



WASHINGTON
STATISTICAL
SOCIETY

WSS NEWS

October 1994

Fourth Annual Morris Hansen Lecture

WSS is pleased to announce that the fourth annual series of lectures to honor the memory of Morris Hansen has been set for Wednesday, October 26, 1994 at 3:30 p.m. in the Jefferson Auditorium of the Department of Agriculture, South Building. The speaker will be Leslie Kish, Survey Research Center, University of Michigan. A reception will be held following the lecture.

This lecture series was established in 1990 by a financial grant from Westat, Inc., to honor Morris Hansen, who made significant contributions to survey sampling and statistical methods during his long and distinguished career at the Census Bureau and at Westat, Inc. Further details can be found on page 5.

Call (703) 803-8109

A New WSS Service

To get timely updates on WSS scientific meetings, social events and other items of interest you can now call (703) 803-8109. WSS is instituting this telephone bulletin board as one of a series of steps to modernize the way it serves its members. The bulletin board is an experiment that should allow us to better communicate within the Washington Statistical Society. Remember, for late breaking information or when your newsletter has not arrived, call (703) 803-8109.

WSS Seminars

(All events are open to any interested persons)

| | | |
|----------------|--------|--|
| October | | |
| 12 | Wed. | The WSS Quantitative Literacy (QL) Program |
| 13 | Thurs. | W. Edwards Deming: Statistical Methodologist (Special Session) |
| 26 | Wed. | Developing Samplers for Developing Countries (Fourth Annual Morris Hansen Lecture) |
| 27 | Thurs. | Seasonal Adjustment of Hybrid Economic Time Series |
| 28 | Fri. | A Comparison of Three Methods of Data Collection |

Call (703) 803-8109 for up-to-date information.

Announcements

Comments on Certification

At the August ASA Board Meeting, a motion was made that:

"Whereas over 1000 members of the ASA have expressed an interest in certification, the ASA will enter into discussion with other societies, e.g., ASQC and IIE, for participation in a joint program for certification of interested statisticians."

The motion was subsequently tabled for consideration at the December meeting of the Board of Directors to give the whole membership of the Association opportunity for input.

If you would like to comment, send to

Nancy Kirkendall
e-mail: NKIRKEND@EIA.DOE.GOV
fax: 202-254-9605

Seventh Annual Federal Forecasters Conference

The Seventh Annual Federal Forecasters Conference will be held on November 15, 1994. The theme of the conference is: "Issues of Coordination and Networking for Federal Forecasters in the Information Highway Era." Numerous Federal government agencies are charged with developing forecasts that overlap in terms of assumptions, outputs, or purpose. Deciding whether and how these agencies should coordinate with each other or interact in the process of forecast development is hardly a new issue, but it involves, perhaps, many unresolved questions.

The conference will be held at the Best Western Rosslyn Westpark Hotel in Arlington, VA. If you wish to attend the conference, register by October 14, 1994. To register, contact Dave Costello of the

Energy Information Administration, Mailstop EI-621, 1000 Independence Avenue SW, Washington, DC 20585, Fax (202) 586-9753, Phone (202) 586-1468, Internet dcostell@eia.doe.gov.

SIGSTAT Meetings

SIGSTAT, the Special Interest Group in Statistics for the Capital PC User Group and the Washington Operations Research and Management Science Council (WORMSC), resumes its meetings on October 12, 1994, after a summer vacation. The topic of the meeting will be "Internet for Statisticians". There will be a demonstration of Internet features such as Usenet, ftp, telnet, gopher, WWW, Mosaic, archie, veronica, etc. with emphasis on statistical discussion groups (eg., stat-1, exact-stats) and software archives (eg., statlib, netlib, simtel, UCLA). On November 11, 1994, we'll look at some free packages available through Internet such as Xlisp-Stat. On December 14, 1994, there will be a demonstration of Resampling Stats.

All meetings are scheduled from 12:30 p.m. to 1:30 p.m. in Room B-14, 1301 New York Avenue, NW. The building is located midway between the Metro Center and McPherson Square Metro stops. If this is your first SIGSTAT meeting, call Charlie Hallahan at (202) 219-0507 or e-mail to hallahan@ers and leave your name in order to gain entry into the building.

Symposium on Recent Developments in Experimental Design

C A N C E L E D

The symposium on recent developments in the design of experiments which was originally scheduled to be held at The George Washington University on Saturday, November 19, 1994 has been canceled.

Program Abstracts

- Topic:** The WSS Quantitative Literacy Program
- Speaker(s):** Barbara Bailar, American Statistical Association
Quantitative Literacy Volunteers
- Chair:** Shail Butani, Bureau of Labor Statistics
- Date/Time:** Wednesday, October 12, 1994, 12:30-2:00 PM
- Location:** BLS Training Center, Postal Square Building, Suite G-440, Rooms 1 and 2, 2 Massachusetts Avenue, NE, Washington, DC (Red Line -- Union Station). Enter at First Street.
- Sponsor:** Quantitative Literacy Section
- Abstract:** The level of Quantitative Literacy (QL) activity in the D.C. metropolitan area has been increasing over the last two to three years, with the expansion of the QL program into Montgomery and Prince George's Counties. Groundwork is currently underway for the 1994-95 academic year. Montgomery County Schools have made special QL requests for the 1994-95 academic year, including mentoring and curriculum development. In Fairfax County, coordinators hope for another increase in the number of requests for speakers from the current level of about 125.

A demonstration of an actual classroom presentation will be given and some QL activities will be spotlighted, including judging for the Curtis Jacobs Award, and the Girls Excelling in Math and Science (GEMS) program. Representatives from some of the counties actively involved in the QL program will discuss what is being done in their counties. Persons interested in getting involved with the QL program are encouraged to attend.

*** * * Note from the WSS NEWS Editors * * ***

Items for publication in the December 1994 WSS NEWS should be submitted no later than October 25, 1994. FAX items to:

Hattie Ramseur or Theresa Hallquist
FAX: (202) 586-0018

Program Abstracts (Cont'd)

- Topic:** W. Edwards Deming: Statistical Methodologist
(Special Session)
- Speaker(s):** Barbara A. Bailar, American Statistical Association
Thomas W. Nolan, Associates in Process Improvement
- Discussant(s):** Samuel Greenhouse, George Washington University
Fritz Scheuren, Internal Revenue Service
- Chair:** Carl E. Pierchala, National Highway Traffic Safety Administration
- Date/Time:** Thursday, October 13, 1994, 12:30-2:30 PM
- Location:** BLS Training Center, Postal Square Building, Suite G-440, Room 1, 2 Massachusetts Avenue
NE, Washington, DC (Red Line — Union Station) Enter at First Street.
- Sponsor:** Methodology Section
- Abstract:** Ed Deming is best remembered today for his work in quality management, but he was also a statistical methodologist. Indeed, he served as WSS Methodology Chairperson in the 1969-70 and 1970-71 program years. In honor of his many contributions to statistical methodology, join us on the eve of the 94th anniversary of his birth for this special presentation. Our speakers, both accomplished statisticians, will each give 30 minute presentations focusing on Deming's uses of and contributions to statistical methodology. Barbara Bailar will emphasize sampling and surveys, and will also mention Deming's contributions to the American Statistical Association. Tom Nolan will focus on the statistical aspects of improving quality, including enumerative vs. analytic studies, a concept championed by Deming.

Program Abstracts (Cont'd)

Fourth Annual Morris Hansen Lecture

- Topic:** Developing Samplers for Developing Countries
- Speaker:** Leslie Kish, Survey Research Center, University of Michigan
- Chair:** Joseph Waksberg, WESTAT
- Discussant(s):** Tom Jabine, Consultant
Vijay Verma, Consultant
- Date/Time:** Wednesday, October 26, 1994, 3:30 PM (Note special time)
- Location:** USDA, South Building, Jefferson Auditorium, 14th Street and Independence Ave, SW Washington, DC (Blue/Orange Line -- Smithsonian, Independence Avenue Exit).
- Co-Sponsor:** National Agricultural Statistics Service, U. S. Department of Agriculture
- Reception:** Following the lecture (normally 5:30 to 6:30 PM)
- Abstract:** Developing sampling statisticians for "less developed countries" (LDC's) has been accomplished in universities, in offices, at research projects, etc., and in both the United States (and other "hosts") and in the LDC's. Methods of survey sampling are eminently "transferable" from country to country but are not entirely "portable" in printed form. Therefore, travels by the "learner" statistician or/and by the "expert" are needed. The teaching/training/learning processes should combine academic subjects, carefully selected for the learners, with practical training and experience. These are more difficult to arrange and so are survey sampling and data collection, compared to statistical analysis. Recruiting suitable candidates and career placement of graduates are also needed for solid gains in the LDC's. Much has been achieved since 1945. Our program in Michigan sent graduates back to 94 LDC's. The audience may share their experiences in Washington.

Program Abstracts (Cont'd)

- Topic:** Seasonal Adjustment of Hybrid Economic Time Series
- Speaker(s):** Stuart Scott, Bureau of Labor Statistics
Thomas J. Sullivan, Bureau of Labor Statistics
- Chair:** Sandra A. West, Bureau of Labor Statistics
- Date/Time:** Thursday, October 27, 1994, 12:30-2:00 PM
- Location:** BLS Training Center, Postal Square Building, Suite G-440, Room 9, 2 Massachusetts Avenue, NE, Washington, DC (Red Line -- Union Station). Enter at First Street.
- Sponsor:** Methodology Section
- Abstract:** Based on a sample of 380,000 employers, State industry employment is estimated monthly by the U.S. Bureau of Labor Statistics and seasonally adjusted with X-11-ARIMA. The estimates are revised annually to reflect employment counts available from administrative records of the Unemployment Insurance (UI) programs of each State. Thus, the overall time series is a hybrid of universe data up to the last benchmark and sample data afterward. As pointed out by Berger and Phillips (1993), there are distortions in a straightforward application of seasonal adjustment due to differing seasonal patterns in these data sources. The universe data dominate the historical data from which the factors are derived, but these factors then get applied to sample data. We find improvements from a "two-step" method, a natural extension, which applies universe factors to universe data and sample factors to sample data. We compare seasonal factors from the two data sources, and examine smoothness and revision statistics to evaluate alternative seasonal adjustment methods. Results have been obtained for seasonally adjusted values, one-month change, and 12-month change. An additional point of interest is that, in this setting, estimation of 12-month change with seasonally adjusted data is preferable to using unadjusted data. The two-step method has been implemented in 1994. This is joint work with George Stamas and Paul Chester, BLS.

Program Abstracts (Cont'd)

- Topic:** A Comparison of Three Methods of Data Collection
- Speaker:** Roger Tourangeau, National Opinion Research Center
- Chair:** Jared Jobe, National Center for Health Statistics
- Discussant:** Mick Couper, Joint Program in Survey Methodology
- Date/Time:** Friday, October 28, 1994, 12:30-2:00 P.M.
- Location:** BLS Cognitive Lab, Postal Square Building, Room 2990, 2 Massachusetts Avenue, NE, Washington, DC (Red Line -- Line Union Station) Enter at Massachusetts Avenue and North Capitol Street.
- Sponsor:** Data Collection Methods Section
- Abstract:** Approximately 450 respondents took part in an experimental comparison of three methods of data collection--computer-assisted personal interviewing (CAPI), computer-assisted self-interviewing (CASI), and audio computer-assisted self-interviewing (audio-CASI). The sample was a general population sample from Cook County and the interview touched on a number of sensitive topics, including illicit drug use, abortion, and sexual behavior. The experiment compared costs, response rates of missing data, and levels of reporting.

Announcements Cont'd

Quantitative Literacy 1993-94 School Year in Review

Fairfax County

Two years ago, Quantitative Literacy (QL) volunteers met with Fairfax County educators to incorporate QL into the middle school math curriculum. As a result, during the 1993-94 academic year, Fairfax County teachers made over 125 requests for speakers. To help coordinate these requests, a School Outreach Committee was formed at BLS. Many thanks to all the volunteers who helped in fulfilling this demand. Groundwork is currently underway for the 1994-95 academic year (see future plans). Additionally, a volunteer participated in the Girls Excelling in Math and Science (GEMS) project (see accompanying article on GEMS). If you are interested in helping further the QL movement in Fairfax County or would like more information, please contact Jill Montaquila at (202) 606-6137 or Tran Kratzke at (202) 606-5898 (phone) or KratzkeD@oecus.psb.bls.gov (Internet).

Montgomery County

Plans are underway for a new round of activities for the QL program for Montgomery County schools. In addition to a continuation of the school visits, teacher workshops, mentoring and judging of science fair projects that took place during 1993-94, we have been asked to provide volunteers for three new activities. First, a private school in the county has asked for one or two volunteers to conduct a teacher workshop similar to what was done last year at Bethesda Elementary. This is likely to occur sometime in November. A second project would involve joining Abt Associates in an adopt-a-school program at Harmony Hills Elementary. The list of requested services is similar in many ways to those we have provided to other schools. The third project is called "Technology and Research Partnership

(TARP)," to be carried out at five high schools in the county throughout the 1994-95 academic year. In this new experimental program each participating school will have a class of 15-20 11th and 12th grade students who will work as a team on a single "authentic task problem" for the year. Each school has one or two partners to guide them in the choice of problem, data collection, analysis, and so on. The partners include the Howard Hughes Institute, FDA, NRC, and IBM. Volunteer statisticians are still needed for two of the schools in this program.

With the continuation of last year's activities and the addition of the new ones, we do not have enough volunteers at the present time to fill all the requests. If you are interested in sharing your expertise with students and teachers in Montgomery County, please contact Dwight Brock at (301) 496-9795 (phone), (301) 496-4006 (FAX), or BROCK@NIHNIAGW.BITNET (E-mail). A small investment of your time now can pay large future dividends in improving the QL of our students and increasing the visibility of our profession.

Prince Georges County

Gary Shapiro served as QL Coordinator for Prince Georges County during the 1993-94 academic year. With the help of volunteers, he has made dramatic inroads into the Prince Georges County school system. For more information on QL opportunities in Prince Georges County, contact Gary Shapiro at (301) 718-3154.

Curtis Jacobs Award

The Curtis Jacobs Memorial Prize is an award given annually to an area student or group of students in recognition of an outstanding survey-related project. Volunteers assisted in the judging for this award.

Announcements Cont'd

Future Directions

Shail Butani, who has served as Fairfax County QL Coordinator for the last 4 years, will replace Ron Fecso as QL Coordinator for the D.C. metropolitan area. Her longer term vision is to (1) establish a QL program within every ASA chapter, and (2) incorporate QL into the math curriculum at the elementary school level across the Nation. In the short run, she was to meet with the various county coordinators in September to discuss plans for the upcoming school year. She has also organized a WSS seminar which is scheduled to be held on October 12 to spotlight a few QL activities and a demonstration of an actual classroom presentation to solicit volunteers.

The level of QL activity in the D.C. metropolitan area has been increasing each year. A major breakthrough during the 1993-94 academic year was the dramatic increase in activity in Montgomery and Prince Georges Counties. If you would like to volunteer in an area other than Fairfax County or Montgomery County, or would like further information, please contact Kirk Mueller at (202) 606-6352 (phone) or MuellerK@oeus.psb.bls.gov (Internet).

GEMS Experience

The Third Annual Girls Excelling in Math and Science (GEMS) conference for fifth- and sixth-grade girls was held March 5, 1994 at Neil A. Armstrong Elementary School in Reston, Virginia. It was sponsored by the Reston Area Branch of the American Association of University Women. A goal of this national group has been to promote gender equity in the classroom and to ensure that girls receive equal treatment and opportunities, especially in the fields of math and science. The GEMS conference is designed to expose fifth- and sixth-grade girls to the opportunities available to them if they pursue courses in math and science.

Seventeen women from diverse fields such as engineering, health care, biology, mathematics, statistics, and geology shared their experiences with the girls and presented hands-on workshops that allowed them to learn more about each discipline. Each girl was able to choose three workshops to attend.

Seven or eight girls participated in each session of the statistics workshop, which began by having the girls guess the number of candies in a jar and fill out a survey questionnaire. The video, "What Is Statistics", played while the statistics based on the survey were computed. Afterwards, the statistical results, as well as inferences and questionnaire designs, were discussed with the students.

There were plenty of hands-on activities including word games using inverted numbers on their calculators and mathematical games. Examples were given to illustrate how probability and statistics were used in the other professions.

The students were very responsive and active during the discussions and hands-on activities. The most important thing was that the students enjoyed themselves and learned from the experience.

Mid-Atlantic Probability and Statistics Day at American University

This year's Mid-Atlantic Probability and Statistics Day will be held Saturday, October 22, 1994, at the American University in northwest Washington, DC. This informal meeting provides an opportunity for professionals in academia, government, and industry to meet and discuss common interests. Graduate students are encouraged to come and participate. (The registration fee will be waived for graduate students.)

The invited speakers will be Richard Durrett of Cornell University and E. Parzen of Texas A & M.

Announcement Cont'd

In addition, there will be contributed paper sessions for those wishing to make a presentation. If you want to make a presentation, please send a short (less than 50 words) abstract along with your name and affiliation to the address below by September 16. (E-mail submissions are preferred).

There will be a \$10 registration fee. For more information contact John Nolan, Mid-Atlantic Probability and Statistics Day, Math/Stat Department, American University, 4400 Mass. Ave NW, Washington, DC 20016. E-mail address: jpnolan@american.edu.

Obituaries

Solomon Kullback

Solomon Kullback, 87, a retired director of research and development at the National Security Agency (NSA) and a professor emeritus of statistics at The George Washington University, died of pneumonia August 5, 1994 at Holy Cross Hospital.

Dr. Kullback graduated from the City College of New York. He received a Master's Degree in Mathematics from Columbia University and a doctorate in Mathematics from The George Washington University.

In 1930, he moved to Washington to work for the Army Signal Corps as a cryptographer. After World War II, he worked for the Army Security Agency. He transferred to NSA after it was established in 1952 and was Director of Research and Development when he retired in 1962.

Dr. Kullback was a fellow of the Institute of Mathematical Statistics and the ASA. He also was the Representative at Large in 1957-58 for WSS.

Employment Column

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 write or call: Bill Arends, USDA-NASS, Room 4133 South Building, Washington, DC 20250-2000, (202) 720-6812.

Vacancies

Statistician

Statistician (GS-9, 11, or 12 with promotion potential to 13). The U.S. Environmental Protection Agency is recruiting for a position in the Office of Science and Technology, Office of Water. The responsibilities of the position emphasize the application of statistics to multi-disciplinary projects directed at protecting and enhancing the waters of the United States. The substance of these projects include development of industrial water pollution control regulations, development of water quality criteria, environmental risk assessment, and monitoring ambient water quality. Responsibilities also include supporting EPA in matters arising in law suits. This position offers the opportunity to apply statistics to important and visible problems. A master's degree in statistics or equivalent is required. Applicants with computer skills, knowledge of SAS and experience and/or training in engineering, science, economics, and litigation support are preferred. Send SF-171 or resume to Dr. Henry D. Kahn, Environmental Protection Agency, Office of Science and Technology, (4303), 401 M Street, S.W., Washington, D.C. 20460.

Employment Column Cont'd

Program Officer/Survey Manager

The National Research Council, Office of Scientific and Engineering Personnel, has a position open for a **Program Officer/Survey Manager**.

Qualifications: Ability to manage large-scale, annual survey of doctorate recipients; perform outreach with graduate deans; maintain sponsor relations; work with oversight technical panel and individual researchers; write annual and semi-annual technical and descriptive reports; manage contracts; supervise staff of research associates and support staff; and attend various meetings and conferences.

Requirements: Ph.D. or equivalent, preferably in higher education, sociology, or related field, and at least one year of relevant experience. Survey methods experience required and familiarity with higher education research desirable.

Contact: Dr. Baker, Office of Scientific and Engineering Personnel, National Research Council, Room TJ2093, 2101 Constitution Ave., N.W., Washington, D.C., 20418. Phone: (202) 334-2700.

Job Applicant

Listed below is a brief description of the qualifications of an applicant seeking employment. Employers interested in interviewing an applicant should write or call: Bill Arends, USDA-NASS, Room 4133 South Building, Washington, DC 20250-2000; (202) 720-6812. All requests should include the code number from the applicant's ad and 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 kept confidential.

Applicant # 95-01

Research, consulting, or teaching position desired. Interests in engineering statistics and operations research. Ph.D. in statistics and industrial engineering (co-major). Experience as adjunct instructor of statistics. Background in survey data analysis and statistical consulting. German language skills. Computer programming skills: SAS proficiency, familiarity with MINITAB and S-PLUS.

Invite a freind to join WSS this Fall!

Call Renee Miller at (202) 254-5507 or Antoinette Martin at (202)254-5409 for membership information.

| | | |
|---|--|--|
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