

# WASHINGTON STATISTICAL SOCIETY

# NEWSLETTER

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## **ANNOUNCEMENTS**

# The American Statistical Association's Sesquicentennial Celebration (ASA 150)

by Nancy Kirkendall, WSS President

The 150th anniversary of the American Statistical Association's founding is in 1989. ASA 150 will be celebrated during the year from August 1988 to August 1989. The theme is Statistics: Past, Present and Future. There will be three theme events to kick off the year at the 1988 annual meeting in New Orleans. The special celebration will be held at the 1989 annual meeting which will be held in Washington, D.C.

#### The ASA Sesquicentennial Committee

ASA has organized a committee (the ASA 150 Committee) to plan the special events in 1988-1989. Gary Koch at the University of North Carolina is the chairman of the committee. Every section and the 1989 host chapter have representatives on the committee. Each section and the host chapter are expected to sponsor a number of activities in support of ASA 150, including the following:

- a. Organize a special invited "theme" session for the 1989 annual meetings. One way in which these "theme sessions" are different from regular invited sessions is that the papers are to be produced well in advance (a draft by March 1988), so that they can be edited, published and handed out with the book of abstracts and other registration material at the beginning of the meetings. There will be 15 such sessions. They will be scheduled at non-overlapping times. Some will also be held on the Sunday prior to the meetings.
- b. Sponsor special presentations during the 1988-1989 year.
- c. Consider other ways to publicize and encourage enthusiasm for the ASA 150 celebration. As an example, the Biopharmaceutical section has decided to sell ASA 150 T-shirts. They did a test selling in San Francisco and sold out on Sunday. It seems that the T-shirts will be popular items. The ASA 150 committee is considering other souvenirs, and we are all encouraged to participate in the planning.

#### WASHINGTON STATISTICAL SOCIETY PROGRAM CHAIRS

Agriculture & Natural Resources		Public Health & Biostatistics		Short Courses	
Ron Bosecker	447-3895	Jai Choi	436-7047	Virginia de Wolf	366-5361
W. Barnes Johnson	249-7388	Mary Foulkes	496-6818	Donald Gantz	425-3931
		•		Brad Pafford	447-2129
Economics Francis X. Diebold 452-2461		Social & Demographic Statistics John Czaika 484-9220		Glenn White	763-5248
Robert Yuskavage	523-0876	John Czajka Harvey Schwartz	223-5555	Methodology	
Physical Sciences & En	gineering	•		Bill Winkler	252-2140
Thomas Mazzuchi	994-7514	Statistical Computing		David Marker	251-4398
Refik Soyer	994-6794	Khalid Aboura	994-7534		
Employment		David Grier	546-8231	Newsletter Editor	
Evelyn Kay	331-1153			Michael Cohen	454-6193

The ASA 150 committee is also planning other special events to enhance the visibility of the Society, some to be held in Washington. Included among events which are being considered are:

- Talks by members of Congress
- Talks by senior government officials
- A talk by the chairman of the Federal Reserve Board
- An exhibit by the Library of Congress
- Arranging for the President to declare "National Statistics Week"
- Arranging for Peter Jennings' "Person-of-the-Week" to be a statistician
- A special exhibit at the Smithsonian
- Collecting statistical papers published at different times in the past (for example, a collection of representative statistical papers published 50, 100 and 150 years ago would be interesting.)

# The Role of the Washington Statistical Society (WSS)

WSS is the Host Chapter in 1989. Therefore, we are expected to participate fully in the ASA 150 planing. Our WSS ASA 150 committee consists of: Nancy Kirkendall, Dan Kasprzyk, Cathy Dippo, Jeanne Griffith, Margaret Martin, Julia Oliver and Miron Straf. This committee has planned the WSS theme session (item a above), and will pursue the planning of the host chapter invited session. Both sessions will be described in later articles.

WSS's representatives-at-large (Cathy Dippo, David McMillian, Bill Bell and Connie Citro) will form a subcommittee to plan the chapter's special ASA 150 presentations to be held during the 1988-1989 year (item b above). Cathy Dippo is both on the ASA 150 Committee and is a representative-atlarge. She has agreed to chair the subcommittee during the coming year.

As the host chapter, WSS will have a number of duties in addition to the ASA 150 activities. Included will be some responsibility for publicity for the meetings, and preparation for some of the local arrangements. Examples of our role in local arrangements are the preparation of a restaurant guide, and collecting advertisements or coupons for local shops and tourist attractions.

WSS should also begin thinking about the souvenir aspect of ASA 150. We have not put much

thought into item c above.

Any WSS members who are interested in working on souvenirs for ASA 150, on the publications committee or on the local arrangements committee should call Nancy Kirkendall at 586-2276.

# Washington Academy of Sciences Meeting

The Washington Academy of Sciences will hold its October meeting in the Mary Graydon Center of American University at Massachusetts and Nebraska Avenues, N.W. on Thursday, October 15. Peter Rossi, Professor of Sociology at the University of Massachusetts at Amherst, will be speaking on Understanding the Homeless: Some Research Findings.

Recent research has provided better information on homelessness in America. These studies show that conventional beliefs about both the size and the composition of the homeless may be far off the mark.

There will be a wine and cheese reception at 6:45 p.m. followed by dinner at 7:30. The lecture will begin at 8:30 p.m. It is not necessary to attend the dinner to hear the lecture, and there is no charge for the lecture only. Call (301) 320-3621 for information and make dinner reservations at least a week in advance. Dinner is \$15 per person.

# 12th Annual APDU Conference

The 12th Annual meeting of the Association of Public Data Users will be held October 21-23 at the Ramada Renaissance Hotel, 1143 New Hampshire Avenue, N.W. in Washington, D.C. Sessions will focus on topics including the decennial census, new forms of data dissemination, new directions in statistics, SIPP, and the Current Population Survey. For further details about the meeting and registration contact: Susan Anderson, APDU, 87 Prospect Avenue, Princeton, NJ 08544, (609) 452-6052.

# Probability-Statistics Day at American University

The Chesapeake Bay - Delaware Bay Regional Probability-Statistics Day Fall meeting will be held on Saturday, November 14, 1987 at The American University. Persons wishing to present a paper (15-20 minutes) at the meeting should send a one-half page abstract by October 15 to Dr. Robert Jernigan, Department of Mathematics and Statistics, American University, Clark Hall, Washington, D.C. 20016.

Information concerning registration for the meeting and for luncheon reservations may be obtained by calling the Department of Mathematics and Statistics (202) 885-3120.

#### PROGRAM ABSTRACTS

TOPIC: Generalized Variance Functions for a Complex Sample Survey

SPEAKER: Benjamin King, Educational Testing Service

DISCUSSANT: Steven Cohen, National Center for Health Services Research

DATE & TIME: Wednesday, October 7, 1987; 12:30 to 2:00 p.m.

LOCATION: Room 2736 GAO Building, 441 G Street, N.W., Washington, D.C.

(Please call 523-1760 if you plan to attend in order to assure building entrance.)

SPONSOR: Methodology Section

ABSTRACT: For a national survey of reading ability among young adults using a multi-stage, stratified

probability sample, generalized variance functions (GVF) were estimated. That is, an attempt was made to express the estimated variance of a statistic as a function of the statistics and other characteristics of the variable of interest. With GVFs estimated from a development sample of variables, predictions of sampling variance were made for other variables in a confirmation sample and comparisons made with conventional jackknife estimates. Conclusions were drawn about the feasibility of use of GVFs, with emphasis on

the margin of additional estimation error that is introduced.

TOPIC: A Measure of Survival Time Especially Suited for Followup Studies in the Elderly

SPEAKER: Dorly J.H. Deeg, National Institute on Aging

CHAIR: Barry Graubard, NICHD

DISCUSSANT: Lester Curtin, NCHS

DATE & TIME: Thursday, October 15, 1987; 1:30 to 3:30 p.m.

LOCATION: Landow Building, Conference Room A, 7910 Woodmont Avenue, Bethesda, Maryland

(Three blocks north of Bethesda Metro)

SPONSOR: Public Health and Biostatistics

ABSTRACT: An individual measure of survival time is presented, that: (1) makes sample subjects

comparable regarding survival time, independent of their age and sex, and (2) serves to check the representativeness of the sample regarding survival time. The measure is called the *Realized Probability of Dying*. Its construction will be described, as well as its application in two followup studies of elderly subjects: one drawing on a national probability sample in the Netherlands, and the other on the U.S. National Health and

Nutrition Examination Survey I.

# PROGRAM ABSTRACTS (continued)

TOPIC:

**Stoplight Control** 

SPEAKER:

Dr. Anthony Salvia, Behrend College, The Pennsylvania State University

CHAIR:

Dr. Richard Soland, The George Washington University

DISCUSSANT:

Dr. Thomas Mazzuchi, The George Washington University

DATA & TIME:

Friday, October 16, 1987; 12:00 to 1:30 p.m.

LOCATION:

Room 301, Staughton Hall, 707 22nd Street, N.W. (corner of 22nd and G Streets, N.W.),

The George Washington University

SPONSOR:

Physical Sciences and Engineering Section and the Department of Operations Research,

The George Washington University

ABSTRACT:

Stoplight control (sometimes known as PRE control) is a rather old technique used in process control. In this paper we consider three topics. First, we examine how stoplight control can be used in acceptance sampling and present results for AOQ and AOQL. Next, we consider a variation of stoplight control that is amenable to a Markov chain model. Finally, we

indicate some possibilities for extending the use of stoplight control.

**TOPIC:** 

Renewal Processes and Sampling Inspection by Attribute

SPEAKER:

Dr. Grace Yang, University of Maryland

CHAIR:

Dr. Refik Soyer, The George Washington University

DISCUSSANT:

Dr. Douglas Miller, The George Washington University

DATA & TIME:

Wednesday, October 21, 1987; 12:00 to 1:30 p.m.

LOCATION:

Room 301, Staughton Hall, 707 22nd Street, N.W. (corner of 22nd and G Streets, N.W.),

The George Washington University

SPONSOR:

Physical Sciences and Engineering Section and the Department of Operations Research,

The George Washington University

ABSTRACT:

Sampling Inspection by attributes generates 0-1 sequences in an infinite dimensional sample space, where 0 and 1 correspond to conforming and nonconforming items, respectively. Various sampling plans with switching rules used in quality control induce a renewal process. Some characteristics of sampling plans, for instance AOQ, AOQL, and AQL, are asymptotic or large sample quantities. Theory of renewal processes provides a powerful tool for analyzing these quantities and more importantly for studying the performance of sampling plans in the finite sample (finite production) case. In our discussion, special attention will be paid to connection of AOQL and AQL used in the MIL-STD 125A  $(\mu)$  and MIL-STD 105D. Our study was motivated by the difficulties encountered by some factories in China in their implementation of these standards.

# PROGRAM ABSTRACTS (continued)

TOPIC:

A Weibull Model for Dependent Censoring

SPEAKERS:

Sherrie Emoto, NINCDS, and Peter Matthews, University of Maryland Baltimore County

CHAIR:

Sylvan Green, NCI

DATE & TIME:

Monday, November 9, 1987; 1:30 to 3:30 p.m.

LOCATION:

Landow Building, Conference Room E, 7910 Woodmont Avenue, Bethesda, Maryland

(Three blocks north of Bethesda Metro)

SPONSOR:

Public Health and Biostatistics

ABSTRACT:

In many survival analysis situations an assumption of independence between the survival and censoring variables cannot be justified. However, generally in such problems, the

survival distribution becomes nonidentifiable.

A bivariate Weibull model is proposed in which the survival and censoring variables have marginal Weibull distributions with different shape parameters. Only weak "nonparametric" restrictions on the form of dependence between the two variables are assumed. The model is based on marginal transformations of the Pickands class of bivariate exponential distributions.

Assuming the model to hold, the joint distribution of survival and censoring times is shown to be identifiable. The maximum likelihood estimator of the parameters is also shown to be consistent.

TOPIC:

Estimates of Weekly Money Stock Components Using Staggered Reports

SPEAKERS:

W. P. Cleveland, C. A. Corrado, M. A. Post, and P. von zur Muehllen, Board of Governors of

the Federal Reserve System

DISCUSSANT:

Bill Davis, Bureau of the Census

DATE & TIME:

Monday, November 16, 1987; 12:30 p.m. to 2:00 p.m.

LOCATION:

Room 2736, GAO Building, 441 G Street, N.W., Washington, D.C.

(Please call (202) 523-1760 at least one day in advance to assure entrance.)

SPONSOR:

**Economics Section** 

ABSTRACT:

The Federal Reserve needs current information on money stocks in order to properly direct open market operations. Money stock data arrive weekly, but they apply to different components in varying lags. Data for the previous week is from a sample of institutions and does not include all series of interest. At a lag of two weeks, preliminary data is available from most institutions on most series. Data for periods three and four weeks previous to the current week represent revisions to earlier reports for the same periods. At present, projections for the current and future weeks are made by judgmentally weighting incoming data reports and data patterns for previous years. A Kalman filter approach is adopted in this paper to incorporate new data information as it arrives into a multivariate ARIMA seasonal time series model for weekly data. This produces a result roughly equivalent to judgmental methods with much less work and is superior to a random walk plus seasonal forecast using the most recent reports, as measured by mean squared deviation from final values. All computations are done in SAS.

#### OTHER ANNOUNCEMENTS

Council of Chapters

The ASA Council of Chapters held two separate sessions for chapters at the meetings in San Francisco: a business meeting plus a two-hour work-

shop on topics of interest to chapters.

One important announcement was that the Council is creating a slide series on the history of statistics. This will be a companion to the slide show finished last year in careers in statistics. The new slide show is to be finished in time for the 1988 annual meeting in New Orleans. The Council is interested in any suggestions of topics and slides to include. Suggestions are needed quickly. Send any ideas to Steve Ruberg, 2110 E. Galbraith Road, Cincinnati, Ohio 45215. Over 100 sets of the slide series on careers have been rented or sold. The slide show has probably already repaid twice its cost. The series will soon be converted to a video tape format.

The Council's nontechnical session for San Francisco-Statistics in Sports-was well attended and very successful. The theme of next year's session will be Misuses of Statistics. Additional suggestions

for speakers are still needed.

One item of interest to all ASA members is that a series on statistics is being planned for public television. A total of 26 1/2-hour presentations are envisioned to be ready by 1989. More details can be found on Page 13 of the July-August 1987 AMSTAT

ASA, through the Council of Chapters, is studying the concept of an award for service to chapters. The program would be considered as an adjunct to the present fellows program. Consider-

able work is needed to define requirements for such an award and how to provide equity when local chapters vary so widely in size and program

activities.

Fiftieth Anniversary Symposium

In 1935 a new department was created at George Washington University, the first Department of Statistics in a college of arts and sciences in the United States. On October 30, 1987, the Department of Statistics (known since 1983 as the Department of Statistics/Computer and Information Systems) will be celebrating (somewhat belatedly) with a Fiftieth Anniversary Symposium at the Marvin Center. WSS members and other statisticians are welcome to attend.

The program will begin at 9 a.m. in the Marvin Theater. Frederick Mosteller of Harvard University will deliver the keynote address. Herbert Solomon, Stanford University, will be the luncheon speaker. Other speakers will include Mitchell Gail, National Cancer Institute; Seymour Geisser, University of Minnesota; C. Terence Ireland, National Security Agency; Nancy Kirkendall, Department of Energy; Solomon Kullback, Professor Emeritus, George Washington University; Stephen Lagakos, Harvard University; Robert Shumway, University of California, Davis; Nancy Spruill, Department of Defense; and L. J. Wei, University of Michigan. The day will conclude with a wine and cheese party.

For the complete program and registration information please call Mrs. A. B. Pham, Department of Statistics/C&IS, at (202) 994-6356.

### **Census Bureau's Fourth Annual** Research Conference Announced

The Census Bureau's Fourth Annual Research Conference (ARC IV) will be held March 20-23, 1988, at the National Clarion Hotel in Arlington, Virginia, only 1/2 mile from National Airport and three blocks from the Metro. ARC IV will comprise a mix of topics ranging from new survey techniques and census survey automation to measurement problems with foreign trade statistics. 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.

# Public Data: Use It or Lose It

The International Association for Social Science Information Services and Technology (IASSIST) is a professional association of individuals who are engaged in the acquisition, processing, maintenance, and distribution of machine readable text and/or numeric social science data. Its 14th annual conference will be held in Washington, D.C. on Thursday, May 26 through Sunday, May 29, 1988. The program will consist of contributed papers, workshops and round table discussions concerned with archiving, accessing and using machine readable social science data. The conference will feature presentations on a wide variety of topics of interest to social scientists, data archivists, librarians, researchers, programmers and program

# OTHER ANNOUNCEMENTS (continued)

administrators. The program committee is now soliciting contributions in the form of papers and proposals for panel discussions, workshops or round tables.

#### SUGGESTED TOPICS

- Data Interchange Standards
- Storage Technologies
- Public Policy Issues
- Cost of Data Access
- Microcomputer Applications
- Data Access Systems

- Networking and Electronic Messaging
- Analysis Methods
- Microsimulation
- Labor Market Surveys
- Microeconomic Panel Studies
- Administrative Data

For more information please contact: IASSIST88, c/o Pat Doyle, Mathematica Policy Research, Inc., 600 Maryland Avenue, S.W., Suite 550, Washington, D.C. 20024.

### **EMPLOYMENT COLUMN**

Deadline for inserting notices is 5 (five) weeks before the publication date. Send notices and requests to: Evelyn R. Kay, 520 22nd Street, N.W., Washington, D.C. 20037, (202) 331-1153.

#### JOB OPENINGS

The Social Security Administration is seeking an individual to serve as DIRECTOR for its Office of Research and Statistics located in Washington, D.C., and Baltimore, Maryland.

The person selected for this position will be responsible for planning and directing a comprehensive policy research and analysis program and developing data systems relating to the Social Security Programs. If you are a good manager, are familiar with and sensitive to the policy development process, and have been involved in research and statistics, this may be the position for you.

The pay range for the position is \$53,830 to \$69,976 depending on prior pay and experience. The Social Security Administration is an equal opportunity employer. Please call Mrs. Sharon Appleby, (301) 594-3392 for additional information and/or an application.

BIOSTATISTICIAN - Ph.D. or equivalent for position in Biostatistics and Data Management Section of National Cancer Institute, National Institutes of Health. Should have interest and experience/coursework in statistical aspects of clinical trials. Experience using SAS for analysis of medical research data, and excellent oral and written communication skills are desirable. For consideration, send resume to Dr. Seth Steinberg, Building 10, Room 13C103, 9000 Rockville Pike, Bethesda, MD 20892. 301/496-9502. EOE

## **EMPLOYMENT COLUMN (continued)**

#### JOB APPLICANTS

Listed below is a brief description of the qualifications of an applicant seeking employment. Employers interested in interviewing this applicant should notify Mrs. Kay of their interest by code number. The request should be by mail and should include the employer's name, organization, and telephone number. The applicant will be notified of the employer's interest and initiation of any further contact will be left to the applicant. All contacts will be confidential.

#### CODE #88-1

MATHEMATICAL STATISTICIAN 1529 - GS 12/13 - Position wanted in Washington, D.C. area; or private industry.

**Education:** 

Masters degree, GWU 1981.

Experience:

20 years federal government: (physical) systems reliability, acceptance sampling and statistical quality control large-scale computerized databases. SAS/SAS graph.

statistical quality control, large-scale computerized databases, SAS/SAS graph, regression analysis (GLM), operations research. Experience in oral and written

presentations.

Objective:

Applied mathematical statistics. Statistical quality control/process control/

reliability.

Area of interest: Multivariate control charts.



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