver Spring, MD. Projects focus on health services research and evaluation, health policy analysis, health disparities, health communications, substance abuse, training, and technical support. Responsibilities include analyzing data, writing reports and other documents, preparing questionnaires and interview guides, assisting with preparation of proposals, literature reviews, summarizing research findings, communicating with clients and service recipients, and conducting focus groups and qualitative interviews.

MA or PhD required preferably in a health specialty, social science, economics, or statistics. Successful candidate should have a solid knowledge of and facility with statistical packages such as SAS or SPSS. Excellent writing skills to draft papers and reports and strong oral communications skills to work with a research team and government clients required.

Please forward resume with cover letter, copy of academic transcript, and independently written and edited writing sample to:

American Institutes for Research, Human Resources – HTH04038, 1000 Thomas Jefferson Street, N.W. Washington, DC 20007-3835
resumes@air.org, subject line: HTH04038
www.air.org EEO

STATISTICIANS/MATHEMATICAL STATISTICIANS

The Office of Applied Studies, Substance Abuse and Mental Health Services Administration (SAMHSA), is recruiting for junior and senior statisticians and mathematical statisticians to work on SAMHSA's National Survey on Drug Use and Health (NSDUH). The NSDUH is an ongoing household survey of 70,000 respondents per year. The survey produces national and state level statistics on the use of tobacco, alcohol, and illicit drugs, and data are used for research on various substance abuse issues. GS 12-14 and Service Fellow positions are available in the Division of Population Surveys for persons with interest and expertise in one or more of the following areas: analysis of data from complex household surveys; small area estimation; sample design and estimation; survey management; questionnaire design; design and conduct of methodological studies; and substance abuse and mental health epidemiology. For information on these positions, contact Joe Gfroerer, at 301-443-7977, jgfroere@samhsa.gov, or Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Room 16-105, 5600 Fishers Lane, Rockville, Maryland 20857.

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