



October 1988

WASHINGTON
STATISTICAL
SOCIETY

NEWSLETTER

October 14	Friday	Effects of Cluster Sampling on Epidemiologic Analysis in Population-Based Case-Control Studies
October 17	Monday	Statistics and the Law ASA-150
October 19	Wednesday	Forecasting the 1988 Elections
October 20	Thursday	Cognitive Aspects of Dietary Recall
November 3	Thursday	Locally-Weighted Regression: An Approach to Regression Analysis by Local Fitting

ANNOUNCEMENTS

New Chief Statistician Named

Hermann Habermann was named July 25 to the position of Acting Chief of OMB's Office of Information and Regulatory Affairs (OIRA), Statistical Policy Branch, replacing Dorothy Tella. Habermann will continue to serve as Chief of the OIRA Information Technology Management Branch.

Habermann's educational background includes a Ph.D. in Statistics from the University of Wisconsin. He worked in the Forest Service of the U.S. Department of Agriculture before joining OMB.

National Office News

There were several items of interest to WSS members coming from the ASA Board meeting in

New Orleans. First, the section on government statistics was approved. Publication rates are being raised for nonmembers but will be held constant for most ASA members. Future annual joint meetings are expected to be rotated among 10 sites (major cities plus locations in Canada and Florida). The report on possible revisions of the ASA Fellows program was accepted, which calls for soliciting more nominations and providing more publicity on the nomination process. No quotas on types of contributions will be set. The planned new Directory of Statisticians will be delayed for some time. Finally, the 1989 meetings will not have a commemorative postage stamp but will have a special pictorial cancellation with a temporary postal substation set up at the meetings.

WASHINGTON STATISTICAL SOCIETY PROGRAM CHAIRS

Agriculture & Natural Resources

Ron Bosecker 447-3895
W. Barnes Johnson 249-7388

Social & Demographic Statistics

Harvey Schwartz 535-0634
John Czajka 484-9220

Short Courses

Glenn White 763-5248
Donald Gantz 425-3931
Brad Pafford 447-2129
Sid Schwartz 268-3490
Virginia deWolf 366-5372

Economics

Francis X. Diebold 452-2461
Gerald Schluter 786-1785

Public Health & Biostatistics

Ed Lakatos 496-5905
Jai Choi 436-7047

Methodology

David Marker 251-4398
Myron Katzoff 436-7047

Employment

Evelyn R. Kay 331-1153

Physical Sciences & Engineering

Thomas Mazzuchi 994-7514
Refik Soyer 994-6794

Statistical Computing

Khalid Aboura 994-7534
Sylvia Leaver 272-2311

Quality Assurance

Stanley R. Freedman 586-2038
John M. Galvin 272-2385

Newsletter Editor

Michael Cohen 454-6193

PROGRAM ABSTRACTS

TOPIC: EFFECTS OF CLUSTER SAMPLING ON EPIDEMIOLOGIC ANALYSIS IN POPULATION-BASED CASE-CONTROL STUDIES

SPEAKERS: Barry Graubard, National Institute of Child Health and Human Development, Thomas Fears and Mitchell Gail, National Cancer Institute

CHAIR: Joe Fred Gonzalez, Jr., Office of Research and Methodology, NCHS

DATE & TIME: Friday, October 14, 10:30 a.m. to 12:00 Noon (Note special time.)

LOCATION: National Center for Health Statistics, 3700 East-West Highway, Hyattsville, Maryland 20782, Room 1-39

SPONSOR: Office of Research and Methodology, NCHS and WSS

ABSTRACT: We consider population-based case-control designs in which controls are selected by one of three cluster sampling plans from the entire population at risk. The effects of cluster sampling on classical epidemiologic procedures are investigated, and appropriately modified procedures are developed. In particular, modified procedures for testing the homogeneity of odds ratios are presented. Simulations which use the data from the 1970 Health Interview Survey as a population suggest that classical procedures may be fairly robust in the presence of cluster sampling. A more extreme example, based on a mixed multinomial model, clearly demonstrates that the classical Mantel-Haenszel (1959) and Woolf-Haldane tests of no exposure effect may have size exceeding nominal levels, and confidence intervals with less than nominal ratios may also be biased with unequal probability selected cluster samples. The modified procedures we propose remedy these defects.

TOPIC: STATISTICS AND THE LAW **ASA-150**

SPEAKERS: Stephen Fienberg, Professor of Statistics and Dean, College of Humanities and Social Sciences, Carnegie Mellon University
Joseph Gastwirth, Professor of Statistics and Economics, George Washington University
Lisa Newell, Esq., Newman and Newell

DATE & TIME: Monday, October 17, 3:00 to 5:00 p.m., followed by wine and cheese reception (Note special time.)

LOCATION: Department of Labor, 200 Constitution Ave., N.W., Rm. N3437 A-D, Washington, D.C. (Please call 523-1760 no later than October 14 to assure entrance.)

ABSTRACT: Statistics are being used more and more as evidence in legal procedures. These proceedings may involve discrimination, product liability or government regulation, among other subjects. The speakers, two statisticians and a lawyer, will discuss the issues of statistical presentation and assessment with examples of recent cases from their varying points of view.

Dr. Fienberg is editor of the forthcoming book, "The Evolving Role of Statistical Assessments as Evidence in the Courts." He was chairman of the National Research Council Panel on this subject. The Panel included statisticians, social scientists, lawyers and judges. He is also editor of CHANCE magazine.

PROGRAM ABSTRACTS (continued)

Dr. Gastwirth is the author of "Statistical Reasoning in Law and Public Policy" and has written a number of articles in this area. He has been an expert witness in several cases.

Ms. Newell, a partner in the law firm of Newman and Newell, was on a legal team in the case of American Federation of State, County and Municipal Employees vs. the State of Washington, a landmark case involving the issue of sex based wage discrimination, and other major employment discrimination cases.

TOPIC: FORECASTING THE 1988 ELECTIONS

SPEAKERS: Jack Moshman, Moshman Associates (Election Analyst for ABC News)
Richard Smolka, American University (Election Analyst for WORC)
(Third Speaker to be Announced)

DATE & TIME: Wednesday, October 19, reception at 6:30 p.m., panel begins at 7:00 p.m.
(NOTE: Those interested in joining the panelists for dinner after the program should contact Doug Samuelson at (O): 703/391-0006, or at (H): 703/476-2058.)

LOCATION: System Planning Corp., 1500 Wilson Blvd., Arlington (2 blocks from the Roslyn Metro), 16th floor conference room

SPONSOR: WSS and WORMS

ABSTRACT: The panelists will discuss methods used in predicting election outcomes, including election night projections. Use of exit polling, early returns, and analysis of key precincts will also be covered.

TOPIC: COGNITIVE ASPECTS OF DIETARY RECALL

SPEAKER: Albert Smith, Ph.D., Assistant Professor of Psychology, State University of New York at Binghamton

CHAIR: Jared Jobe, Ph.D., Office of Research and Methodology, NCHS

DATE & TIME: Thursday, October 20, 10:00 to 11:30 a.m. (Note special time.)

LOCATION: National Center for Health Statistics, 3700 East-West Highway, Hyattsville, Maryland 20782, Room 1-39 (NOTE: If you will be attending, please call Lisa Himmelfarb, NCHS, on 436-7022 by Tuesday, October 18.)

ABSTRACT: As part of a collaborative research project between SUNY-Binghamton and the National Center for Health Statistics, several experiments were conducted on the cognitive aspects of dietary recall. The goal of the research is to improve the quality of statistics on dietary data in national health surveys. Experiments were designed specifically to assess the accuracy of answers to questions about long-term dietary intake, the cognitive strategies employed to answer such questions, and the extent to which variations in the nature of the inquiry influence the accuracy of the answers. To explore these issues, subjects made free recalls of dietary intake, relative and absolute judgments for frequency of dietary intake, and portion size estimates. These experiments will be summarized and implications for nutritional epidemiology discussed.

BLS Distinguished Statistician Series

TOPIC: ON OLD HATS AND NEW STRAITJACKETS: CAN WE RECAPTURE SOME OF THE HISTORIC TENSION BETWEEN QUANTITATIVE AND QUALITATIVE DATA?

SPEAKER: Jean Converse, Director, Detroit Area Study, Department of Sociology, University of Michigan

DATE & TIME: Wednesday, October 26, 1:30 to 3:00 p.m.

LOCATION: GAO, Room 2734, 441 G Street, N.W., Washington, D.C. 20212
(For building access, call 523-1760 by close of business, October 25.)

OTHER ANNOUNCEMENTS

Council of Chapters Report

The history of statistics video presentation for next year has an almost final script. The Council will need assistance with photographs. If you think you have some appropriate photos which could be copied contact: Stephen Ruberg, Chair, Committee on the History of Statistics, Department of Biostatistics, Merrell Dow Research Institute, 210 East Galbraith Road, Cincinnati, Ohio 45215. Under the proposed new ASA Constitution and Council of Chapters charter, the entire membership of ASA will do the final voting on the Council of Chapters representatives on the ASA board. The Council will nominate at least two people for each election. The Council will probably develop a procedure to ensure geographic representation among its three members to the Board.

Sesquicentennial Souvenirs

Several souvenir items commemorating the ASA-150 celebration were available at the New Orleans annual meetings and a few more are planned for 1989. The Biopharmaceutical Section had very impressive canvas portfolios and gym bags for a donation of \$10 each which are expected to be repeated next year. The Council of Chapters had a nice looking Shaeffer ball-point pen for \$3 and foam beverage can holders (Koozies). A supply of these two items has been procured for WSS and will be offered at the annual holiday party in December. A new WSS

mug commemorating the ASA-150 celebration will also be available at that party.

Some souvenir items for next year are pending and may depend upon having enough preorders. An appropriately inscribed striped tie (in both men's and women's versions) is being pursued along with an inscribed clipboard which has a calculator built in. These items would probably need to sell for about \$17 each so you can see the reason for judging interest through presell activities.

A prototype of an extremely handsome lapel pin was presented to the ASA Board at New Orleans. Something of that nature may be included in the registration next year as a permanent memento.

Carolee Bush Joins ASA

The American Statistical Association has established a new position of Executive Assistant to the Executive Director. Carolee Bush, formerly of the Bureau of the Census, will fill that new position. Carolee's duties will include staff liaison to Chapters, Sections, and Committees; working with the Board of Directors and Executive Committee on developing materials for Board meetings and following through on implementation of Board actions; interacting with government agencies on fellowship programs and advisory committees; assisting the Director of the new Office of Scientific and Public Affairs; and serving as Secretary to the Executive Committee of the Board of Directors.

APDU Plans Thirteenth Annual Conference

The Association of Public Data Users (APDU), an active network of data users, producers, and distributors concerned with the collection and dissemination of public data, has scheduled its thirteenth annual conference for October 19-21, 1988, in Washington, D.C.

ADPU88 will open with a Census Workshop at 1:00 p.m. on Wednesday afternoon at which representatives from the Bureau of the Census and conference attendees will discuss changes in content from the 1980 to the 1990 decennial censuses, proposed census products, and current research and thinking on disclosure avoidance.

The Workshop is an excellent forum for the discussion of controversial issues in the past year or two concerning the decennial census, such as the Office of Management and Budget's eleventh hour decision to disapprove the questionnaire.

Sessions on Thursday will focus on the use of public data for election purposes, the archival function of the federal government, sources and uses of health statistics, and private sector activities and products of interest to data users.

Friday will open with a report on issues and policies affecting the collection and dissemination of public data by Katherine Wallman, Executive Director of the Council of Professional Associations on Federal Statistics. Concurrent sessions in the morning will bring attendees up to date on programs of the Bureau of Labor Statistics, applications of data collected in the Survey of Income and Program Participation, and data collections of the Veterans Administration and the Internal Revenue Service. Session moderator Janie Harris, of Cornell University, has promised to bring the conference to a close with a "fireworks session" on public policies that affect data availability.

Registration brochures for the Annual Conference will be available in August from the office of the Association of Public Data Users, 87 Prospect Avenue, Princeton, New Jersey 08544, 609/452-6025.

Census Bureau's Fifth Annual Research Conference Announced

The Census Bureau's Fifth Annual Research Conference (ARC V) will be held March 19-22, 1989, at the National Clarion Hotel in Arlington, Virginia, only 1/2 mile from National Airport and three blocks from Metro. ARC V will comprise a mix of topics such as nonsampling errors, new techniques in questionnaire design, analysis of complex survey data, and geographic systems. For further information contact Ms. Maxine Anderson-Brown, ARC Conference Coordinator, Office of the Director, Bureau of the Census, Washington, D.C. 20233, 301/763-1150.

Conference in Memory of Eugene Lukacs - November 1988

The Mathematics Department at Catholic University is organizing a one-day conference on November 3, 1988 in honor of the late Professor Emeritus Eugene Lukacs. The conference will consist of lectures by the following invited speakers:

Samuel Kotz, University of Maryland
Joseph Gani, University of California-Santa Barbara
Abram Kagan, University of Maryland
Vijay Rohatgi, Bowling Green University, Ohio
Miklos Csorgo, Carleton University, Ottawa, Canada

Thanks Due

The WSS thanks George Bonney (Howard University), James Bozik (Census Bureau), Michele Chyba (National Center for Health Statistics), and Mohammad Quasem (Howard University) for volunteering to help at the membership information booth sponsored by the Council of Chapters during the recent Joint Meetings in New Orleans.

OTHER ANNOUNCEMENTS (continued)

The International Association of Survey Statisticians

The International Association of Survey Statisticians (I.A.S.S.-A.I.S.E.) was founded in 1973 as a section of the International Statistical Institute. Its aims are to promote the study and development of the theory and practice of sample surveys and censuses. It also aims to increase the interest in surveys and censuses among statisticians, among governments and the public in the different countries of the world.

The IASS carries out its aims by means of:

- International meetings held every two years in conjunction with the International Statistical Institute. These meetings provide a forum for discussion of survey statistics. They include a number of sessions on recent advances in survey and census methodology, and their applications. (A list of some of the meetings for the next ISI Session that are of special interest to IASS members is given in the following article.)
- Regional meetings or seminars devoted to specific aspects of surveys.
- Publications distributed to members on a regular basis or on request, and the opportunity for members to subscribe to certain journals at reduced rates.

Services Provided by IASS

The IASS sends to all members free of charge:

- The *Survey Statistician*, the journal of the Association, which is issued twice a year, in English and in French. It includes general information about the activities of the Association (meetings, seminars, etc.) and about meetings arranged by other organizations around the world that are likely to be of interest to its members. It also includes various technical sections on issues related to surveys (e.g., survey terminology, bibliographies, summaries of papers or books).
- *International Statistical Information*, the newsletter of the International Statistical Institute and its five sections. This newsletter is issued three times a year.

- Volumes of the papers relating to surveys and censuses that were presented at sessions of the International Statistical Institute.
 - A directory of the members of the Association.
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Persons interested in becoming members of the IASS should write to: Mrs. A.M. Vespa-Leyder, I.A.S.S. Secretary, c/o I.N.S.E.E., 18 boulevard Adolphe-Pinard, 75675 Paris Cedex 14, FRANCE.

The dues are F.F. 130 or the equivalent in other countries. These dues are reduced to F.F. 65 for members from developing countries. Members living in some countries with nonconvertible currencies can obtain UNESCO coupons which can be used to pay IASS dues.

1989 International Statistical Institute Session

The next Session of the International Statistical Institute will be held from August 29-September 6, 1989 in Paris. Among the meetings at that Session, the following are likely to be of special interest to survey statisticians:

Invited Paper Meetings

Data collection and estimations for informal economies
 The 1990 round of population and housing censuses
 Methodology of household budget surveys
 Automation of survey data: collection and processing
 Methodology of agricultural surveys
 Reduction of memory errors in retrospective surveys
 Estimation and analysis of panel survey data
 Quality improvement of survey questionnaires
 Survey evaluation with special reference to non-sampling errors

Selected Topic Meetings

Applications of variance component analysis in sample surveys
 Methodology for nutritional status surveys in developing countries
 Model based estimation for sample surveys
 Sampling for rare populations and other special issues in developing countries
 Longitudinal surveys and methods for analysis of longitudinal data
 Statistical methods for marketing
 Recent developments in opinion polls

Spotlight on WSS Board Members

This column, during the 1988-89 program year, will highlight the members of the WSS Board of Directors who serve in appointed positions. This month we feature the cochair of the Social and Demographic Statistics Committee, Harvey Schwartz and John Czajka, plus two other members.

Harvey Schwartz is a Senior Staff Associate with the Civilian Management Technologies Division of Applied Management Sciences, Inc. He is responsible for conducting statistical and econometric analyses of Federal benefit programs. This includes microsimulation and estimation of costs under various policy scenarios, utilizing national-level data bases, as well as statistical tests of the effects of demonstration treatments on program outcomes using local and State developed data bases. Harvey was formerly a research associate at the Bureau of the Census through the ASA/National Science Foundation Fellows program. He has a BA in Economics from Columbia, a MBA in Business Economics and Public Policy from the Graduate School of Business at Columbia, an M.S. in Applied Statistics, and a Ph.D. in Economics, also from Columbia. He is interested in a variety of social and economic statistical topics including labor force, poverty, educational attainment, and income maintenance program participation. He serves as a consultant to the Unemployment Insurance Service Revenue Quality Control Task Force. He has published on topics of statistical discrimination. Nonstatistical interests include hiking, swimming, and listening to jazz.

The other cochair is **John Czajka**, Senior Sociologist at Mathematica Policy Research, Inc. He directs and conducts research projects involving statistical applications to problems in domestic policy, generally under government contracts. He is currently directing a major project for the Statistics of Income Division of the Internal Revenue Service which involves imputation, redesign of a SOI sample, and study of the IRS telephone assistance program. He is also directing a project for the Department of Labor which will evaluate the feasibility of using substate labor market characteristics to trigger unemployment benefits. Prior to joining Mathematica, John was a sociology lecturer at the University of California, Berkeley. He holds a BA in government from Harvard and a Ph.D. in Sociology from Michigan. His publications include work on both household and corporate income statistics. John has been a member of the ASA Committee on Subnational Statistics and is an active member of the Population Association of America and the American Sociological

Association. John enjoys the western U.S., particularly downhill skiing and hiking whenever he can fit it into his schedule.

In **Sid Schwartz**, WSS has a former national chess master. He is serving this year for the first time as a member of the Short Course Committee. Sid has a BS and an MS in mathematics from York University, North York, Ontario, Canada. His present position is Senior Operations Research Analyst with the U.S. Postal Service. He formerly was a senior mathematical statistician with USPS and a mathematical statistician at the Bureau of the Census. Specific work interests currently involve developing methods of detecting change in the nature of survey data during implementation of new data collection methods. He has created special "test deck" data records and written programs to compare the computer representation of the data records using old and new entry systems. His publications have been in his fields of major statistical interest: record linkage and overlap resampling methods. In addition to his current work with WSS, Sid is a member of the Committee on Membership, Subcommittee on Government Members of ASA.

R. Clifton Bailey has been the WSS representative to the Washington Academy of Sciences since WSS became a member of the Academy. He is currently a statistician with the Health Standards and Quality Bureau of the Health Care Financing Administration. In that position, he is responsible for statistical studies using Medicare data to evaluate the effectiveness of health care. This is a recent shift of positions for Cliff who formerly worked at the Environmental Protection Agency, the Naval Medical Research Institute, and the Food and Drug Administration. His academic credentials include a BS in Physics from Randolph-Macon, an MS in Physics from Iowa State, and a Ph.D. in Statistics and Biometry from Emory University. He is interested in a wide variety of applied statistics especially modeling for survival analysis. Many of his publications have dealt with medical applications including statistical analyses of transplants. Cliff is very active in the American Association for the Advancement of Science (AAAS) serving as the ASA representative to AAAS and chair of the COPSS Committee for AAAS coordination. Since Cliff's present work position is in Baltimore, he will be less active with WSS activities but has been asked to serve as President of the Maryland Chapter of ASA in an effort to revitalize that chapter. WSS wishes him well in that new challenge.

OTHER ANNOUNCEMENTS (continued)

News Concerning the Constitutional Revision

At the ASA annual meeting in New Orleans an open meeting was held to discuss the ASA Constitutional Revision. From that meeting it was clear that there was substantial interest in the revision, and that there was some misinformation about the revision process as well as the proposed revisions. The Constitutional Revision Committee is composed of George Casella, chair, and Charles Goldsmith, David Hoaglin, Ron Hocking, Kathleen Lamborn, Joan Reisch, Barbara Ryan, and Michael Cohen. Members of this committee, taking their charge from the Strategic Planning effort of the ASA, have been meeting for well over a year. Major goals were to: (a) facilitate the formation of new sections, (b) reduce the size of the Board of Directors, (c) direct most section-related matters to a new Council of Sections, and (d) allow the sections more autonomy, especially fiscally. Those interested in receiving copies of the constitution may write to the ASA office. Comments to members of the committee are strongly encouraged.

The draft Charter of the proposed Council of Sections was written by Michael Cohen, chair of the ASA Committee on Sections and Subsections. This document is now in the process of being modified, and questions and suggestions are especially welcome. These should be directed to Michael Cohen, School of Public Affairs, Morrill Hall, University of Maryland, College Park, Maryland 20742. Some important decisions yet to be made include: (a) how to nominate officers of the Council of Sections and representatives of the Council of Sections to the Board of Directors, (b) the type of representation large versus small sections will have in voting and otherwise, and (c) the fiscal autonomy mentioned above. Those interested in reviewing this document can also receive a copy from the ASA office. A revised version, incorporating the comments given at the open meeting, should be available for distribution in early October. Those interested in proposing changes to either document should communicate these changes soon, since both

documents will be reviewed at the December meeting of the ASA Board of Directors.

Washington Academy of Sciences News

W. Edwards Deming was recipient of a 1988 Distinguished Career in Science Award, presented by the Washington Academy of Sciences at its April Awards Meeting. The award was for "improving quality, productivity, and scientific method thru statistical science." Also awarded a Distinguished Career in Science Award was Simon W. Strauss, formerly Senior Staff Scientist with the Air Force Systems Command. His award was for "his exceptional contributions to advanced composites technology, and to science." This is the first year that WAS has presented Distinguished Career in Science Awards.

WSS member Carl Pierchala was recently elected to serve a one-year term as an Academy Member of the Board of Managers of the Washington Academy of Sciences.

JOS Call for Papers

The 1989 Special Issue on Environmental Statistics

Environmental statistics is a recent and growing branch of official statistics, stemming from the substantial changes in the environment due to pollution, acidification, etc. Describing and analyzing the state of the environment, with its complex biological systems, present new challenges for statistical methodology. In this special issue, we are interested in a broad range of methodology and applications, and in the policy issues of environmental statistics. The following are examples of suitable topic areas.

1. Sampling the environment, e.g., definition of population and frame, random and nonrandom samples.
 2. Data collection and data sources, e.g., methods of measurement, remote sensing, etc.
 3. Generalization from point measurements, e.g., Kriging, etc.
 4. Analysis of environmental data, e.g., analysis of relations between variables, other multivariate methods, time series analysis, and nonrandom data.
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5. Choice of variables, indicators, indices, e.g., comparability and classification. Planning for future data needs.
6. Harmonizing data of different character and quality, e.g., data obtained by different methods over time, hard and soft data, and case studies.
7. Presentation: choice of topics, forms (maps, tables), and regions (administrative, drainage areas), etc.
8. Use of official environmental statistics, e.g., instrumental use by government and local authorities, in research, or general information.
9. Evaluation of the environment in monetary terms, e.g., benefit-cost analysis.
10. Statistics, law, and environment.
11. International environmental issues, cooperation, etc.

Manuscripts for the special issue should be sent in five copies to the Chief Editor, Lars Lyberg, no later than November 30, 1988.

The *Journal of Official Statistics* is a refereed scholarly journal published quarterly. All inquiries should be directed to the Chief Editor at the address below.

Mid-Atlantic Regional Probability and Statistics Day

The Johns Hopkins University, Applied Physics Laboratory invites you to the next meeting of the on-going series of regional Probability and Statistics Days. These informal meetings offer a chance for professionals in academia, government, and industry in the Mid-Atlantic region to meet with each other, communicate recent findings, and discuss common interests. The Laboratory is located

approximately midway between Baltimore and Washington.

We plan for the day to begin about 8:30 a.m. with registration and refreshments; from 9:00 until noon there will be sessions of contributed talks (about 20 minutes each) and discussions; lunch will be held until about 2:00, followed by more contributed papers until about 3:30. At that time, Dr. David Findley of the Census Bureau will present an invited talk on problems in statistical model building.

We welcome informal talks on any aspect of probability and statistics, including summaries of your recent publications, discussions on preliminary and ongoing work, formulations of open problems, and discussions of new pedagogical techniques. Participation by graduate students is also encouraged.

Rooms will be available for talks, discussion, refreshments, and socializing. Tables will also be set up for distributing reprints or announcements that would be of interest to other meeting participants. To help defray our expenses we will ask at registration for contributions of approximately \$7.00 from students and \$9.00 from everyone else. These fees will include lunch. (There are no restaurants within walking distance from the Laboratory and so we are encouraging attendees to participate in the informal lunch provided.)

If you plan to attend, please write or call James C. Spall, The Johns Hopkins University, Applied Physics Laboratory, Johns Hopkins Road, Laurel, MD 20707 (phone 301/953-5000 x4960) before October 12.

We look forward to seeing you in October.

EMPLOYMENT COLUMN

The Washington Statistical Society Newsletter provides a service of notification of employment opportunities and descriptions of those seeking employment here in Washington. Evelyn Kay, who is in charge of this service, has achieved a high success rate. Readers are encouraged to take advantage of this feature of the newsletter. Deadline for inserting notices is 5 (five) weeks before the publication date. Those interested should write to: Evelyn R. Kay, 2510 Virginia Avenue, N.W., #709, Washington, D.C. 20037, Phone 331-1153.

JOB OPENINGS

STATISTICIAN

Mathematica Policy Research, Inc., is an employee-owned social science research firm which specializes in evaluations of domestic public policy issues in the areas of health, labor, nutrition, taxation, and welfare programs. We provide clients with expertise in the design and evaluation of demonstration programs, sample design, data collection, statistical analysis, report preparation, and consulting.

A position is currently available in either our Princeton, NJ, or our Washington, D.C., office for a senior statistician with experience in sample design and inference from sample data. The position entails both methodological development and applications. A Ph.D. in statistics or equivalent qualifications and U.S. citizenship are required.

Send resume to: John Czajka, Mathematica Policy Research, Inc., 600 Maryland Ave., S.W., Washington, D.C. 20024. EOE.



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